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Author: Bajema, Marcus Jan

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A COMPARATIVE APPROACH TOWARD UNDERSTANDING THE MYCENAEAN AND LATE PRECLASSIC LOWLAND MAYA EARLY CIVILISATIONS THROUGH THEIR ART STYLES

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Marcus Jan Bajema

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Promotores

Prof. Dr. M.E.R.G.N. Jansen

Prof. Dr. J.L. Bintliff

Promotiecommissie

Prof. Dr. R.H.A. Corbey

Prof. Dr. N. Grube (Rheinische Friedrich-Wilhems-Universität Bonn)

Prof. Dr. M.L. Sørensen (Universiteit Leiden / Cambridge University)

Dr. G.J. van Wijngaarden (Universiteit van Amsterdam)

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CHAPTER ONE: THESIS SUBJECT AND OUTLINE

1.1: Thesis subject and research questions

The subject of this thesis is to compare the Mycenaean and Late Preclassic lowland Maya early civilisations, focusing specifically on their art styles. It should be emphasised from the start that the analysis is a synthetic one. That is, it will selectively draw upon the entire archaeological record of the two cases to address theoretically-informed questions. The reason to select these two cases specifically is that each can be seen as the earliest urban and state societies in its area. Furthermore, both early civilisations are roughly comparable in that they can be characterised as city-state systems. Also not unimportant is that the records of both cases possess a diverse set of sources and overall sophistication in scholarly interpretation (Marcus 2003; Tartaron 2008). The fact that both cases constitute a break from pre-existing patterns, makes it especially interesting to consider the role of art in this development. For it can be used as a key for understanding changes in social relations fostered by the emergence of the first early civilisations in the two areas. The approach used in this thesis is tailored especially for investigating the social role of art, using a method that focuses on forms of agency of art. It will be argued that art, while sometimes not seen as very important for understanding the earliest urban societies (e.g. Smith 2009, 14), is especially suitable for the cross-cultural comparison of early civilisations. This is so because art allows insights into a wide range of different issues through its central role in the articulation of worldviews.

Another reason to select the Mycenaean and Maya cases is that one is located in the Old World and the other in the New World. Of course, the two cases cannot be taken as exemplary for their respective hemispheres. Yet it is nevertheless possible to use this great geographical and historical contrast between the New and Old Worlds, in order to say something about the different material and historical conditions in which roughly similar kinds of societies developed on different continents. The subject of comparing Old and New World early civilisations was breached in archaeology by Adams in Urban Society (1966). He compared the Mesopotamian and central Mexican cases, using the broader intellectual framework of the day.² A study like that of Adams is a rare occurrence, although others will be discussed in due course. There are no predecessors for the very specific topic of comparing the Mycenaean and Late Preclassic lowland Maya cases. Even so, interpretations of the Maya and Aegean Bronze Age early civilisations have at times seen promising convergences. One example comes from the heyday of settlement pattern archaeology in the 1970s, when the potential for comparing Maya and Aegean settlement patterns was noted (Bintliff 1977a, 12). While methodologies of survey in both macro-regions have since diverged, it is still possible to compare Mediterranean and Mesoamerican settlement patterns fruitfully to discern common trends and notable divergences (Blanton 2004). The decipherment and interpretation of textual sources in both areas have also seen a convergence of interest by scholars (Leventhal 2003; Palaima 2003a).

More recent calls and preliminary work for comparison between Aegean prehistory and the Maya area can be noted (Englehardt & Nagle 2011; Galaty 2008; Tartaron 2008, 132-134). Such efforts can be seen as part of a broader engagement with comparative studies in archaeology recently (Lillios 2011a; Smith 2012). The current thesis seeks to contribute to these efforts in three different

¹ This means that while the entire record is potentially open for analysis, not every dataset is necessarily used in the analysis. The goal is explicitly to provide an analysis that is informed by the topics relevant to comparative studies, not to generate a more encyclopedic analysis of each case. However, the aim is at all times to base the research on each case as closely on the archaeological record as possible.

² In particular the work of Gordon Childe on the urban revolution (Childe 1950) and the method of context-based diachronic comparison between different cultural areas (Childe 1951). The impact of this work on subsequent scholarship such as Bruce Trigger's *Understanding* (2003) and Norman Yoffee's *Myths* (2005) will be discussed in more detail in chapter two on the philosophical-methodological background of the thesis.

but closely interrelated ways. First of all, it seeks to make a contribution to the philosophical-methodological underpinnings of comparative studies of early civilisations in general, and their art styles in particular. Secondly, there is the analysis of the two specific cases of Mycenaean and Late Preclassic lowland Maya art, and especially the agency of that art in these two early civilisations. This second step allows for meeting the third aim, that of providing a comparative analysis of the findings for the two case studies. Of course, the findings of the comparative work of this third step also have some bearing on the philosophical-methodological framework outlined in the first one. As such, the thesis seeks to make a contribution both in terms of the substantial findings of the comparison of the two cases, as well as in terms of the methods used in cross-cultural comparative studies of early civilisations and their art styles.

1.2: Thesis outline

The main body of the thesis consists of nine chapters, the content of which is listed briefly in table 1.1 below. Chapter two deals with the philosophical-methodological issues concerning cross-cultural comparison in general. It follows a three-step approach of critique, the establishment of 'first principles', and finally an outline of the specific approach to the comparison itself. The critique concerns the dualism in archaeological theory between interpretive and processual archaeology, which can be understood as part of a distinction between relativist and foundationalist conceptions of human nature in the history of Western ideas. An alternative to this will be provided through the 'first principles' of a history-based conception of human nature, which eschews *a priori* ideas in favour of seeking to understand human nature in the context of specific areas and periods. The more theoretical work of the archaeologist Gordon Childe will occupy a central role in this, but other thinkers such as Vico and Wittgenstein will be used as well. The development of these basic philosophical ideas will allow for a critical evaluation of the comparative work carried out for early civilisations and their art. Based on this a methodological 'toolbox' can be developed that allows for the two case studies to be compared in a comprehensive way.

Chapter	Brief description content
two	provides the philosophical-methodological framework of the thesis
three	introduction to Mycenaean early civilisation
four	outlines the general characteristics of Mycenaean art
five	provides the contexts of Mycenaean art, as well as the synthetic accounts of this art and its agency within this early civilisation
six	introduction to Late Preclassic lowland Maya early civilisation
seven	outlines the general characteristics of Late Preclassic lowland Maya art
eight	provides the contexts of Late Preclassic lowland Maya art, as well as the synthetic accounts of this art and its agency within this early civilisation
nine	provides the comparative synthesis of the two case studies
ten	retrospect that discusses the strengths and limitations of the thesis, as well as an outline of prospects for further research

Table 1.1: Overview of the remaining thesis chapters.

Having thus outlined the methodological approach and its philosophical basis, the Mycenaean and Late Preclassic lowland Maya cases can be investigated. The two cases are covered in two separate

sets of three chapters, respectively three through five for the Mycenaean case and six through eight for the Maya one. The first of these (chapters three and six) provide a fairly extensive introduction to the early civilisation in question, focusing on its chronological framework, sources, and the interpretation of the substantive patterns of societal structures and trajectories. Multiple purposes are served by this, for not only is each case introduced properly but the discussion of chronology and sources is also necessary for the later evaluation of the comparability of cases. Furthermore, the overall societal patterns of the two cases need to be grasped in-depth, both in order to compare the societal structures and trajectories of the two early civilisations and to grasp the agency of art within them. The second set of chapters of each case (chapters four and seven) will provide the bulk of the analysis of art. These cover the four topics of sources, material forms, craft and materiality, and iconography.³ It should be noted that these two case chapters do not carry any significant synthetic sections, excepting the summaries of each topic covered. The main reason for which they are treated together in a separate chapter is to allow for readability and to serve as the analytical basis for the synthetic chapter of each case.

The third set of chapters (chapters five and eight) are concerned with tying together the different strands. This is achieved at three different levels. The first of these is that of contexts of art. Analysis at this level is not concerned with synthesis as such, but rather discusses the spatial embedding of the three aspects of art as based on the patterns discussed in chapters four and seven. Following this, the first level of real synthetic analysis is done for art in itself. The analytical categories of metaphor, semiotics, and praxis are used here to consider the higher-level patterns that emerge from the more empirical treatment of the material forms, craft and materiality, iconography, and contexts of art. The second level of synthesis then relates these higher-level patterns of art to other elements of the two early civilisations. As such, it can be noted that the overall structure of the argument is the same for both the Mycenaean and the Late Preclassic lowland Maya cases. This does not mean, of course, that the content of the analysis will be identical, and some allowances have to be made for the different characteristics of sources and interpretive frameworks in both cases. In some cases such differences are reflected in the way the argument itself is structured, as can be seen especially well for the outline of the argument of the contexts of art in both cases.

As the case studies cover chapters two through eight, the full-scale comparative analysis is provided in chapter nine. Three main topics are considered in this chapter, starting with the comparison of early civilisations in general. The structure of this argument mirrors that of the introductory chapters of each early civilisation, by considering chronology, sources, and overall societal structures and trajectories. This is followed by the comparative analysis of the art of the two cases, which starts by taking into account the comparability of sources. The comparison of art itself does not replicate the entire structure of the case study chapters, for this would be too cumbersome and encyclopedic. Instead the argumentative sequence of the synthesis of the analysis of the art of the two cases in chapters five and eight is used here. This involves first of all a comparison of the higher-level analytical categories of metaphor, semiotics, and praxis, so as to achieve a good comparative understanding of the similarities and differences of the art of the two cases. The next task is the comparison of the agency of art within the two early civilisations. In the final part of chapter nine the implications of the comparative analysis of the two cases on general ideas about the role of art in early civilisations will be considered. Chapter ten provides an overall evaluation of the thesis, focusing on its strengths and limitations, as well as discussing possibilities for further research.

³ For the Maya case an appendix is added that outlines the narrative micro-structures of the San Bartolo wall-paintings.

CHAPTER TWO: PHILOSOPHICAL- METHODOLOGICAL ISSUES FOR CROSS-CULTURAL COMPARISON IN ARCHAEOLOGY

2.1: Introduction

In this chapter the philosophical-methodological background of the thesis is presented in three parts. These parts are connected in a logical order of critique, counterpoint, and resolution. Section 2.2 provides the critique by focussing on the role of analogy, here understood as the scaling downwards from high-level theoretical ideas to the formulation of concrete middle-level models. This conception of archaeological theory will be outlined in section 2.2.1. Following that, in section 2.2.2 the more general question (not limited to archaeological theory) of the role of analogy in Western conceptions of human nature will be addressed. A counterpoint to such analogical theories of human nature are history-based ones, which will be discussed in section 2.3. This section forms the epistemological core of the thesis, serving both as its general philosophical-methodological foundation and as providing guidelines for the crafting of specific models to address the archaeological record. As such it justifies a fairly detailed treatment that goes into the basic details of different approaches of history-based conceptions of human nature.

After a brief introduction in section 2.3.1, the next section 2.3.2 starts with a brief overview of the conditions in which history-based conceptions of human nature emerged, and which are relevant to grasping the differences of different systems of thought grouped under this philosophical umbrella. Section 2.3.3 will then focus on the thought of Vico, who was the first Western philosopher to approach human nature from a historical perspective. The thought of Vico is not only relevant because he was the first, however, but also because he was influenced by a different set of conditions than later approaches. This issue is treated in section 2.3.4, where the focus of Vico on the Western encounter with the Greco-Roman past and non-Western cultures is contrasted to the Marxist focus on capitalism and machine-based production. In section 2.3.5 this latter approach is investigated through the later theoretical work of Gordon Childe. The approaches of Vico and Childe can be seen as complementary in some ways, but also share common problems characteristic of history-based approaches to human nature.

These problems will be addressed in sections 2.3.6 and 2.3.7 based on the work of Wittgenstein. The result is that in section 2.3.7 the different strands can be brought together in a comprehensive way. Even if the perspective adopted may seem somewhat eclectic from a doctrinaire perspective, it is argued here that its emphasis on underlying methodological principles allows for a better connection with the specific models discussed in section 2.4. This starts in section 2.4.1 with a brief discussion of the scholarly contexts of comparative studies in archaeology, to be followed by a critical overview of different approaches to cross-cultural comparison in section 2.4.2. Here the philosophical-methodological framework is of immediate use. Section 2.4.3 on defining and comparing early civilisations builds upon the previous section in outlining a specific approach, one that is greatly influenced by Childe and those who came after him. In section 2.4.4 the definition and comparison of the art of early civilisations is discussed. Here the philosophical-methodological ideas of section 2.3 are again of use to resolve conceptual issues with regard to agency and art in different archaeological theories.

2.2: Conceptions of human nature and cross-cultural comparison

2.2.1: Dualism and the role of analogy in archaeological theory

Comparative studies of early civilisations, and indeed of any kind of society, demand some consideration of the theoretical and methodological issues pertaining on cross-cultural comparison. This concerns ideas on the general character of cultures and of the human condition that allow their students to intellectually bridge the divides between different sets of cultural information. In archaeology such high-level theories remain underdeveloped (Trigger 2006a, 519-528), constrained by what has been recognized as a cycle of theories between the opposite poles of rationalism and romanticism as part of the place of archaeology within the modern history of ideas (Kristiansen 2004, 89-90; Bintliff 1993, fig. 2, p. 99). These opposite poles become especially clear in comparative studies, long dominated by rationalist approaches to culture and human agency. A good recent example of this is the evaluation of the role of specific human agents in state formation processes in five different world areas, showing great similarities in the way agents operated in relation to the structural constraints they found themselves in (Flannery 1999). Such views of invariant homo politicus have been critiqued by Kohl (2005) and others as being reductive rather than truly comparative, in the sense that *a priori* theories about state formation and (political) agency perform bridging roles between different cases rather than theories being derived from the substance of the comparison itself.

A contemporary opposite pole to such ideas can be found in interpretive archaeology, which, while not strictly part of the romantic tradition, forms a kind of counterpoint to rationalist theories. One sophisticated critique of Enlightenment-based archaeology has come from Julian Thomas (2004a), who has analysed it as forming part of the intellectual bedrock of modern society, placing archaeology in a more historically contingent position and criticizing its universalist pretensions. The basic argument of Thomas is that archaeology is a constituent part of the modern world and its trajectory and could not, as it exists today, have emerged in another set of historical conditions (Thomas 2004a, 247-248). He investigates the ontology of modern archaeology by looking how many of its metaphysical concepts are concretised in various archaeological practices and theories. Among these are notions of the state, the social contract, notions of individuality and also more abstract ones dealing with the significance of depth and stratigraphy as revealing underlying truths. Of fundamental importance is his treatment of notions of materiality, where the metaphysical roots of the notion of material culture as an object for study, a precondition for archaeology itself, are traced back to their roots in 16th and 17th century philosophy, and especially in the work of Descartes, Locke and Newton (Thomas 2004a, 202-209).

Thomas (2004a, 207-209) cites the critiques of Marx and others on alienation in modern societies, but argues that this stems more from the metaphysical conception of matter in modern thought, as it is now viewed as part of nature and can only become part of the social sphere through human agency. It is due to this Cartesian separation of object and subject that an 'ontological disquiet' or 'homelessness' is created, as the relation is established between a person and an abstract idea of that object, not with the thing in itself. This, as Simmel had observed, creates a teleology of human fulfilment in the unceasing acquisition of goods. To develop alternative conceptions of materiality, Thomas argues that an interpretive archaeology should follow philosophers such as Heidegger and Gadamer in using hermeneutics and phenomenology to allow the (past) world to reveal itself to us through specific encounters with (past) things (Thomas 2004b, 29-31). In this view archaeologists are not 'outside' observers and are not able to compare different cultures from such a position:

"The abiding problem for an interpretive archaeology is one of where to enter the hermeneutic circle, if we have no fixed point of departure. We cannot assume that the human body is biologically fixed and ahistorical, or that the human mind has a set of hardwired capabilities, which create a stable bridge to the past. The most that we can do is to experience and interpret prehistoric artefacts and ancient landscapes through our own embodiment and our own prejudices, knowing that what we create is a modern product, enabled and limited by our own positioning in the contemporary world." (Thomas 2004b, 34)

For Thomas this creation of meaning takes places within a Heideggerian 'horizon of disclosure', in which certain phenomena are revealed while others are inevitably obscured, as human existence is intrinsically surrounded by a 'dark penumbra of unintelligibility' (Thomas 2004a, 217). This does not mean that from a Heideggerian perspective it is impossible to enter into a different ontological framework as he himself explored for the pre-Socratic philosophers, and others (using his ideas) have done for the ancient Chinese (Zhang 2010) and Aztec early civilisations (Gingerich 1987). Yet the ability to carry out an exploration like this does not imply universalism, since the horizons of disclosure remain separated from each other and completely rooted in their respective 'soils'. For Thomas one of the main goals of what he calls a 'counter-modern archaeology' would be to alleviate the disenchantment of modernity and through this satisfy the yearning to reconnect materiality and meaning (Thomas 2004a, 229-230).

Such a perspective on the interpretation of the archaeological record hardly lends itself to cross-cultural comparison, though neither does the opposite end of rationalist uniformity. It may well be asked if in fact the discipline of archaeology has not outgrown this cycle of theoretical discourse. The growing sophistication of field methods, and the formulation of new middle-range theories to make sense of the abundance of new knowledge in archaeology, demands close attention to the question of high-level theory lest the fruits spoil from theoretical indigestion. As shown in figure 1, the standard view of archaeological theory is to divide it between the archaeological record on the one hand, and basic or lower, middle and high levels of theory on the other. Leaving aside for a moment the question of the archaeological record and the truth procedures of the basic and middle levels, the relation between the high and middle-level theories has been described by Yoffee as one of 'scaling' models (*Myths*, 187-188). One good example of this is how the high-level axioms of formalist economics are used to structure middle-level theoretical models of 'optimal foraging strategies'. Trigger has noted a similar pattern in his history of archaeological thought, with various theoretical schools, such as processual and interpretive archaeology, shaping research agendas, models, and methodologies (Trigger 2006a, 33-35).

The problem with this is that these high-level theories are themselves immune to any kind of direct scrutiny, as the process of scaling is downward only (Trigger 2006a, fig. 1.1, p. 31). Such a practice of doing theory carries with it a great risk of succumbing to a singular perspective, which does excludes everything that cannot be modelled according to its own axioms as unimportant or even nonsensical (Bintliff 2011, 16-17). Whether these axioms are meant as objectively scientific or embraced as one's own frame of reference is not even relevant, as in both cases there is no way to question the *a priori* assumptions.⁴ Both in this sense are based on analogical reasoning. This is also true for the various schools of culture history, where the theoretical foundations were often formulated less explicitly, though see Trigger (2006a, 303-311) for features of its theoretical discourse. All of these approaches (explicitly or implicitly) use downward scaling from high-level

⁴ Of course this is highly relevant for the middle-level models and research strategies, which can consist of widely varying ideas such as phenomenology or hypothesis testing. In both cases these ideas will need to be coherent with the information derived from the senses, whether these are understood to derive from subjective individuals in a landscape or computer-enhanced satellite maps of the same terrain.

theoretical axioms. It depends on where one is in the intellectual cycle between rationalism and relativism whether this leads to, respectively, a coherent theoretical doctrine or a cacophony of different, subjective interests. According to Trigger (1995a), the 1990s ushered in an era of domination of relativism, spurred on by neoliberal economic thought.

Yet, this cycle has only meaning (in an intellectual sense, leaving aside practical matters) if one accepts the idea of downward scaling from high-level theoretical ideas, based on either positive or critical forms of analogical reasoning. Instead of using analogical approaches, it is also possible to embed conceptions of human nature within history itself. That is, using the historical record to supply the materials in order to develop ideas about human nature, and taking it to be primary over *a priori* ideas. Hence this approach denies that one's cultural frame inevitably puts interpretations of human nature out of reach, and also checks strongly determined views of it that are less amenable to the particulars of the historical record. Specific examples of this generic approach will be discussed in part 2.3. In the next section a critique of analogical approaches to human nature will first be elaborated, one that is based on the strong practical limitations of them in the face of ethnographic encounters with non-Western cultures.

2.2.2: A critique of analogical theories of human nature

High-level theoretical ideas derive from the wider social-intellectual environment in which they take shape, and this is true for conceptions of human nature and its origins as well. Looking for the 'origin of origins', it can be observed that such questions can be traced back in a genealogical sense to the Greco-Roman civilisations of the Mediterranean in the first millennium BC, when philosophers started to speculate about the origin of the cosmos, biological creatures, humankind, as well as of culture (Campbell 2006). The diversity of human cultures, their origins and their (moral) valuation in the terms of specific philosophical schools, such as the Epicureans or the Neo-Platonists, created a series of philosophical debates that were continued in a sequence of 'Hellenic revivals' in the Mediterranean and neighbouring regions that stretched into the Early Modern period (Ruprecht 2001, 35-42).⁵ One of these debates concerned human nature, and this has been specifically investigated by Marshall Sahlins as part of this *longue durèe* of ideas and its impact on more recent anthropological endeavours in his small book *Illusion* (2008).

Sahlins' initial point of reference was the description by the Athenian general and historian Thucydides of an event of *stasis* or civil strife between two different factions in the *polis* or city-state of Corcyra during the Peloponnesian war between Athens and Sparta in the 5th century BC (*Illusion*, 5-15). The narrative describes a near total anarchy with people from the different factions killing off one another almost at random, as well as committing sacrilege against the law and religion. Thucydides attributed this to human nature overturning the beneficial effects of the weaker pull of law and custom that keep societies together. His narrative resonated powerfully with many later thinkers, who often advocated widely opposing solutions to this problematic aspect of human nature, these include for example Hobbes' sovereign monarch or Adams' democratic balance of power. As such the notion of individual human nature was conceived as forming a powerful threat to the well-being of society. Yet as Sahlins notes, nature or *physis* is a paradoxical concepts, as it is itself without real active agency:

"Note that as an independent realm of necessity, physis is thus subjectless – except possibly as god created the world – and accordingly in humans it refers to aspects of behavior for which they are

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⁵ This is not to deny that there were no important schools of thought regarding such issues elsewhere in Eurasia or the rest of the world, nor that there was no interaction in an intellectual sense between different parts of the world, but the discussion is kept here within the confines of Sahlins' genealogical critique for the sake of brevity.

not responsible: the inherent and involuntary urgings of man's makeup. The absence of subjects is a distinctive quality of the Western imagination of 'nature', again in contrast to many other peoples who live in worlds imbued with subjectivity, their cosmos being populated with the sun, moon, stars, animals, mountains, thunder, food crops and other such non-human persons." (Illusion, 35-36)

Starting with the initial formulation of *physis* by the early Greek philosophers, it has been concerned not only with human nature and its practical political implications, but also with cosmology, the human body, and conceptual ontologies (*Illusion*, 24-33).⁶ Such interconnections can be seen as especially pronounced for conceptions of the emergence of the cosmos and human society, both of which carry important ethical implications (Campbell 2006, 11-12). They can be found in almost all of the iterations of Western thought discussed by Sahlins, including medieval Europe, Italy during the Renaissance and the Early Modern United States. The one major change that gained ground during the early modern period was that instead of human nature being viewed as an ever-present force of disruption to society, the purported egoism and self-love of individual human beings began to be seen as in fact constituting its basic building block.⁷ This is a viewpoint that has been stressed especially by formalist economic theorists and also more recently evolutionary psychologists (*Illusion*, 84-87).

Sahlins contrasts these Western ideas (and their actualisation in various colonialist enterprises), to a series of ethnographies from areas as diverse as South Asia, Africa, Oceania and Latin America (*Illusion*, 43-51). Many of these cases show that the idea of natural self-interest as substantiated in the actions of a supposedly egoistic individual is often seen as madness and possibly connected to witchcraft. Individuals, as described in these ethnographic cases, are instead conceived as forming part of small kin communities, which may or may not be defined by blood relations. As such they are not seen as essential subjects in themselves but as 'dividuals', though with important differences in conceptions of personhood between these different ethnographic case studies. This goes as far as seeing the body not as a private possession but as part of the micro-kin-community feeding and caring for it, with diseases, deaths and transgressions impacting others of that group. Such a holistic perspective on the human world even goes beyond the social world to include the surrounding animals, plants and other physical phenomena, which are believed to possess personhood of themselves, to be engaged through myths, dreams and visions:

"In this connection, the 'magical' power of words and ritual performances may seem less mystical or at least less mystifying when it is realized that they are addressed to persons. As such they are intended to influence these other-than-human persons by rhetorical effects, in the same way as interpersonal dialogue among people moves them to thought and action. For this purpose, a full semiotic repertoire of associations is brought to bear, ranging far afield of the technical dimensions of the activity yet remaining connected to its aims. Praxis becomes poetics, since it is itself persuasive." (Illusion, 92)

⁶ Left out of Sahlins' account are theories of the origin of language, which are nevertheless of crucial importance not only as an element within origin accounts (Campbell 2006, 52), but also as providing the philosophical underpinning of such accounts in epistemological terms. This question will be more extensively discussed in part 2.3 below.

⁷ Ever since Jacob Burckhardt's study of the Italian Renaissance (Burckhardt 1878), debates have been going on where and when in Early Modern Europe this specific conception of individualism emerged, though further arguments have considerably modified what is understood by the notion of individualism in this period as well (e.g. Martin 2006). For Sahlins, this shift occurred with Aquinas in the 13th century, when he modified Aristotle's notion of the natural association of humans as *zoon politikon* in a *polis* to pursue the good life to seeing this association as arising primarily from the need of individuals to secure a material existence (*Illusion*, 52-62).

This can be observed practically in contexts such as hunting, which is for some indigenous hunters experienced as an interpersonal relationship like kinship and often referred to in terms of the courtship of animals. Animals also are believed to have their own houses, marriages, chiefs, ceremonies and the like, but humans appear to them as spirits or as an animal species, due to bodily differences. Thus, in many indigenous worldviews it is human culture that is seen as universal and natural phenomena as things-in-themselves as secondary. Hence Sahlins asks the question who the actual realists about human nature are (*Illusion*, 104-112), arguing the case for culture as the location for what is significant about the term 'human nature'. In fact in an earlier work comparing the Peloponnesian war to a structurally similar conflict in 19th century Polynesia, he had suggested that Thucydides view of human nature could be plausibly linked with the very specific character of the conditions of the Athenian empire, although not strictly determined by these conditions in themselves (Sahlins 2004, 30-46).

Having outlined the context in which the ideas of human nature critiqued by Sahlins were formed, what about alternatives? Sahlins himself states explicitly that he is no postmodern thinker, (*Illusion*, 3), aptly noting the dialectic interconnectedness between Hobbes and the work of Michel Foucault on knowledge, truth and power in Early Modern Europe (Sahlins 2002, 40-41). Rather than remaining within a culturally-internal debate, his introduction to the comparison of Aegean and Polynesian wars provide alternative ideas on how to proceed (Sahlins 2004, 4-7). Following Mikhail Bakhtin, Sahlins argues it takes a person from another culture to really understand a culture. Rather than solely immersing oneself in a different culture, which would only be duplicating it at an individual level, an outsider can by creative understanding achieve a position of 'exotopy' or *vnenakhodimost* in which the culture is seen anew from a different angle which brings a more complete and deep understanding. Yet this position of exotopy is not one of being secluded in a position of absolute knowledge, as it is impossible to perceive one's own position in the whole, and hence propose *a priori* ideas. Instead it can be seen as more of a relational position, in which the reciprocal exchange of viewpoints is a distinct possibility.

Although his studies focused primarily on literary works, Bakhtin approached them not as a critic but rather strived to understand them as means of gaining insights into cultural transformations such as the transition from the medieval period to the Renaissance, much as the French *Annales* school studied *mentalités* (Holquist 1986, xiii-xiv). In an essay written in 1970 for the Soviet journal *Novy Mir*, Bakhtin emphasized that cultural systems should be understood as open and unfinished (Bakhtin 1986, 5-7). These 'open unities' also form part of what he called 'great time' or *bol' shogo vremeni*, the single, though not linear, process of cultural evolution of humanity. This emphasis on the universal, incidentally, is quite different from some postmodern appropriations of Bakhtin's work.⁸ Through achieving a position of *vnenakhodimost*, there is the potential for a 'dialogic encounter' in which there is no reduction of each 'open unity' to a single form. Rather, there is the distinct potential of this encounter to alter one's own conceptions of phenomena:

"We must emphasize that we are speaking here about new **semantic** depths that lie embedded in the cultures of past epochs and not about the expansion of our factual, material knowledge of them — which we are constantly gaining through archaeological excavations, discoveries of new texts, improvements in deciphering them, reconstructions, and so forth. In those instances we acquire new material bearers of meaning, as it were, bodies of meaning. But one cannot draw an absolute distinction between body and meaning in the area of culture: culture is not made of dead elements,

⁸ Many interpretations have been put forward about the influences and leanings of Bakhtin, who had a difficult if not unproductive life in the Soviet Union. If we keep with the principles of his own work, it seems most useful to consider him as part of humanistic strands of interpretation within Russia, which are explicitly counterposed to postmodern ideas (Bulavka & Buzgalin 2004). We may then view this in a Braudelian sense as a specifically Russian/Soviet *conjoncture* of ideas, within the *longue durée* of post-Renaissance philosophy.

for even a simple brick, as we have already said, in the hands of a builder expresses something through its form. Therefore new discoveries of material bearers of meaning alter our semantic concepts, and they can also force us to restructure them radically." (Bakhtin 1986, 6, emphasis in the original)

Such a dialogical approach seems to offer a plausible alternative to both rationalist and relativist approaches, since it is potentially able to both generate truth procedures and to treat different cultures on their own terms. Tedlock (1979) has explicitly contrasted dialogue with analogical approaches in the context of ethnography, but it has implications for archaeology as well (Joyce 2002). Yet while Bakhtin's method of *vnenakhodimost* is very useful for critiques of analogical conceptions of human nature, his notion of *bol' shogo vremeni* that captures the overall historical process is not explored by Sahlins. Nor is it extensively explored by those favouring a more dialogical approach. This situation is unsatisfactory as it abstracts from Bakhtin's methodological ideas a more general theory, whereas they were intended more specifically for studying the relation between literary works and the characteristics of the eras in which they were created. It is doubtful that on this basis alone an alternative approach to human nature can be developed. Another point of contention, not unrelated to the first one, is that while Sahlins connects Thucydides and those who came after him to clear historical contexts, he never does so for those thinkers that for him embed human nature within culture, such as Plato, Pico della Mirandola and Marx (*Illusion*, 104-112). This means that while the arguments of Sahlins are very useful, they are also incomplete.

2.3: History-based conceptions of human nature and cross-cultural comparison

2.3.1: Introduction

In the following sections the philosophical-methodological basis for history-based conceptions of human nature will be outlined. As such they form the epistemological core of the thesis, and act as a pivot between the more philosophical issues discussed in section 2.2 and the practical methodology of section 2.4. The first step in section 2.3.2 is to briefly note the historical contexts within which the different systems of thought emerged. This sets the stage for the discussion of the work of Vico in section 2.3.3. Vico's thought is highly significant as he was the first to develop a history-based conception of human nature in a systematic way. He also incorporated the indigenous development of the cultures of the New World in his system. These two elements make it useful to consider the potentialities and limitations of his philosophical-methodological framework in detail, so as to be able to compare it to the work of others. Section 2.3.4, then, extends the discussion of Vico by placing his work within the context of broader intellectual currents. First of all these can be found in his own era of the early Enlightenment, but over the *longue durée* a connection can be traced to the 20th century as well. The work of Gordon Childe shows something of a family resemblance to that of Vico, even if it is derived from a different societal context and intellectual tradition.

The philosophical and methodological aspects of Childe's work are treated in section 2.3.5. This treatment also involves the relation of these ideas to the Marxist tradition, with which Childe was closely involved. Since the approach to cross-cultural comparison in section 2.4 derives from the Childean philosophical-methodological framework, considering its potentialities and limitations is of crucial importance. The earlier discussion of the work of Vico provides a useful counterpoint in this regard. By setting up a contrast between Vico on the one hand and Childe and the Marxist

⁹ This does not mean that no insights can be derived from his work. The preference here is to value Bakhtin's substantial work, especially that on Dostoevsky and Rabelais, as excellent cases of historical study and methodology, over any notion that somehow a meta-theory of literary criticism can be developed out of his thought. Work influenced by the Rabelais study has treated subjects as diverse as Greek vase-painting (Mitchell 2009) and Aztec markets (Hutson 2000).

tradition on the other, a common methodological limitation in history-based conceptions of human nature can be articulated. This limitation revolves around the observation that in the work of both Vico and Childe the variations and idiosyncrasies of different regional trajectories tends to be subsumed under the over-arching reconstructions of universal history. In order to find remedies for this, use is made of the work of Wittgenstein in section 2.3.6. Particular emphasis in this section will lie on the critical remarks made by the philosopher about the work of the comparative anthropologist James Frazer, but other elements of Wittgenstein's work will be discussed as well. All of the previous strands taken together will allow for the formulation of the basic philosophical-methodological framework of the thesis in the final section 2.3.7.

2.3.2: The emergence of a history-based conception of human nature

Although he was not without intellectual precursors and influencers, the Italian philosopher Giambattista Vico (1668-1744) was the first to develop an approach to human nature based on history in a coherent and systematic way. Even if Vico remains somewhat infamous, he can still be seen as an important precursor for many later thinkers. For example, Gordon Childe (1947, 67) mentioned Vico as having had 'some anticipations' of his view of history as a creative process. This view of Vico was shared by one of his friends, the philologist Benjamin Farrington, who elaborated upon it in his Conway Lecture of 1950 (chaired by Childe). Here Farrington outlined how the Childean notion of 'man makes himself' could be traced back to the 18th century Italian philosopher, especially with regard to the centrality of an internal relation between thought and world as it developed in the course of history:

"Vico saw clearly that while mathematics might avail to describe the movements of matter in space, its usefulness for the material with which he was concerned was much less. He had to describe how the brute-man from whom civilisation had originally sprung, had created such mighty institutions as tribe and nation, city and state, property and law, public assemblies, art, religion, poetry and philosophy. Hegel agreed with him that mathematical knowledge was inadequate for the handling of such concepts, and he had discarded not only mathematical but formal logic, showing how a true logic must take its form as well as its content from the material it seeks to organise." (Farrington 1950, 31-32, emphasis added)

For Farrington and Childe the philosophy of Vico was essentially a precursor that was superseded by the classical Marxist position they adopted. Here a different position is taken, in that Vico is not seen as just a stepping stone to Marxism, but rather as starting-point of an 'elective affinity' in the *longue durée* of thought that stretches from the Early Modern period till the present. This demands taking the thought of Vico seriously in its own terms (cf. Verene 1981, 20), while also exploring more in-depth the societal structures within which it emerged. Three important features of the latter topic will be discussed in this section, starting with the Early Modern impact of the changed relationship with Greco-Roman antiquity and non-European cultures on European thought. As we saw in section 2.2.2, there were accounts of prehistory in Greek and Roman writers. Yet even when these were expounded in a rational way, empirical data, while not totally ignored, were subsumed under general philosophical ideas (Campbell 2006, 1). The artefacts of preceding periods recovered in the Greco-Roman world did not seem to have impacted such thinking in any significant way, with the Greek term *archaiologia* having more to do with philosophical anthropologies than with the material record as such (Trigger 2006a, 45-47). Where the prehistoric material record was used, it was treated mostly through cultic and mythological approaches (Gere 2006, 25-46).

This situation was different for Europe in the Early Modern period, in the sense that differences in degree of the available sources eventually led to intrinsically different approaches to them. Not only

were the archaeological remains from Greco-Roman civilisation more visible to those living in Early Modern Europe, there was also more continuity in terms of philosophical, artistic and literary traditions. The result was a crucible of the availability and high valuation of Greco-Roman antiquities, which stimulated the development of both philological and antiquarian methods, including the rudiments of excavation techniques (Trigger 2006a, 52-61). Taking a broader cultural perspective, Panofsky ([1939] 1972, 27-28) argued that whereas in the medieval period elements of Greco-Roman culture were continued, only in the Renaissance was there a reconstitution of this culture as a whole. For Panofsky (1944, 225) the implication of this was that Greco-Roman antiquity could now be viewed from a distance and in a more objective way, analogous to the development of perspective in painting in the same period. Another view of this is that of Malcolm Bull (2005), who argued that the impact of Greco-Roman mythology on Renaissance art was not to reconstitute it as a coherent system but rather created a new relation between art and truth. Paintings of such themes would be based on *fantasia*, being neither fully true nor entirely false, but an appropriation of a culture that was held to be true in antiquity (Bull 2005, 394). In

This 'distance effect' implies that Greco-Roman antiquity concurrently is appropriated and remains foreign, as can be seen in the 'quarrel of the ancients and moderns' of the 17th century. At the same time the encounter with non-European cultures in Africa, the Americas and Asia reached a level of scope and intensity that went far beyond what the Phoenician, Greek and Roman explorers encountered in their voyages. These were inter-cultural contacts that engendered important philosophical and theological debates, which have been interpreted as challenging established conceptions of human nature and natural law (Pagden 1983). Of course, one should not underestimate the powers of ethnocentrism and societal biases in moulding thinking about these societies, as can be seen not only in these early debates but also in the representation of Amerindian art in later art-historical discourse (Pasztory 2005, 119-128). Despite continuities in thought in the earlier explorers like Columbus (Campbell 2006, 142-151), the scope and intensity of the European colonial encounter with the non-Western world makes it of a completely different order. In sum, the broadening of horizons to the Greco-Roman past and to the world beyond Europe was so different in degree, that it would enable a different approach in kind to questions regarding human nature. In time what would emerge from this are the scholarly methods of philology and ethnography.

The second important development to consider was that of the expansion of the monetary economy and the emergence of capitalism in Early Modern Europe. In his magisterial study of the initial phases of capitalism, Braudel shows that its basic tenet is not to be found in the 'free market' but rather in the sphere of finance and its intimate relations to the state (Braudel 1977, 63-65; 1984, 623-625). Monetary exchange in itself was not a sufficient condition for this development, as it

¹⁰ According to Panofsky the earlier Carolingian re-uses of antiquity should be seen as being alike to quotations, since they neither were able nor saw the need for creative use of this literature and the concepts embodied in it, thus separating form and content (Panofsky 1944, 219). In contrast to the Carolingian 'renascence' (among other cases), the Renaissance did bring form and content back together.

¹¹ Of course part of the reason for this was that paganism could never have been accepted as true within a strict Christian culture (Bull 2005, 394-395). Nevertheless we are dealing here with a new kind of artistic subjectivity rather than a reconstitution of a preceding one. This entails a somewhat different thesis than the one put forward by Panofsky, even if he also recognised the differences in the art of Greco-Roman antiquity and the Renaissance from a cultural perspective, as can be seen in his work on the emergence of perspective in Renaissance painting (Panofsky [1927] 1991, 67-72). One review of Bull's book also rightly stresses that the Greco-Roman myths would have some inalienable qualities, with structuring effects on artistic representation and perception (Clark 2005).

¹² For Braudel markets are present, in one form or another, in all complex societies, including sub-Saharan and Amerindian cultures, whereas capitalism proper was developed and implemented from the summit of the economy rather than its base, which then moved from 13th century Florence to the big financial centres of today (Braudel 1977, 112-114). Hence the markets recognised in various pre-capitalist societies (Feinman & Garraty 2010), should be seen as distinct from capitalism. Braudel also provides an important suggestion as to why the two are seen as inseparable:

can already be observed in Greco-Roman antiquity (Von Reden 2010). Renfrew (2003a, 182-184)) has discussed the introduction of coinage in the Aegean as providing a new 'form of communication', one based upon standardised units of universal value. With capitalism the use of money as a form of communication would become more pervasive and universal (Braudel 1981, 477-478). As shown long ago by Marx, this depended upon the ability of moneyed wealth to gain control over the means of production, starting with the land (Marx [1858] 1964, 67). These developments of course played out in a spatial setting. One way in which this can be understood is as part of a broader world-system, in which relations between core, semi-peripheral, and peripheral regions structure economic and geopolitical interaction (Wallerstein 1974). Change in this system took place in different ways, and at different speeds:

"A 'synchronic' view of the world in the eighteenth century bears this out to the point of obviousness. Vast areas and millions of people were still in the age of Homer when the value of Achilles' shield was calculated in oxen. Adam Smith was struck by this image: 'The armour of Diomede,' says Homer, 'cost only nine oxen; but that of Glaucus cost an hundred oxen.' An economist today would unhesitatingly call these simple types of humanity a Third World: there has always been a Third World." (Braudel 1981, 441-442)

More recent research has led to more detailed insights into the relations between economy, geopolitics, and ecology, as in the case of the exploitation of the South American Potosi silver mine by the Spanish empire (Moore 2007, 2010). Hence the impact of this system not merely changed the relations between humans, but those with the natural environment as well. As such, the expansion of the capitalist world-system can be understood as part of the broader expansion of the human ecological 'footprint' (McNeill 2000, table 12.1, p. 360-361). It was once again Marx who supplied a key insight into how this increased control over nature could take place. He argued that the difference between a tool and a machine is that the latter can incorporate the former in a mechanism for specific tasks (Marx [1867] 1976, 492-495). This means not only that tools are now separated from human labour, but also that these tools can be connected to other sources of power that allowed them to operate on a 'Cyclopean scale' (Marx [1867] 1976, 507). Because of this the average human being of the 1990s used the equivalent of twenty non-human 'energy-slaves' for sustenance (McNeill 2000, 15), though of course these were not equally distributed. Coupled with capitalism, this form of machine-based production ultimately succeeded in a complete transformation of the previously existing pre-capitalist world.

The third important aspect relevant to the understanding of the societal context in which history-based conceptions of human nature were first expressed is that of the early Enlightenment. As argued for by Jonathan Israel (2001, 11-13) a key distinction can be made between a number of different moderate versions of the enlightenment, which sought to reconcile the new developments in science and philosophy with the existing economic, political and religious structures, and a radical version that sought to use them to establish a new order. His main argument is that the key for understanding the radical Enlightenment can be found in Spinoza's one-substance metaphysics,

[&]quot;If no distinction is usually made between capitalism and the market economy, it is because they both moved ahead at the same rate, from the Middle Ages to the present, and because capitalism has often been presented as the motivating force or the flowering of economic progress. In reality, everything rested upon the very broad back of material life; when material life expanded, everything moved ahead, and the market economy also expanded rapidly and reached out at the expense of material life. Now, capitalism always benefits from such an expansion. I do not believe that Joseph Schumpeter was right in considering the entrepreneur a sort of deus ex machina. I persist in my belief that the determining factor was the movement as a whole and that the extensiveness of any capitalism is in direct proportion to the underlying economy." (Braudel 1977, 63)

¹³ This term was originally developed by Margaret Jacob, who gave a rather different meaning to the concept than does Israel, in particular with regard to the importance of Spinoza (Jacob 2012).

which rules out divine intervention in human affairs and instead points to the central role of human agency in shaping moral values (Israel 2011, 11). In its methodological essence this doctrine is intimately related to history-based conceptions of human nature, as will be discussed further in section 3.2.3. Starting with the work of Vico, including its impact for understanding the indigenous civilisations of the Americas, the 'elective affinities' of these ideas will be explored from the early Enlightenment through to Gordon Childe and his impact on archaeological thinking.

The purpose of discussing these factors is not to pretend to give an intellectual history of the kind provided by (Thomas 2004a). Instead, it serves a much more limited aim of outlining the perspective of the present author in focusing especially at the thought of Vico as part of what may be termed a new mode of historiography. Summing up the very brief account, we can see that these three developments allowed for the emergence of a history-based conception of human nature in different ways. Through the broadening of temporal and spatial horizons Europe was positioned differently in a historical and geographical sense, and through the development of philology and anthropology scholars were able to interpret this broadening of horizons in a methodological way. The development of capitalism and the modern world-system had a powerful transformative effect, reordering relations between humans, as well as the interaction between humankind and the natural environment, on a global scale. Finally, through science and the Enlightenment in general, the position of humans changed in an intellectual sense as well. Together these developments acted as a crucible for the emergence of a new way of looking at history and human nature.

2.3.3 Vico's method, human nature and history

Turning now to Vico, the starting-point is the method he developed based on a critique of Cartesianism. Thomas (2004a, 55-57) is right that in terms of method the Cartesian *cogito* does not only place individual self-certainty at the centre of inquiry, but also that this implies reason as being universal and objective. For him the Cartesian method, indeed the notion of method itself, remains bound within the horizon of modern metaphysics that it helps to constitute (Thomas 2004a, 61) and is diametrically opposed to the Heideggerian notion of 'dwelling' that he seeks in an anti-modern archaeology. Here a different view is taken in that this method should not be seen as a reflection, or indeed reflector, of modern metaphysics. The critique of it offered here does not concern the notion of method as such, but rather the specifics of the Cartesian method. First of all, though, it should be noted that Cartesian thought is regularly decried by many a writer as responsible for all kinds of modern ills and anxieties, see the examples discussed in (Watson 2002, 18-22). This one-sided view neglects the implications of his work in terms of the valuation of the individual, the conception of the body, and the ethical principle of *générosité*. All of these seem to have fostered an elaborate and effective argument for egalitarianism, including for women and peoples at that time considered to be lacking in development (Stuurman 2009, 262-273).

However one values the thought of Descartes and his followers, it certainly did have a clear and lasting impact in the sense that it opened up new ways of thinking. According to Thomas the best example of Cartesianism in archaeological thought can be seen in middle-range theory (Thomas 2004a, 72-75), but from our purposes it is more important here to note the pivotal role of his work in the shift from vitalistic to mechanistic conceptions of the human body (Carneiro 2010, 272). This shift was of crucial importance in the development of the medical-biological sciences, and the view of the human body as a hydraulic-mechanical machine (Stuurman 2009, 266) can also be related to

¹⁴ Quite clearly there are other important aspects, such as the development of the European nation-state after the Westphalia treaty of 1648. Thomas emphasises this point in relation to the emergence of ideas on social contracts and nationalism, finding their way into archaeological theory as well (Thomas 2004a, chapter five). While not denying the significance of this, here the concurrent development of capitalism and machine-based production is held to be of greater importance, at least when viewed in the long run and on a global scale.

the broader shift to a mechanical-based worldview. 15 At the same time, of course, the Cartesian view remains a dualistic one, in that it removes the soul and God beyond the scope of rational analysis (Carneiro 2010, 116-118). Here we can see the real difference between Descartes and the radical Enlightenment. It lies not in the notion of equality as a political project, as some critics of Israel have contended (Stuurman 2009, 483-485), but rather in the scope of reason to analyse not just physical bodies in space and time, but also social and moral questions in their historical contexts. The key difference, then, lies in the scope and subject matter of methodology.

Yet the notion of the *cogito* as constitutive of the Cartesian method remains problematic within his thought. It is thoroughly unhistorical, but emerges in the historical person of Descartes, who, within the constraints of the time, also saddles it with all kinds of theological concerns which need not concern us here. As a method it cannot account for its own historical genesis, as it projects human nature from the outside, from the mind upon the body and physical reality, rather than allowing for a more subtle dialectic between subject and object. A very different view of this can be found in the work of Vico. Living in an age in Italy when Cartesianism and other Enlightenment ideas were making a big impact in Italy (Israel 2001, 43-58), Vico was also concerned first and foremost with method. His method formed part of a philosophy of history that involved much more than just the rejection of progress as an ordering principle noted by Thomas (2004a, 87). Instead the core methodological principle of Vico's philosophy, developed in direct opposition to the Cartesianism of the day, was the methodological insight that 'the true and the made are convertible' (verum et factum convertuntur). Originally developed in his early work On the most Ancient Wisdom of the Italians (1711) this principle can be seen as the basis for his later development of a grand philosophy of history in the *New Science*, with the third and final edition being published in 1744.

This principle means that truth lies not in observation, as by an external observer, but rather in the ability to make something and to grasp its inner workings (Verene 1981, 36-40). This prompted Vico to express surprise at the fact that philosophy had concerned itself primarily with physical nature, which for him is made exclusively by God and can only be understood by that entity, while neglecting what has been made by humans themselves (Vico [1744] 1948, #331). This is sometimes interpreted as indicating humanistic studies and the scientific investigation of nature as different domains (Hacker 2001, 51-52). However, Vico's distinction should not be interpreted according to Snow's (1959) 'two-culture' division between science and the humanities. Instead, the human study of nature, as opposed to divine knowledge of it, is itself part of history and therefore cannot be separated from historical inquiry. This can be seen in Vico's account of the origins of metaphysical and mathematical ideas in the era of the first humans, as they derived from the original, astrological, mapping of the heavens (Vico [1744] 1948, #711). Hence human knowledge about nature is made by humans, being intrinsically dependent on the kind of society in which the inquiry is carried out, and can thereby only be properly understood through the universal history as outlined in the New Science (Vico [1744] 1948, #367).

¹⁵ In his point that the method of Descartes was conducive to formulating a new kind of political economy appropriate for the emerging capitalism of his time, Marx made an observation that relates it to machine-based production:

[&]quot;The portion of value which is added by the machinery decreases both absolutely and relatively when the machinery drives out horses and other animals which are employed merely as motive forces and not as machines for inducing metabolic changes. We may remark here, incidentally, that Descartes in defining animals as mere machines, saw with the eyes of the period of manufacture. The medieval view, on the other hand, was that animals were assistants to man." (Marx [1867] 1976, note 27, p. 512)

¹⁶ Bull has noted the remarkable similarity between this account and the wording of the early Nietzsche's view of the origin of the sciences (Bull 2013, 123). There is a stark contrast between the two thinkers, however, in that Vico seeks to move from facts to his ideal and eternal history, just as Neapolitan painters moved from the autopsy of nature to its ideal form (Bull 2013, 93-94). Nietzsche in his reflections on the uses of history rejects the notion of 'monumental history' (Nietzsche [1874] 1997), adopting a very different view of art and society.

The difference between godly and human understanding of nature is as the difference between a sculpture and a painting. In making the sculpture of nature, God actually shapes the material into a three-dimensional object, whereas humans can grasp it only through experiment and approximate its form on a two-dimensional plane using geometric methods of projection (Verene 1981, 36-37). As pointed out in an insightful study, Neapolitan painting may have played a role in role in fostering this perspective, acting as an epistemological model in its own right, as can be seen in a painting by De Matteis (Bull 2013, 118-120). The difference between the godly and human ways of grasping nature is that between *verum* (true) and *certum* (certain). When looking at nature, including the mind, a human being can never posit anything more than a *certum*, since it has not been made by him or her. Descartes has made the mistake of taking his *cogito* for a *verum*, whereas it really was a *certum*, and thereby fails to distinguish between scientific knowledge and consciousness (Verene 1981, 43-44). Vico likens the Cartesian *cogito* to a passage in Plautus where the character Sosia is confronted by Mercury having masqueraded as his double, leading Sosia to meditate:

"By Pollux I recognize my own form when I regard him. He is as much like me as my own reflection in a mirror. He wears the same hat and garb; he is my spit and image. Legs, feet, stance, haircut, eyes, nose, teeth, lips, cheeks, chin, beard and neck are, one and all, my own. Need I say more? If his back is scarred, there is nothing more like to this likeness [than me]. But when I think, I am for certain the same man I have always been." (Vico [1711] 1988, 54, emphasis in the original)

Vico locates the *verum* of human truth not in the *certum* of the individual *cogito* of Descartes or Sosia, but rather in communal origins: the convertibility of *verum* as universal history and the *certum* of particularities can be traced back through the etymology of the Latin language. According to Verene (1981, 44-49), the principle of *verum-factum* originated for Vico in the *sensus communis* of the ancient Latin worldview, as it can be reconstructed through history and etymology. It thereby underlies the art of topics that makes the advanced geometrical method of Descartes and modern thought possible. This is because the art of topics allows, through metaphor, for the formulation of a middle term, which in turn can connect different thoughts and thereby make them intelligible within a coherent framework. It may be observed that by positing his *cogito* almost out of nowhere, Descartes not only ignores the origins of his own method, but also throws out the baby (the art of topics) with the bathwater (superstitions). Instead, Vico proposes a marriage of philosophy and philology, for which seven kinds of philological proofs are formulated (Vico [1744] 1948, #352-358). These include an emphasis on language as the expression of *sensus communis*, which can be traced back to its origins through the study of etymology.

The fruits of this exercise was the universal history outlined in the *New Science*. It has been argued that the key to understanding this work is the notion of the 'imaginative universal' or *universali* fantastici, which is a theory for concept formation, for metaphor and for the basic conditions for the activity of thinking itself (Verene 1981, 65-69). With regard to knowledge, it can be contrasted with the 'intelligible universal,' as epitomised by the logic of Aristotle. The imaginative universal differs from the intelligible one in seeking out not analogies, as in grouping particulars together in classes, but through attributing identity to generic poetic types such as Achilles or Odysseus (Verene 1981, 76). This kind of thought, so Vico noted, was very difficult to grasp for himself and for others whose thought was shaped in an age dominated by the logic of intelligible universals. The basic principle of this kind of thought is simply constituted differently, following a distinct ordering

¹⁷ Exempted from any kind of etymological investigation are the Hebrews, which are distinguished from all other peoples owing to their close relation to the superior Christian faith (Vico [1744] 1948, #9). The difference can also be seen in the frontispiece of the *New Science*, in which the light of divine providence falls not on biblical figures, as in contemporary Neapolitan painting, but rather on the the female figure of metaphysics and Homer (Bull 2013, 103-104).

principle that derives from his observation that the human mind naturally is inclined to uniformity:

"This axiom as applied to the fables, is confirmed by the habit the vulgar have when making up fables for men famous for this or that, in these or those circumstances, of making the fable fit the character and occasion. These fables are ideal truths conforming to the merits of those of whom the vulgar tell them; and such falseness as they now and then contain consists simply in the failure to give their subjects their due. So that, if we consider the matter well, poetic truth is metaphysical truth, and physical truth which is not in conformity with it should be considered false. Thence springs this important consideration in poetic theory: the true war chief, for example, is the Godfrey that Torquato Tasso imagines; and all the chiefs who do not conform throughout to Godfrey are not true chiefs of war." (Vico [1744] 1948, #205)

However, the imaginative universal is not just a way of classification followed in a past age, it is also a theory for metaphor relevant to any age. Metaphor is the necessary condition for the mind to express itself, and as such for Vico it is rooted in the human body, which forms the basis for linguistic extension and is therefore the 'universal principle of etymology' (Vico [1744] 1948, #236-237). Furthermore, as noted by Verene (1981, 87-95) this is an existential condition rather than a response to practical issues. Hence the ignorance of Cartesianism to origins, in particular the bodily root of metaphors, leads it to ignore the true conditions of thought, and leaves its theses floating in the air. By contrast for Vico the imaginative universal made possible his philological work, in which posited his theory of the 'true Homer' that held that the works of the Epic Cycle reflected not the genius of one man, but rather the *sensus communis* of the Greek nation (Vico [1744] 1948, book three, section II). Expanding upon this, he explored how poetic form shaped a variety of features of society, including morals, economics, politics, conceptions of physics, history and astronomy, as well as of chronology and geography. From such insights into the radical difference between the ordering principles of different ages, Vico developed his 'ideal eternal history' composed of three distinct 'natures' (Vico [1744] 1948, book four, sections I-XI):

- 1. A 'divine' nature, in which the imagination is the primary ordering principle, and in which the physical world was conceived of as being composed of substances that were animated by deities. Dominated by fear, this nature was ruled over by 'theological poets'.¹⁹
- 2. A 'heroic' nature, ruled over by an aristocracy of heroes who based their self-conception on the idea of a natural nobility and virtue, itself of divine origin.
- 3. A 'human' nature, defined by intelligence and reason, with government based on justice.

While the terms of this tripartite division can be traced back to the Roman historian Varro, the use made of it by Vico was highly original. These 'natures' formed part of the ideal eternal history and can be understood as stages in a historical process, ²⁰ in which the first two natures can be grasped

¹⁸ That poetry here should be understood in a quite different and much broader way from modern common sense conceptions of it can be seen in Vico's position that the jurisprudence of ancient Roman law should be understood as "a severe poetry" (Vico [1744] 1948, #1037), from which their conception of personhood was derived.

¹⁹ The speculations of Vico on earliest prehistory derive from his philology-based research, and are incomparable with any modern archaeological research on the topic. We can see this in his account of the giants, also current in the Neapolitan art of his time (Bull 2013, 37-38). To be fair to Vico, the state of knowledge, if indeed we can already call it that in this period, on this topic was woefully inadequate.

²⁰ Each 'nature' can be distinguished by different specific social features, such as customs, laws, languages, characters, authority, reason and the like. Of particular interest is that in Vico we see for the first time the notion of a struggle between classes as part of a philosophy of history, as in the age of humans constitutional arrangements had to be made by the aristocracy to prevent a revolt of the plebeian class (Vico [1744] 1948, chapter four, section VIII). Yet note that here the first era of divine nature originates with property, while in another place Vico refers to the "infamous communism of things and women" as bestial and impious, only overcome through the establishment of authority by the first patriarchs (Vico [1744] 1948, #1099).

primarily through the imaginative universal. According to the plausible reading of Verene, this historical process should not be understood in a progressive sense, as in the Hegelian notion of *Aufhebung*, but rather as a continuous cycle in which each beginning contained its own end (Verene 1981, 112-113). Vico had traced this cycle for a number of different regions in the world in his Chronological Table (Vico [1744] 1948, p. 27), and this shows the ideal character of it, for even in Vico's own time there were questions with regard to his theory trumping over the facts, which were addressed through an insistence on Vico's part on prudence in the recollective reconstruction of the history (Verene 1981, 119). Such an intellectual move cannot be accepted easily, but that this strategy was very useful for certain purposes can be seen in the treatment of the Americas by Vico and by the work of Boturini as well, which was inspired by Vico's approach to history.

Vico clearly states in the *New Science* that the Indian cultures of the Americas would have followed the same cycle of the ideal eternal history, had their trajectory not been altered by the Europeans (Vico [1744] 1948, #1095). Kubler had compiled the references to the Americas from all editions of the *New Science*, and this shows that Vico's interest in Amerindian societies was enlightened and broad, if not systematic given that the references to them were scattered throughout the work (Kubler 1985, 296). Of particular interest for our purposes, however, is that Vico also discusses the hieroglyphs from the New World. Kubler notes that the critique of Vico of the notion that these signs contained esoteric philosophical wisdom (as ideograms) and instead should be seen as 'speech through physical things' resonates with the decipherment of the Maya script from the 1970s onwards (Kubler 1985, 298-299). Yet it is important to note that for Vico this derives not so much from insights into these scripts, and certainly not from detailed knowledge of the Maya, but from the philosophical point that the three ages of the ideal and eternal history are associated with distinct kind of languages. In fact, he argues that Amerindian cultures, and that of China as well were still using hieroglyphs (Vico [1744] 1948, #435), and hence would not have entered the human age.

Conforming to the notion of language as an extension of the body discussed earlier, Vico states that much as mutes express themselves through gesture-language that has a 'natural relation' to what is signified, so do hieroglyphs: both deriving from a 'natural speech' that existed before the start of poetic discourse (Vico [1744] 1948, #225-227). What developed from this was of course a large diversity of languages, which Vico accounts for by arguing that different historical peoples in different regions of the world provided different perspectives on the same basic conditions of human life (Vico [1744] 1948, #445).²¹ Hence even though Vico's theory of language appears to be very rigid, it actually can incorporate considerable diversity and explore similarities through the notion of imaginative universals. This uneasy balance between rigidity and flexibility can also be seen in the work of another Italian, Lorenzo Boturini Benaducci (1702-1756). Boturini went to Mexico in 1736, having read the first edition of the *New Science*, and collected there a large archive of colonial and pre-colonial indigenous documents, which also contained artefacts, which he, after suffering several misfortunes, used to publish a synthetic account of the indigenous, pre-colonial history of Mexico in 1746 (Keen 1971, 225-237; Kubler 1991, 87-89).²² Here we see a work that includes not only customs and religion, including the Mesoamerican calendrical systems, but also

²¹ Vico's theory of the origin of languages is quite difficult to grasp, as it cannot be held to have been a simple stage-scheme given that for him the divine, heroic and vulgar languages were all present from the beginning (Vico [1744] 1948, #446). Several scholars have noted the relation between Vico's conception of language and the one developed by Epicurus and his followers (Gera 2003, 39-40; Lifschitz 2009, 215-216). Some of the notable features of the Epicurean account are: different stages in the development of language, the rejection of a single inventor of it, initial language as instinctive and for expressing emotions, and the multiplicity of natural languages based on different material conditions (Gera 2003, 170-179). It would go too far to denote Vico's ideas as Epicurean, but there are family resemblances to be found here, which may well derive from his early exposure to Lucretius.

²² This work also had a considerable impact on the later historiography of pre-Columbian Mesoamerica, especially for Mexican scholars (Jansen & Pérez Jiménez 2011).

economic structures, all embedded within the framework of the Vichian view of universal history.

The key innovation made by Boturini in his work, basing himself on Vico's ideas about language and history, is his recognition that the works he collected in Mexico represent an indigenous record of historiography (Mignolo 2003, 149-151). As such he foreshadowed contemporary work on Mesoamerican conceptions of the past (e.g. Hamann 2002). The basic condition for this lies in conceiving of hieroglyphs not as expressing esoteric wisdoms, but as a semiotic means of communicating the *sensus communis* of a society. Boturini clearly esteemed the Mesoamerican tradition of historiography, viewing his own collection as being of the utmost value (Ødemark 2011, 47). He also argued that, contrary to the strictures of the Vichian scheme, there had been a transition to the human age in Mexico, dated by him rather exactly to AD 660.²³ However, as noted by Mignolo (2003, 151), while Boturini recognised the existence of an indigenous historiography, he never took it seriously as an equal to his own scheme. This is important because not only does the Aztec periodisation of history into five eras or 'suns' differ from the three Vichian eras derived from the Old World, these periods are also defined differently as being based on different food sources rather than on semiotic systems.

Here, then, we can observe the imposition of a schema honed in the Old World on a structurally different New World case. In this Boturini is, of course, far from unique, as can be observed for European discussions of early encounters with the Tupinambá of Brazil (Campbell 2006, 151-160). Within the sympathetic treatments of this society by a number of European writers we can also see, as with Boturini, an inability to capture its structural difference in more sophisticated terms. Yet these differences were certainly grasped at a more intuitive level, as noted by Viveiros de Castro in his account of the interaction between Catholic missionaries and the Tupinambá in the 16th century. In this encounter the latter were driving the former to exasperation by their ready willingness to adopt new doctrines of Christian ideas, while at the same time not changing their modes of behaviour accordingly (Viveiros de Castro 2011, 1-10). Not merely to be seen as a strategy for survival, it points to a different ontological framework within which aspects of culture acquire meaning or become meaningless. Viveiros de Castro cites the metaphor of the 17th century Jesuit priest Vieira, who compared the marble statues of solid doctrines to those made of myrtle, reflecting what he saw as the inconstancy of the Tupinambá (requiring continuous upkeep), and extends the metaphor to consider modern anthropological concepts of culture:

"Our current idea of 'culture' projects an anthropological landscape peopled by marble statues, not ones made of myrtle: a classical museum rather than a baroque garden. We think that every society tends to persevere in its own being, and that culture is the reflexive form of that being; we believe that a violent, massive pressure is needed for it to deform and transform. But, above all, we believe that the being of society is its perseverance: memory and tradition are the identitarian marble out of which culture is made." (Viveiros de Castro 2011, 17)

This does not imply that religion and memory were entirely lacking among the Tupinambá, but rather that these were conceived of and practiced in a very different framework. In this setting of myrtle, society was, contrary to Durkeimian notions of it being based on a doctrinaire core, defined by being able to incorporate ideas that were considerably different (Viveiros de Castro 2011, 46-47).²⁴ Mesoamerica was quite different from pre-colonial Brazil, but what matters is how we see

²³ This is based on what Boturini inferred was the date of the composition of a sacred book called *Teoamoxtli* (Boturini [1746] 1999, 99). Yet the description of this age is very brief, lacking any detailed exposition of the societal institutions characteristic of the 'human age' found in Vico.

²⁴ Viveiros de Castro has a tendency, often notable in the work of ethnographers, to set up stark dichotomies, as can be seen also in his counterpoising of European fears of solipsism to Amazonian fears of cannibalism, based on different conceptions of mind and body (Viveiros de Castro 1998, 481). Such contrasts have their use and can be enlightening,

also in Boturini that it is the concept of culture as related to religious doctrine that influences interpretation. In his account of Tlaloc, Boturini compares the role of the deity with that of Jove in Vico as the first civil metaphor: both communicating the law of the first, divine age through the natural signs of lightning and thunder (Ødemark 2011, 50-52). This prevents him from recognising indigenous concepts that provide counter-points to his own conceptions of culture and writing systems, such as the Toltec terms of *toltecáyotl* and *tlatóllotl* (Mignolo 2003, 140-143). Hence the marriage of philosophy and philology in Vico and Boturini proves to be a double-edged sword. On the one hand it allows for the recognition of an indigenous Mesoamerican historiography, as part of a universal history of humankind. On the other hand, we see that the specifics of their linguistic and historical scheme prevents them from recognising precisely what is interesting in this comparison: the structural differences between the Old and New Worlds.

2.3.4: History-based conceptions of human nature in their longue durée context

At this point the reader may well ask the point of the relative lengthy exposition of the work of Vico and Boturini for present-day comparative work in archaeology. The answer, as noted in section 2.3.1, is that they represent the starting point of an approach to human nature that is history-based. We also saw that Childe and his friend Farrington conceived of him as such. It will be argued here that precisely by considering this connection as an 'elective affinity' within the *longue durée* of thought, it is possible to view the work of Childe in a different perspective that pays more attention to method and less to its 20th century ideological context. In order to do so, it is necessary first to attend to the broader interpretation of Vico's work, in particular the question as to whether it should be seen as an anti-modern position contrary to the Enlightenment or as presenting a more modern take on the world, though somewhat different than the conventional one. At the core of this debate is the question how one should interpret the notion of providence in the work of Vico, the role of which in his universal history he expressed well in the following passage:

"We thereby establish the fact that man in the bestial state desires only his own welfare; having taken wife and begotten children, he desires his welfare along with that of his family; having entered upon civil life, he desires his own welfare along with that of his city; when its rule is extended over several peoples, he desires his own welfare along with that of the nation; when the nations are united by wars, treaties of peace, alliances and commerce, he desires his own welfare along with that of the entire human race. In all these cases, man desires principally his own utility. Therefore it is only by divine providence that he can be held within these orders to practice justice as a member of the society of the family, the state, and finally of mankind. Unable to obtain all the utilities he wishes, he is constrained by these orders to seek those who are his due; and this is called just." (Vico [1744] 1948, # 341)

Divine providence in this way is what preserves and guides human society. The interpretation of this concept is also at the core of debates as to whether Vico should be understood as an 'antimodern' or in fact even as part of the radical Enlightenment. Clearly the quotation given above does not refer to direct intervention by a divine agent in history, and cannot in any way be related to the ideas about miracles and the devil that were still current in the Italy of his day. Isaiah Berlin (1976, 120-122) argued that Vico should be seen as 'anti-modern' and not part of the science of his day, instead relying on Hermetic and neo-Platonic traditions to outline a 'theological' historicism. Yet it is clear that Vico himself saw his work as explicitly scientific and was aware and sympathetic to the main scientific currents of his age, and, analogous to Bacon's 'idols', emphasised his method as a

vet it would be too limited to leave cross-cultural comparison at this.

²⁵ These terms are here given as generic examples, we will return to Mesoamerican conceptions of the past in the chapters on the Maya case study and address the contrast between them and those of the Old World in chapter nine.

way to counter the conceits of the human senses and mind, as well as those of nations and scholars (Verene 1981, 129-132). Furthermore, the key point of Berlin (1976, 123), that there is a gulf in Vico's work between the passive world of nature and the actively made world of human affairs can be read in a quite different way from the strong contrast between natural science and the study of human history that he infers from it. For as we saw in the previous section, knowledge of the natural world is completely inaccessible without the culturally made 'tools' of mathematics and experimental science.²⁶

Jonathan Israel (2006, 664-667) has proposed a highly contrasting reading of Vico that associates him with the radical Enlightenment, and specifically with the work of Spinoza, rather than with anti-modern currents. This relation to Spinoza is a crucial one since, as we saw in section 2.3.1, he was a pivotal figure in the development of the radical Enlightenment, or as Israel puts it the 'great bogeyman' of the early Enlightenment (Israel 2001, 160). Positing an intellectual relation between the two seems a highly contentious thesis, given that Vico himself explicitly expressed his disagreement with the Spinozist position on the politico-theological foundation of nations (Vico [1744] 1948, # 335). However, Vico was writing in a time and place where expressing agreement with the ideas of Spinoza, or others likewise held suspect by the authorities, entailed very real social and physical risks (Israel 2006, 513-528). Hence an Aesopian language would have been required in order to express potentially incriminating allegiances. We may consider this point with regard to the inherent vagueness of Vico on certain topics, which go some way to account for the variation in the interpretations of his work. The position adopted here is that the use of method is a surer guide to a person's work than the conscious communication of political and personal stances.

That a connection between Vico and Spinoza existed in terms of methodology may be inferred from a passage in which the former paraphrases the latter (Stone 1997, 302-304; Israel 2006, 527), a passage modified in the third edition of the *New Science*. We can compare here Spinoza's phrase "the order and connection of ideas is the same as the order and connection of things" (Spinoza [1677] 1985, 451), with the formulation by Vico that "the order of ideas must follow the order of things" (Vico [1744] 1948, #238). Furthermore, the context of these passage points to the non-accidental character of this paraphrase. For in Spinoza it provides the starting point for the elaboration of the one-substance doctrine relating mind and body (Stone 1997, 302), while in Vico the passage immediately follows one that stresses the connection between bodies and minds, as a 'universal principle of etymology' (Vico [1744] 1948, #237). Yet, there also seem to be differences as for Vico ideas are held by the sensus communis, while the position of Spinoza on this seems to have been more ambiguous (Stone 1997, 304; Israel 2006, 535-536).

Also, the historical investigation of Spinoza in the *Tractatus Theologico-Politicus* is in some ways almost the opposite of Vico's universal history. It only treats the Hebrews, who as we saw earlier were left out by Vico, and exclusively focuses on a narrow set of theological and political issues, rather than society as a whole. Nevertheless, some important similarities may be observed. As noted by Israel, the one-substance doctrine forms the basis for the method used in Spinoza's interpretation

²⁶ See for a contemporary account, based on extensive psychological research, on the relation between mathematics and metaphor Lakoff & Núñez (2000).

²⁷ This threat was not in any way abstract, given that some of his close acquaintances were imprisoned for heretical views based on their use of the materialist writings of Epicurus and Lucretius during the early phase of his career (Bull 2013, 48-49). Not only did Vico know these men, he himself also wrote a short poem at this time that seems to have been inspired by Lucretius (Vico [1692] 1935), even if the impact of the Roman poet on his later work is doubted by some (Verene 1981, 90).

²⁸ Some of this vagueness is clearly in evidence on the topic of modern societal reform, where, contrary to the topic of class struggle in Greco-Roman antiquity, the ideas of Vico remain hard to determine (Stone 1997, 257-258). Yet, the notion of divine providence could, with important qualifications and only in certain cases, be taken as indicating the necessity and justness of a revolution (Israel 2001, 670).

of Hebrew history. For this allows the philological analysis of its particular historical characteristics to be anchored in naturalism (Israel 2007, xii-xiii). This method enables Spinoza to discount the notion that the miracles described in Scripture actually took place, being refuted through natural science, while at the same time also grasping Hebrew history in its own terms. He clearly outlines that a careful use of philology is required to properly interpret Scripture (Spinoza [1670] 2007, 99-102). Through this certain historico-poetic concepts can be drawn out, which are neither true in the sense of being naturalistic explanations nor random and arbitrary (Israel 2007, xvi). In terms of method, they seem to compare well at a basic level to Vico's 'imaginative universals'. Again, however, the views of Spinoza are also somewhat different, as the use of imagination by 'ordinary people' is seen in terms of negative prejudices (Spinoza [1677] 1985, 445-446).

Yet this view should not be taken as an inherently elitist one. Instead, Spinoza's position in the Dutch Republic has been persuasively argued to have been that of a 'thinker between the classes' (De Vries 1976, 91). His philology-based analysis of the trajectory of the Hebrew state highlights the shift from an egalitarian theocracy to despotic kingship, existing in a near-perpetual state of internal and external warfare (Spinoza [1670] 2007, 208-229). From this reconstruction, Spinoza drew lessons for his own Republic.²⁹ He outlined a position on the relation between the state and its subjects that held that individual inclinations can be checked for the mutual benefit of all, provided the state enforces this in a way that is based on reason (Spinoza [1670] 2007, 195-201). Here, then, we can see another broad commonality with Vico: the impulse for self-preservation of human beings can only be considered as part of an overarching order, one that is independent of any kind of direct supernatural intervention.³⁰ Again, there remain important differences in the specific analyses of both men, which also owe to the particularities of their Dutch and Neapolitan contexts, as well as to the details of their personal lives. Rather than dwelling on these idiosyncrasies, however, it is more profitable to consider them as the starting point of an 'elective affinity' in terms of a methodological approach to human nature that emphasises the importance of history.

Now it is time to make a leap of slightly more than two centuries, to the theoretical work of Gordon Childe. Apart from the acknowledgement by him of Vico that was already noted, Childe's main inspiration derived from a critical engagement with the work of Karl Marx and the philosophical and political tradition associated with him. With regard to the different societal factors outlined in section 2.3.1, it is clear that the Marxist tradition derives more from the emergence of machine-based production and the expansion of capitalism, rather than from the encounter with the Greco-Roman past and the contemporary non-Western world that is so central to Vico's work.³¹ It may

²⁹ Although the Americas are not discussed in the work of Spinoza, they do feature in the efforts of his mentor Van den Ende and Plockhoy, as well as many later writers that evaluate Amerindian societies in positive terms as part of their theoretical and practical evaluations of societies in general (Israel 2001, 179-180, 273). This can be contrasted to what some of the adherents to moderate versions of the Enlightenment had to say on this topic:

[&]quot;For in his history the 'line by which nations proceed towards civilization, the discovery of the useful metals and acquisition of dominion over the animal creation' represent 'steps of capital importance in their progress'. Robertson, not unlike De Pauw, considered the Aztecs and Incas primitives, their backwardness being especially evident, he thought, in their failure to discover iron and other metal-working and their domesticating only ducks, turkeys, rabbits, and a species of 'small dogs'." (Israel 2006, 491)

³⁰ Impulse is known in more technical philosophical terms as *conatus*. In the initial work of Vico, *conatus* derived from a 'metaphysical point' located midway between the human and the divine, but later this point was replaced by the ideal and eternal history (Verene 1981, 49-56). We can see this expressed clearly in the passage immediately preceding the crucial one on divine providence at the beginning of this section (Vico [1744] 1948, #340). In the work of Spinoza, *conatus* is not identified with universal history but rather with nature, acting on human beings through the impact of joy-pleasure and sadness-pain (Israel 2001, 236-237).

³¹ Riverso makes the useful point that while both Marx and Vico were concerned with similar kinds of comparative ethnological study, the perspective of the former was very much shaped by the approaches to political economy he sought to criticise (Riverso 1983, 275-276). These ideas were not yet present in Vico's time.

seem strange and questionable to connect the pair of Vico and Spinoza to that of Childe and Marx, but in tracing this 'elective affinity' the concern is not with 'genetic influences'. Instead, the task is to recognise recurrent features of methodological approaches, especially those concerned with grasping human nature from a history-based perspective. This demands taking into account both the work and societal context of thinkers, without reducing the one to the other. For Childe, this context has to be sought in the intellectual trends of what we may call in *Annaliste* terms the *moyenne durée* of the 'short twentieth century' (cf. Hobsbawm 1994).

Before doing so, it is important to briefly note the place of Childe's theoretical work within archaeology. One remarkable feature of Childe's theoretical ideas is that they seem to fit comfortably with different archaeological agendas, in particular the diametrically opposed tendencies of processual and interpretive theoretical archaeology (Trigger 2006a, 482). Recent studies have extolled his work for topics as diverse as urbanism (Smith 2009), classical archaeology (Whitley 2001, 12-16), social evolution (Shennan 2011) and epistemology (Gathercole 2009), yet very rarely are his diverse ideas treated together in a comprehensive way. The work of Bruce Trigger was to some degree an exception to this (McGuire 2006). We could point to the fact that Childe himself never put forward his ideas in a definitive account, as for example David Clarke's *Analytical archaeology* (1968). Yet, at the same time his publications were readily available, and subject to further discussion in a number of studies (Harris 1994; Wailes 1996), while a number of (intellectual) biographies have also emerged (Green 1981; MacNairn 1980; Peace 1992; Trigger 1980). Another important factor no doubt were the misunderstandings of Childe's work in US archaeology due to the inability to address the Marxist aspect of his work in the McCarthy era and the longer-term ramifications that sprung from it (McGuire n.d.).

Yet the lion's share of the incomprehension should not be sought within archaeology, but rather in changes within the Marxist tradition, especially with regard to its conception of science. It is not often remembered today that in the 1920s and 1930s, Marxism as a dialectical materialist approach was taken seriously by a number of scientists such as Bernal, Haldane, Hogben, Levy and Needham (Werskey 1971, xvii). Marxism as a method was used not only to address scientific questions in themselves, but also, perhaps more importantly, to the history of science and its societal context. This latter aspect was most fully developed by Needham in his work on China (Hobsbawm 2013, 191-192). An important stimulating role in this development was the visit of a Soviet delegation led by Nikolai Bukharin to the 1931 London congress on the history of science and technology called *Science at the Cross Roads*. The presentations given by this delegation, especially that of Boris Hessen on the socio-economic context of Newton's thought, had a great impact on ideas about the relation between science and society in Britain (Werskey 1971, xxii; Peace 1992, 147-149). Childe was very much an active participant in these developments, not only through his friendship with many of the key figures, but also because of his active contributions to the goals and methods that carried it forward (Peace 1992, 143-145, 155; Trigger 1980, 136-143).

However, just as this work was gaining momentum in an intellectual sense, Marxism as a political movement took a sharp turn away from proper science. Within the consolidated Stalinist state almost every field of learning became subject to political control over its content, excepting cases such as nuclear physics where geopolitical demands prevailed, with being 'red' becoming primary over expertise (Hobsbawm 2013, 179). Many of the participants in the 1931 congress in London fell victim to various purges (Needham 1971, ix-x), including Vavilov, who had presented an insightful

³² Apart from the issue of class, the main point concerns the relation between mechanism in machinery and in science, also explored for the Renaissance by Grossman (Freudenthal 2005), and as we shall see below by Childe for antiquity. The mainstream of Marxism seems not to have taken any significant interest in this, but recent explorations in the history of science (not necessarily influenced by Marxism) do explore the relations between social structure and intellectual tools in different eras. A good example of this is the work of Netz (2003) on Greek mathematics.

paper on the early development of agriculture in different world areas (Vavilov [1931] 1971). His genetics-based approach was replaced by the pseudo-science of Lysenko, just as in linguistics the theories of Marr became established dogma.³³ Slightly later, Marxist and Marxist-inspired work in the West took a sharp turn away from science as well, if in a very different direction. A key influence in this was the work of the Frankfurt School, in particular *Dialectic of Enlightenment* by Horkheimer and Adorno ([1947] 2002). In a process that became more pronounced after the events of 1968, this work can be seen as a starting point in a move away from science and economics toward political, psychological and cultural studies by Marxist and Marxist-influenced thinkers in the West.

From the perspective of these developments, which seem like a grotesque mutation of the cycle between rationalism and romanticism, the thought of Childe may well seem obsolete. Yet, it will be argued here that it would be wrong to dismiss him as a quirk of the vagaries of 20th century socialism.³⁴ Instead we can point to the more general relevance of his work on the relation between science and society, as observed from the long-term perspective of archaeology. This can be seen in the contribution he made to the work of the UNESCO committee on developing a non-Eurocentric history of humankind, a project with which Needham was also closely involved (Duedahl 2011, 106). It can also be grasped in his use of the archaeological record to make an original contribution to the history of science, by tracing it deep back into prehistory (Childe 1954a, 1954b). This concern with science and society in a common framework is not so different, in basic terms at least, to the concerns of the radical Enlightenment. As will be explored in the next section, this similarity can in some ways also be observed at a methodological level.

2.3.5: An outline of the philosophical-methodological ideas in Gordon Childe's later work

From his own list of philosophical influences it is clear that Childe read widely, from Plato and Aristotle to Hegel and Marx, but always with the aim of adding to his work as prehistorian rather than seeking to 'double up' by providing an historical overview of philosophy (Childe 1956, 1). Yet, while he certainly was eclectic, and intellectually courageous in being able to revise his positions continually (Childe 1958), there was also a consistency in what may be termed his 'dialectical method'. This approach is most succinctly outlined in a posthumously published short article on the relation between Marxism and prehistory (Childe 1979). The underlying assumption of his approach is that the great diversity of historical facts should be understood as interconnected within a pattern knowable to archaeologists, leading to a focus on their relations:

"But the relations are not conceived mechanistically. The process is not repetitive or predetermined as are the operations of a machine which, however complicated, grinds out just that which it was

³³ Childe, while he obviously sympathised with the Soviet Union, did not follow Marr, calling his work a 'perversion' of Marxism (Childe 1958, 72). Neither did his political inclinations prevent him from seeing the shortcomings of Soviet archaeology, as evidenced in his comments on the possibility of writing a synthetic account of the prehistory of the area (Klejn 1994, 83-87). Even so, he did borrow something from the sociological implications of burial analysis in Soviet archaeology (Childe 1946a, 75), similar work later also finding its way to Lewis Binford (McGuire n.d.).

³⁴ The relation between Marxism as method and as doctrine is clearly outlined in a private letter from Childe to R. Palme Dutt, with which he turned down the request to join a Marxist institute:

[&]quot;To me Marxism means effectively a way of approach to and a methodological device for the interpretation of historical and archaeological material and I accept it because and in so far as it works. To the average communist (and presumably it is only for their benefit that this piece of labelling is necessary), Marxism means a set of dogmas – the words of the master from which as among medieval schoolmen, one must deduce truths which the scientist hopes to infer from experiment and observation (archaeologists can do some experimenting and are always amassing fresh observations). I want to be a scientist; why should either group be deceived into thinking I am a schoolman?" (cited in Peace 1992, 162, emphasis in the original)

built to make and nothing else. It produces a pattern none the less, and its uncompleted portions must harmonize with what is already there, though there may be various combinations to complete the pattern." (Childe 1979, 93)

Furthermore, these relations are not only determined by biological needs, although in the final end these do constrain what is possible, but also by the knowledge and institutions that are required for cooperation. Thus, there is a complex interaction between different factors:

"The relations between productive equipment, the organization requisite for operating it and distributing the product (the economy), and the legal, religious and artistic institutions and ideals that inspire it are not one-sided, but dialectical like the relation between society and its members." (Childe 1979, 94)

This is a much looser and more pragmatic view of causality than the classical mechanistic one.³⁵ It is an approach that can incorporate both universals and particulars, and even historical contingencies such as the personalities of important leaders (Trigger 1980, 130-133). It is also different in that this conception of causality is derived from a view of knowledge that itself is embedded within history, that is, it is inseparably connected with the societal context from which it is derived. As we saw in the previous section, this was the case with Vico as well, with his notion of an internal relation between the 'true' and the 'made'. Here the societal context was conceptualised as both objective and historically contingent. It is clear that Childe followed a similar strand of thought, arguing that the only real criterion for truth lay in action, that is the application of knowledge in a social context, which allows individuals to act in certain ways (Childe 1956, 96-105). However, there are also important differences in terms of method that become apparent in a more detailed investigation. As a starting-point, it is useful to consider Childe's conception of knowledge in more detail, as it follows from the definition given in his book *Society and knowledge*:

"Knowledge is to be an ideal reproduction of the external world serviceable for the co-operative action thereon." (Childe 1956, 54)

In his further explication of this definition (Childe 1956, 54-55), he makes clear that the phrase 'to be' implies that knowledge can never be complete, and hence is always historically embedded within the institutions required for cooperative action. Again, this is close to Vico's ideas, while the notion of the the reproduction of the external world in that of ideas raises the point of the relations between things and ideas. Key to understanding this relation is the conception of symbols, especially linguistic ones, in Childe's work. Here he seems to have drawn his ideas from a wide variety of sources. For example, Childe (1949a, 5-9) uses the work of the physicist Niels Bohr to argue for the internal relation between objects and symbolic meaning in concepts and that of Malinowski to argue for the basic use of symbols in practical, social contexts rather than for private reflection. These come together in the, largely unconscious, Durkheimian 'collective representation' that shapes and is shaped by the social environment (Childe 1949b, 4-6). In his later book, Childe elaborates on this discussion of the symbol, arguing that it involves not merely memorisation but also seeing the logical pattern of something (Childe 1956, 67-68). This requires imagination to infer

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³⁵ This is not surprising, as the Marxist perspective on causality is derived from a very different methodology. This method focuses not so much on empirical appearances as ends in themselves, but rather on the 'hidden substratum' behind them (Wolf [1981] 2001, 338-339). The approach is dialectical, moving from the abstract core to its more concrete expressions. A key example of this is the movement from the basic properties of social labour to various kinds of possible modes of production (Marx [1858] 1964, 67-80). A reasonable case can be made that this method actually derives from Marx's doctoral dissertation, which used a dialectical approach inspired by Hegel to make sense of different Greek conceptions of materialism (Schafer 2006).

the connections between the known and unknown parts of the overall pattern. We can compare this process of the imaginative reconstruction of a pattern with that of archaeological reconstruction:

"Let the surviving pieces of the ruin represent the perceptual data in our ideal reproduction called knowledge, and let the church as built in A.D. 950 stand for the structured external world it must reproduce. Then, just as in the church the missing parts had to be replaced by substitutes shaped like surviving structural elements, so the gaps in pooled experience must be filled with symbols, expressing ideas imagined on the model of ideas, already socially approved and objectified. As the architect had to anticipate the design that the original and substitute pieces are to form and to lay out a scaffolding accordingly, so knowers must anticipate the uncompleted pattern of reality in imagination, using partial patterns already known as a frame to support their hypotheses. But this frame must be flexible since hypotheses must be modifiable in the light of practice." (Childe 1956, 70-71)

The implication of all this is that symbols such as linguistic expressions are more than signs that only correspond to referents, in that they acquire meaning through their context within language as a whole (Childe 1956, 21-33). At the same time, Childe also makes the point that while symbols can be seen as always embodied in one kind of physical embodiment or the other, the meanings that are associated with them are seen as non-material (Childe 1956, 35). Yet this should not be seen as a dichotomy, for ideas are always expressed and embodied through symbols, even if they cannot be tied singularly to a specific symbol. Furthermore are inherently public if they are to have any meaning at all (Childe 1956, 48). Therefore, in this sense symbols and ideas are inseparable and subject to the same methods of investigation.³⁶ In this sense, Childe's ideas on symbols seem broadly similar to Vico's notion that the order of ideas follows that of things, and can be understood as a form of monism. We may well infer that this similarity can be understood as a logical consequence of the definition of knowledge provided by both thinkers. At a higher level of abstraction, Vico and Marx are argued to have shared a common rejection of Cartesian dualism an emphasis on active, socially-based praxis rather than passive reflection (Rockmore 1983, 191).

Taking up such a position in a basic sense demands the notion of an internal relation between truth and praxis, as the former can only be sought within the latter. As noted, knowledge of the orders of ideas and things are bound within the same societal context, though investigated with substantially different methods, and are therefore inseparable. Yet the way of investigating these orders in Vico's work is quite different from that of Marx and the Marxist tradition of which Childe was part. We saw in section 2.2.4 that for Vico the principal method of his universal history was the marriage of philosophy and philology, made concrete in the notion of the imaginative universal. Deriving from the human body, this universal formed a 'master key' to understand both the basis for thought itself and for the reconstruction of past eras with worldviews that were structured around poetic categories. This emphasis on philology is quite different from the Marxist perspective, however, which instead focuses on technology as the 'master key', albeit a conception of technology quite distinct from conventional interpretations of it. As noted by Lachterman (1983, 39), this can be best seen in precisely the rather well-known footnote in which Marx also refers to the work of Vico and which encapsulates his views of technology and science very well:

³⁶ A good example of this is provided by Childe in his discussion of the material and ideational aspects of the plough:

[&]quot;Every artefact thus expresses and also realizes an idea. At the same time a tool is to some extent a symbol, in so far as it suggests a function. The plough not only embodies and exemplifies an idea, not only incorporates the technical skill of its maker, but calls to the ploughman to use it. A constituent of the idea of plough is ploughing. And so with any tool; its idea embraces the purpose for which it has been made." (Childe 1956, 52)

"Darwin has directed attention to the history of natural technology, i.e. the formation of the organs of plants and animals, which serve as the instruments of production for sustaining their life. Does not the history of the productive organs of man in society, of organs that are the material basis of every particular organization of society, deserve equal attention? And would not such a history be easier to compile, since, as Vico says, human history differs from natural history in that we have made the former, but not the latter? Technology reveals the active relation of man to nature, the direct process of the production of his life, and thereby it also lays bare the process of the production of the social relations of his life, and of the mental conceptions that flow from those relations. Even a history of religion that is written in abstraction from this material basis is uncritical. It is, in reality, much easier to discover by analysis the earthly kernel of the misty creations of religion than to do the opposite, i.e. to develop from the actual, given relations of life the forms in which these have been apotheosized. The latter method is the only materialist, and therefore the only scientific one." (Marx [1867] 1976, note 4, pp. 493-494, emphasis added)

The key distinction of humans and animals in Marx's thought is that for him human beings use their labour power not by following their instinct, as animals do, but by following a plan conceived in their mind (Marx [1867] 1976, 283-284). According to Patterson (2009, 42-46), basing himself on Fracchia (2005), there is a 'central logic' in the relation between humankind and nature in the work of Marx. In this there is no separation between nature and human history, but rather an interplay between them that is mediated through human labour (cf. Wolf [1981] 2001, 340-341). By serving both physical and social needs, labour creates both humankind itself and nature as it relates to humankind (Patterson 2009, 45). This labour power is inherently social and ecological, as it depends for its own reproduction upon a community and land (Marx [1858] 1964, 81-82). This forms the basis for Marx's materialist view of history rather than class struggle, for classes are limited to specific kinds of societies (Hobsbawm 1964, 11). Before the emergence of capitalism, class in the Marxist sense would depend upon the use of 'extra-economic' means to extract surplus (Marx [1858] 1964, 86-87). Political and military coercion could be such means (Wolf [1981] 2001, 345), but others are not excluded in principle.

The result is a more nuanced framework that avoids a dogmatic view of class struggle as a perpetual Tug of War between clearly defined groups, even if it may well take that form. Class can then be seen as a 'relationship of exploitation' that is encapsulated within the social formation as a whole, a relation that revolves around the appropriation of surplus (De Ste. Croix 1984, 99-100). This reading of Marx has in common with Vico's conception of class that in both cases it derives from the 'social-practical relation to nature' (Barnouw 1983, 95). A key difference, of course, is that Vico never develops a fully-fledged theory of capitalism and machine-based production. This has led one prominent Vico scholar to state that Marx's work can be seen as valid complementary account to that of Vico to account for the the modern world based on industrial technology (Verene 1983). This position is accepted here on the basis of the similarities in conceptions of class struggle, as well as the different kinds of emphasis on the encounter with antiquity and the non-Western world as opposed to capitalism and machine-based production, as noted in section 2.3.4. However, while complementary in this sense, both approaches also suffer from common shortcomings, as will be discussed at the end of this section.

Returning to Childe, we can see that he clearly adopted this perspective in its subtle, principal features rather than espousing any kind of technological determinism. This can be best seen in his 1947 book *History*, in which he discusses different modes of historiography and briefly outlines his own. From the beginning Childe (1947, 1-5) here makes clear that his science is one of progress, to

³⁷ In this sense both Vico and Marx stand in mutual opposition to the idealist Hegelian 'struggle for recognition', which was later elaborated by Alexandre Kojève and popularised by Fukuyama (1992) in his 'end of history' thesis.

allow for the prevention of economic crises and wars in the one-sided focus on the control of nature. This science should be conceived of not as an exact physics but rather one that reveals order without being able to predict individual cases, much as anatomy does. Technology provided a key order with which to interpret human history as a whole, impacting other orders, such as the social, political and religious ones, but not in a determinist sense. This as can be inferred from Childe's view of 'possibilism' in the relations between specific social formations and the natural environment they inhabited (Trigger 1980, 101). Furthermore, he stressed that while the order of technological development through history was a logical one, its direction was not directed and should not be grasped as proceeding on analogy with a train moving over predetermined tracks (Childe 1947, 11). As such, we should keep in mind that progress in Marxism is an abstraction based upon scientific observation, while at the same time carrying a certain desirability (cf. Hobsbawm 1964, 12-13).

As with Marx, technology in Childe constitutes not just merely tools, but rather the use of those tools as part of the relations of production that form the economic base (Childe 1947, 70-71). Here we see an interesting use of functionalism on the part of Childe, already noted above, as he used Durkheim's idea that the 'collective representation' of a society is not a photographic copy of the world but rather that its categories reflect the way social relations are structured in that society (Childe 1949b, 6). The reason given to favour this view is not because such relations are the most familiar ones, but rather that they are most easily controlled.³⁸ From this perspective, it is less surprising that the Marxist notion of the superstructure in the thought of Childe assumes a much more independent position, although ultimately still dependent on the economic base, in which the consolidation of social relations and their ideological legitimation can act as powerful brakes on the development of the economic base (Childe 1947, 72-75). It is sometimes asserted that Childe was not a Marxist because he didn't adopt class struggle as having causal primacy in fostering historical change (Faulkner 2007). If we return to the argument of De Ste. Croix, of class struggle as revolving around the exploitation of surplus, then we may in fact see Childe's treatment as incorporating this in a more nuanced way than politically-charged uses of this concept.³⁹

We can see the implications of these more theoretical reflections on Childe's analysis of the historical record. A key element in this was his working out of the relation between the archaeological Palaeolithic, Neolithic, Bronze and Iron ages, and the sociological stages of savagery, barbarism and civilisation as outlined by 19th century anthropologists like Morgan. Childe had first formulated the notions of the Neolithic and urban revolutions to demarcate key changes in the archaeological record, when he encountered work being done along the lines of Morgan's scheme, from its adaptation by Engels, in the USSR in 1934 (Childe 1958, 71-72). The working out of the relation between the revolutions he recognised in the archaeological record and concepts of general development took place alongside the formulation of his ideas on knowledge, technology and social formations. Hence it is not surprising that his evaluation of the Neolithic and urban revolutions underwent quite significant changes over the years, though they were never abandoned, as has been traced in (Greene 1999). Indeed, it may well have been the case that the matter of classification was never satisfactorily resolved for Childe himself (Trigger 1980, 144-148).

³⁸ This was well-expressed in Childe's view on magic:

[&]quot;Magic is largely a transfer to inanimate nature of techniques found to be effective in changing social relations." (Childe 1949b, 6)

³⁹ This can be seen very well in Childe's most explicitly Marxist work on Scottish prehistory, which traces class relations over the long-term trajectory of this nation (Childe 1946a). One difference, however, may be recognised in the role class struggle played in this historical reconstruction. For him class does not seem to have taken an active role as a prime mover in fostering social change, but has to be understood within specific historical contexts that can persist despite its internal contradictions (Childe 1946a, 96-96). It may be that this greater realism about the role of class distinctions was partly the result of Childe's own direct operator's experience with the problems faced by the Australian Labour Party in government (Childe 1923; Derricourt 2014; Irving 1988).

Yet this does not mean that nothing was achieved in this exercise, since it made the properties of the problem much clearer. The first thing that Childe sought to accomplish was to achieve greater insights into the characteristics of the Bronze and Iron ages. He argued that rather than viewing them as contemporaneous across large areas, it would be more correct to treat them as homotaxial and as technological stages (Childe 1944a, 7). They would follow the same general sequence but not in exactly the same chronological time periods. He also outlined different modes, which were not homotaxial, within the Bronze and Iron ages, based on the kinds of tools that can be found in the archaeological record (Childe 1944a, 10, 19-20). For the Bronze Age these modes ranged from the use of copper for weapons and ornaments (mode 1) to the use of metals for certain agricultural tools (mode 3), while in the Iron Age a distinction is made between the initial use of iron for larger and heavier tools and the later diversification into a variety of smaller tools, as well as incipient machinery. The delineation of these modes made it possible for Childe to consider their relation to broader evolutionary and sociological concerns.

Of crucial importance in this is his view that metallurgy demanded full-time craft specialists, who, together with the merchants and other workers in the chain of supply and production, required the concentration of surplus to support them (Chile 1946b, 22). Therefore, although there were many regional differences in metal use in the Bronze Age, the concentration of surplus and full-time specialisation distinguished it as a mode of production from the preceding, kinship-based social formations (Childe 1946b, 25). Notably, however, Childe here does not tie the urban revolution to the development of metallurgy per se. Instead he investigates how the different modes delineated for the Bronze Age played out differently in different regions. For example, for the Aegean he noted the combination of an agriculture based on rotational fallowing and vine and fruit trees and easy access to the sea would lessen the need for extreme concentrations of surplus to support itinerant metal-workers, which may also have been the case for southern Iberia and central Europe (Childe 1946b, 26-27). By contrast the early civilisations of Egypt and Mesopotamia, located as they were in river-systems, saw a much greater focus of surplus to sustain their metallurgical industries, though with different degrees of control (Childe 1946b, 28-29).

Finally, a distinction was made by Childe between the Bronze and Iron ages through his conception of them as technological stages. Not only was iron more plentifully available, he also observed that its use had seen a much greater innovation in the development of different kinds of tools (Childe 1946b, table 1, pp. 31-32). To account for this difference, recourse was made to the relations of production prevailing in the Bronze Age monarchies of Mesopotamia and Egypt, which acted as brakes upon further development through the stifling concentration of surplus, while iron was more fully developed towards its potential in the 'Mediterranean republics' (Childe 1944a, 23; 1946b, 30-31). Here, then, we can see the more nuanced view of technology of Childe playing out in a more practical archaeological setting. However, the matter of the relation of these technological stages to his concept of the urban revolution and general, sociological stages of development remained unresolved. A crucial element in preventing this seems to have been the case of the Maya, recognised by him to have been as an exemplary case of an urban revolution (Childe 1950, 9). As

⁴⁰ Such incipient machinery would in this view have already been developed in the Iron Age for rotary movement, but held back by the lack of need to deploy labour-saving techniques at a larger scale in a slave-holding economy (Childe 1944b, 19-24; 1946b, 30). Rather speculatively, Childe also argued that these mechanisms can be related to new kinds of conceptualisation of causation:

[&]quot;By 400 BC rotary mills in Athenian bakeries and revolving olive-presses on Attic farms were performing repetitive tasks that had to be done by hand in every Bronze Age household. So causality could be depersonalized, but only at the cost of reducing most men to ἔμψυχα ὄργανα and leaving 'final causes' outside and above nature in a master-slave relation." (Childe 1949a, 22)

based on essentially Neolithic technology, the Maya case presents a powerful contrary argument to identifying the Bronze Age with Morgan's stage of barbarism (Childe 1951, 26-27).

As noted earlier, Childe never succeeded in welding these contradictory elements into a new and comprehensive way of classifying societies. As we shall see in section 2.4 below, such a classification has proven elusive in subsequent archaeological comparative studies as well, not least because of the dualism of processual and interpretive approaches. The problem, which Childe's efforts at least brought into focus, is the tension between empirically-derived trajectories, such as that of western Eurasia as based upon metallurgical ages, and the idea that general stages of human development can be recognised. Given the enormity of the task of resolving this matter, as well as the state of research at that time that would preclude a global comparison, Childe should not be faulted for this. 41 Yet at the same time it should be noted that some of his theoretical ideas are not very conducive to carrying out such an exercise either. Of particular concern here are the ways Childe conceived of progress and of language, which can be grasped from this statement on the relation between past forms of thought and present-day ones:

"They do not have to be translated into alien logical forms or fitted into foreign frames; for they have been translated and actually help to constitute the frames. The historian's business is to locate in their proper social and chronological context these thoughts that are still living and active in our culture. Thereby they suffer no relativity distortion; on the contrary distortions which may have crept in through the irregular rate of social change may be corrected." (Childe 1949a, 26)

Here he means to counter the more relativist position of Niels Bohr's (1939) theory of complementarity, by pointing out that modern 'frames of thought' are founded on past ones. The genealogical connection between past and present then negates a more independent existence of different perspectives. The notion of 'our' in these frames of thought should not be conceived of in an ethnocentric sense, however, but rather as referring to the long-term effect of the 'pooling' of knowledge (Childe 1956, 61-63; cf. Childe 1942). This process of pooling is quite nuanced in Childe, as it includes regional systems of knowledge based on the prehistoric past and acknowledges the contributions of the pre-colonial cultures of the Americas and the Australian Aboriginals. Furthermore, as discussed earlier, he saw prehistoric cultures as having their own distinct 'social worlds of knowledge' and argued against transcendental standards for what he referred to as Truth, Goodness and Beauty (Childe 1956, 130-131). We have also seen that his take on technology-based progress was such that it was not to be conflated with history itself, but can only be grasped an an abstraction of it.

But for all these nuances, and the possibility to derive from them a theory of progress able to incorporate multiplicity. Childe's ideas on progress incorporated more unitary elements as well. For one thing, the internal relation between truth and praxis led to a view that European weaponry and medicine not only proved themselves to be superior in their specific function, but in broader terms would practically demonstrate the inadequacy of the belief systems of other cultures (Childe 1956, 113). Hence the worldviews associated with them would be shown to be erroneous in a conceptual sense, through being superseded in practical matters. Trigger (1980, 140-141) notes that we may

⁴¹ Of course Childe did include the case of the Maya in his article on the urban revolution, even if somewhat reluctantly (Childe 1950, 9). The notion of the urban revolution, and the preceding Neolithic one as well, was adopted for Mesoamerica and other areas of the New World (Flannery 1994). But even in the comparative work of Adams the basic difference in technologies is only considered at a more general level, in terms of a more technologically innovative Mesopotamia in contrast to a more static technology base in the Valley of Mexico (Urban society, 174). Despite the author's clear interest in technology, as later expounded in (Adams 1996), the perspective of metallurgical development as outlined by Childe for the Old World remained incomparable to that of the New World. This topic will here be addressed in chapter nine for the comparison of the Mycenaean and Maya cases.

understand this aspect of Childe's thought through the dichotomy between true and false consciousness, based upon the degree of correspondence of a concept to external reality. Numerous concepts now known to be false, or perhaps better less truthful, can be seen in the archaeological record, but these have been weeded out through the progressive accumulation of knowledge. Not to be included in knowledge, based on the definition of it as the reproduction in ideas of external reality to act upon that reality, were art and religion:

"Now we have been unable to find ideas apart from the symbols of which they are meanings, and ideas can only be communicated by means of these symbolic vehicles. A world of ideas must therefore have a symbolic basis, and knowledge, being communicable, must be expressible. An ideal pattern must then also be a pattern of symbols. The normal vehicles of communication are the conventional symbols of language, including mathematical symbolism. Other kinds of symbols may convey and express ideas. But knowledge as here defined does not find expression in the symbols of art or of religion any more than in dreams, the private symbols of 'the Unconsciousness' (a mythical entity imagined, but successfully used, by psychoanalysts)." (Childe 1956, 66-67)

This denial of a progressive role of art does not derive from a philistine attitude to it, which would be very much out of character, nor was Childe unperceptive when he actually did discuss art, as we shall see in section 2.4.4. Rather it is subsumed under a central dichotomy in Childe's view of progress between science as increasing the human capacity for creative action, while magic and superstition were used as devices for the socio-political control of populations and in this capacity acted as brakes to further progress. We already saw how he conceived of the stifling influence of Egypt and Mesopotamia on technological progress, and this can also be related to the ideological conceptions used in these societies to exert control (Trigger 1980, 138). Our concern here will be more specifically with Childe's view of language as it relates to these issues. Language for him was the crucial factor that made possible the 'pooling' of knowledge and its effective use for creative action, but in such a way that it was structured by the properties of society as well (Childe 1942, 13). It is this latter, inescapable, aspect of language that has resulted in the perpetuation of crucial conceptual errors about the world:

"In particular the symbolic supports for ideas that society offers us in language, the principal instrument of thinking, may often constitute a stumbling block. All languages took shape in a comparatively early stage of social development. Grammar and syntax are appropriate to a Stone Age technology when men controlled no motive power save their own muscles, at best supplemented only by that of oxen. Grammatical forms and syntactical usage make little distinction between inanimate and living objects, less between the latter and persons. And all too often the confused word is sanctified and invested with intense emotional colour." (Childe 1956, 117)

This confusion between words and things lies at the root of magic, and hence false consciousness, but is erroneous because Childe argues words are not things but rather events (Childe 1956, 88). Recognising this would lead to viewing reality as 'creative activity' and even make possible a science in which the boundary between society and nature is obfuscated (Childe 1956, 131). These brief and rather cryptic remarks have been interpreted along Marxist lines (Trigger 1980, 141), and indeed Childe had explicitly linked his theoretical perspective earlier with the 'abolition of classes with class interests' (Childe 1949b, 8). For our purposes it is important to note that while this perspective does not claim a position of absolute knowledge, and therefore cannot be held to be teleological, it nevertheless creates a myopic effect in viewing the past. That is, everything that has

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⁴² A clear relation can be discerned here with the ideas of Farrington, in particular with regard to his discussion of the suppression of Epicurean materialism by the Roman state and its encouragement of religious superstition as a tool of socio-political control (Farrington 1947, 88-115).

happened in history is brought nearer to the modern position for its contribution to the overall pooling of knowledge that constitutes progress. This has the effect of underrating the possibility of alternative pathways, and thereby also of the distinctiveness of developments outside the trajectory that led from the Near East, through Greece and Rome, to Western modernity.

For a variety of reasons there exists a much greater incentive today to look at such alternative pathways. Partially this is due to changes in the contemporary world, moving away from colonialist notions of universalism, but significantly also follows from the continued accumulation of archaeological data. Today there is simply much more evidence available for the trajectories of the civilisations of the pre-colonial Americas and Asia, and increasingly also for Africa, which were never treated in any detail in Childe. Renfrew (2006, 227-229) has recently investigated some of the implications of this. Taking his cue not from Marxism but rather from Pragmatist philosophy, he explores how the human capacity for embodied and social cognition developed in a 'speciation phase' led to a 'tectonic phase' (tectonic referring to constructive acts in general) that started 50-60,000 years ago. Based on the development of generic cognitive abilities in the speciation phase the forms of human societies that emerged in the tectonic one were characterised by a greater diversity than hitherto recognised by archaeologists working with 'psychic unity' models:

"These fundamental underlying 'realities', out of which the social life of the different trajectories of development during the tectonic phase are constructed, have not yet been systematically recognised or investigated by archaeologists. They are all too often accepted as givens, as concepts so obvious in our own society as to be hardly worth specifying, and to be taken for granted also in other cultures. To understand the processes of becoming human, or more human, or human in a specific way, during the tectonic phase, in each area, along each trajectory of development, of such concepts as property, or deity, or computable value (of fungible commodities)." (Renfrew 2006, 231)

Examples of this include not only that leading to European modernity, based as it was on the 'commodity nexus' that emerged in western Asia, 43 but also pre-Roman Europe, the Americas and China and eastern Asia (Renfrew 2006, 231-234). This issue will be addressed in section 9.4, but for now it is important to stress that Childe's views on progress and language would inhibit the exploration and comparison of these different trajectories. On the one hand his dialectical concept of human nature as history-based, incorporating the orders of things and ideas, makes it possible to recognise different 'social worlds of knowledge' in the archaeological record. On the other the denial of any accumulative potential of art and mythology would prevent the recognition of distinct regional forms for conceptualising the material world that could persist independently over long time periods. Even so, in his discussion of Upper Palaeolithic art along magical lines, Childe had already noted that there was not one 'primitive logic' but likely several ones (Childe 1954a, 754). It is precisely through grasping such logics within their regional embedding and then comparing them, that a topography of prehistory could be mapped that can incorporate multiplicity.⁴⁴

Having provided an extensive overview of Childe's later theoretical ideas, it is now necessary to return to history-based conceptions of human nature in general. The first thing to consider in this regard is Bakhtin's concept of exotopy or *vnenakhodimost*, discussed in section 2.2.2. This concept captured how encounters with different cultures can require one to restructure one's own understanding of the conceptual framework used to interpret that culture. After treating the work of

⁴³ This effectively constitutes the prehistoric component of the later forms of money discussed earlier in section 2.3.2. This particular issue will also be addressed in the Mycenaean chapters and in the comparison with the Maya case.

⁴⁴ Instead of the image put forward by Childe (1942, 22-23) of a central river incorporating as tributaries rivers previously flowing independently, the conception of prehistory put forward here can be likened to a delta landscape into which a variety of rivers have flowed.

Vico and Childe, we can see that both to a large extent succeeded in describing cultures organised along radically different lines, thereby negating the Cartesian perspective that would tend more strongly to notions of the 'psychic unity' of humankind. They did this in different ways, however, as Vico's views on the imaginative universal and the marriage of philosophy and philology can be contrasted with Childe's Marxist take on technology as it can be reconstructed from the archaeological record. These differences have implications for their views on the practical use of their schemes as well. This can be understood within the different emphasis caused by the focus in Vico on the encounter with the Greco-Roman past and non-European cultures, while Childe's life was dominated by an era in which alternatives for capitalism to use machine-based production for human progress were discussed and put into practice.

At the same time, the approaches of Vico and Childe also seem to share a common limitation in their methodology, in that in both cases their overarching perspective of history, respectively the ideal eternal history and progress, creates a myopic effect. This calls into question the notion that Vico's work, mediated through that of Ernst Cassirer and Henri Frankfort, 45 can provide an alternative position to that of Childe for the comparative study of early civilisations, as has been suggested (Wengrow 1999, 610-613). While there were very interesting aspects in the work of Frankfort on worldviews (Meijer 2009; Taylor 2011), arguably Childe had a more complete framework. This can be seen in his review of the Intellectual adventure of ancient man (Frankfort & Frankfort 1946), a book that traced the mythopoeic worldviews of the Bronze Age Near East, where he points out that there were other, more scientific forms of knowledge in this period as well (Childe 1948). His connection of mythopoeic thought as connected to ideology also allowed him to circumvent the position of Levy-Bruhl of 'pre-logical' mentalities, later to be discredited by Levi-Strauss. Hence it makes little sense to go back to Vico, all the more so because the myopic effect of the ideal and eternal history would be just as problematic as one deriving from the idea of progress.

It can be argued that the root of this myopia can be traced to the conception of language in both approaches. Whereas for Vico and Boturini it was possible to use the imaginative universal to gain sophisticated insights into the pre-colonial historiography of Mesoamerica, their stage scheme of divine, heroic and human ages prevented them from taking the indigenous conceptualisation of history as it structured life within communities and states. Similarly, for Childe it was possible through archaeology to reconstruct past 'social worlds of knowledge' but these were evaluated according to the progressive movement of the 'pooling' of knowledge. In this sense, the notion that the linguistic terms of other cultures can be subsumed under a universal reason harkens back to Greco-Roman philosophies of language, in which the relation between words and things is grasped as part of the broader connections between ontologies, evolution and ethics discussed in section 2.2.2. This position needs to be superseded, and one way of doing so is to turn to recent work on early humans. Working on the long-term trajectories of early humans, Gamble (2007) has recently discussed much the same kinds of issues. He came up with the term 'Originsland' to denote the ways in which scholars have conceptualised the past, including the point at which humanity became 'finished' in biological terms:

"The concept of the anatomically modern human is just a way of isolating that moment so that very different histories and prehistories can be traced back to a point of origin. The idea of a modern human is essential to the marriage of biology and culture and the unfolding of latent capacity that is history. Archaeologists are particularly prone to accepting the structure of the research cone. In a

⁴⁵ The position of Collingwood in this is complicated, as he championed a re-enactment method (Nielsen 1981) with which to investigate issues like Caesar crossing the Rubicon or Nelson at Trafalgar. Despite some similarities in the use of imagination, the method of Vico's imaginative universal is instead focused on collectivities that can be investigated through the well-defined methods of philology rather than through 're-enactment'.

subject that is often seen as discovery-led the contest revolves around who at any moment has the evidence to wrest the tip of the cone from the hand of a rival." (Gamble 2007, 66)

This builds upon the sceptical view of accounts of different origin 'points' as deeply problematic, a point already expressed by David Clarke (1973, 11). Gamble moves beyond scepticism, however, in his argument that the best way to understand Originsland is to look at the pervasive use of metaphors deriving from the human body that are used to describe aspects of it (Gamble 2007, 75-77). Most of these are based on analogies with the life-course of individual human beings, and as such they can be understood as a conceptual 'container' in which we situate ourselves in relation to the past. Even though Gamble bases himself on more recent philosophers such as Damasio, Lakoff and Merleau-Ponty, relating metaphorical language to the human body resembles the views of Vico in this respect. This should not be surprising as his aim is to provide an alternative to the Cartesian view of the human body as separate from the mind. Instead for Gamble the human body is simultaneously natural and cultural, just as artefacts are (Gamble 2007, 9), hence again the notion that the order of things and ideas are inseparable derives from an anti-Cartesian position.

Much good use can be made of Gamble's perspective, as we shall see in section 2.4.4 on modelling the art of early civilisations. The limits of the use of simpler, generic metaphors that derive from the human body are, however, that they can be used much more effectively when dealing with the relation between body and artefact in early prehistory than with the worldviews of complex societies that make extensive use of linguistic concepts. Gamble (2007, 90) admits that there may be a distinction between them, but does not address the latter issue. This is very problematic, for not only do these kinds of societies have to be incorporated in an approach that wants to consider the orders of things and ideas simultaneously, but also his own formulation of his framework depends precisely upon one such complex society. Merely providing a critique of certain aspects of the world today, such as the notion of the Enlightenment entailing a kind of entanglement (Gamble 2007, 157), is insufficient to address this issue. Instead it is useful to refer to work being done on the comparative history of science, a subject much developed since Childe's day, to address the way different conceptions of reality can be grasped through language.

Of particular relevance in this is the work of Geoffrey Lloyd (e.g. 2002, 2004), who, working in the footsteps of Joseph Needham, has long sought to compare the intellectual advancements in ancient China and Greece. In the course of his studies he naturally came up against issues of reason and relativism, especially with regard to the way concepts were treated in the textual records of both civilisations. Lloyd (2012, 73) notes that counter-intuitive concepts from different cultures are often treated through dichotomies, as between the literal and metaphoric, but also between mythical and rational accounts. The problem here is that the relation between words and things may be quite differently understood in different languages, so that it is very hard to establish the boundary between literal and metaphoric meanings, if these apply at all. To address such issues, Lloyd (2012, 85-91) proposes the notion of a 'semantic stretch' that relates specific words to their broader semantic context. Using such a method makes it possible to grasp alternative styles of inquiry, without holding them to be incommensurable.

Lloyd (2012, 89-90) notes that this strategy renders the idea of a definite connection between words and things as misplaced, instead opting for an emphasis on the communicative and practical roles of language. Of course this raises the question of what semantic stretching is based on, and, following from that, what constitutes truth in such an exercise. It can be argued that Gamble's use of

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⁴⁶ A clear example of this is the different kinds of ontologies of materiality in ancient Greece and China, being based respectively on process-based and substance based worldviews (Lloyd 2012, 87-90). Such different ontologies are not incommensurable, however, since translation and hermeneutic understanding is possible.

metaphors provides a complementary approach that can relate the basic conditions for metaphor to their further elaboration in the specific semiotic systems of complex societies. Indeed they both provide ways of addressing the limits of the approaches of Vico and Childe, with which they nevertheless share some affinities. It is easy, however, to become entangled in such affinities and lose perspective of the central thrust required of methodology. Recourse is therefore made in the next section to elements of the philosophical work of Wittgenstein and its implications for the issues that have been discussed in this part, in order to disentangle the different elements and provide a coherent methodology for the rest of the thesis.

2.3.6: Wittgenstein's remarks on Frazer's *Golden Bough* and their methodological implications

In this section the philosophical work of Ludwig Wittgenstein (1889-1951) will be discussed in order to resolve the key problem of history-based conceptions of human nature identified in the previous one. As such it forms the basis of the discussion in 2.3.7. This concerns the myopic treatment of multiplicity in the global historical record, which is related to specific views of historical development and of language as relating to this. Of course, it is true that in his work Wittgenstein was rarely directly and systematically concerned with social and historical questions, though he clearly had strong personal views on such issues (e.g. Monk 1990, 480-482). What was central to his work was the use of method to clear up conceptual issues, and it is precisely from this more Spartan perspective that we can turn back to history and resolve issues. This emphasis on the centrality of method is well summed up in the following quotation:

"He [Wittgenstein] was able to dig down to the most fundamental, and typically unnoticed, presuppositions of thought in a given domain. Where philosophers had presented opposing views of a topic, and debate had long continued polarized between alternatives – for example, between idealism and realism in epistemology, or dualism and behaviourism in philosophy of mind, or Platonism and intuitionism in philosophy of mathematics – Wittgenstein did not side with one or another of the received options, but strove to find the agreed presuppositions common to both sides of the venerable dispute and then challenged these." (Hacker 2001, 2)

Paramount in turning to this method is the realisation that it cannot be for developing a specific model of what society is and how it ought to be interpreted, although this has on occasion been tried (e.g. Schatzki 1991). Neither should it be used to argue for a deconstructive view that discounts the possibility of constructing coherent models for interpreting societies. Instead Wittgenstein's work can be used for more reflective purposes, in particular for the relation between middle-level and high-level theory discussed in section 2.2.1 (see figure 1). As we discussed there, the relation between these two levels is often characterised by downward scaling from high-level theories, which can often lead to an 'ideopraxist' position in which the axioms of that theory exclude any alternatives. Hence the work of Wittgenstein has proven to be quite useful for outlining a view of archaeological theory as a toolbox of different kinds of models co-existing in a non-exclusionary multiplicity (Bintliff 2000, 163-165). Our purpose here, however, is not to discuss archaeological theory in general, but rather with the crafting of models to be used in cross-cultural comparison. This demands taking into consideration Wittgenstein's reflections on anthropology as well, starting with his remarks on Frazer's *Golden Bough*. These are then situated in the broader context of his later work, allowing the formulation of key points to be used in section 2.3.7.

The *Remarks* is a posthumously published text, mostly written in 1931, of Wittgenstein in which he provides a critique of Frazer's exercise in comparative mythology in the *Golden Bough*. Before turning to the text itself, it can be useful to consider the circumstances in which it emerged. At first glance Wittgenstein and James Frazer could not be further apart in terms of their respective

interests. As recounted by one of his biographers (Monk 1990), Wittgenstein came to philosophy in the 1910s in an unconventional way, through aeronautical engineering, and would always remain ambivalent towards it as an academic subject. What initially attracted him was the drive of philosophers such as Bertrand Russell and Gottlob Frege to develop logic far beyond the scholastic work building on the foundations of Aristotle. This would enable philosophy to move beyond big generalisations and metaphysics towards a more precise, mathematically-minded scientific philosophy. Wittgenstein became Russell's student, then collaborator and in a relative short span of time a philosopher in his own right. His initial work culminated in the *Tractatus* (Wittgenstein [1922] 2001), the book in which he outlined a new system of logic and the role of philosophy.

The rigorous, focused style and the subject matter of logic in the *Tractatus* can be seen as an almost polar opposite to the *Golden Bough*, which was a huge work comprising twelve volumes in the third edition published between 1906 and 1915, although here the later abridged version is used (Frazer 1959). The *Golden Bough* is mainly concerned with bringing together bits of information on the worldviews of countless cultures around the world under the banner of the rather curious theory of 'survivals' (Carneiro 2003, 87-89). This theory holds that worldviews can be viewed in an evolutionary sense, progressing from magic through religion to science. Traces of earlier modes can recur in later ones as 'survivals'. Thus hard-to-understand rituals of the Roman Mediterranean, such as the slaying of the priest-king at Nemi by his successor, can actually be understood as 'survivals' and can be explained by reference to any culture at the magical mode stage. Frazer's work and the theory of 'survivals' were ultimately not very influential in anthropology, though the book remains for many a gold mine of information on mythological concepts. However, the *Golden Bough* had more success as a literary work, influencing writers such as D.H. Lawrence, James Joyce, T.S. Elliot, Robert Graves and other representatives of literary modernism.

It is not immediately obvious how the logic-oriented Wittgenstein could become interested in a book like Frazer's. Yet already during the time when he was writing the *Tractatus*, Wittgenstein showed interest in things other than logic as understood in its strictest sense. One good example is his comment on a poem by Ludwig Uhland, send to him by his friend Engelmann (Monk 1990, 150-151). This tells the story of a crusader who on his journey cuts a spray from a hawthorn brush, plants it upon his return and then sits under it at old age, being reminded of his youthful adventures. According to Engelmann in his accompanying letter to Wittgenstein the poem is a wonder of objectivity, describing life in just 28 lines, precisely through its descriptive force rather than through any attempts to express it theoretically. Wittgenstein agrees in his reply:

"And this is how it is: if only you do not try to utter what is unutterable than **nothing** gets lost. But the unutterable will be – unutterably – **contained** in what has been uttered." (cited in Monk 1990, 151, emphasis in original)

This difference between saying and showing is crucial for understanding the way Wittgenstein conceived of the relation between world, thought and language.⁴⁷ The philosopher as a subject stands not outside the world but rather as a metaphysical subject forms the limit of that world (Wittgenstein [1922] 2001, #5.641), a position that Hacker (2001, 8) has characterised as 'transcendental solipsism' in combination with 'empirical realism'. After writing the *Tractatus*, Wittgenstein was convinced that he had solved all the problems of philosophy as commonly

⁴⁷Important here is Wittgenstein's conception of internal relations. For him propositions mirror but cannot represent logical form, because to do so would mean to stand outside logic and hence the world (Wittgenstein 1922, #4.12), so it is rather an internal property or relation. Language and world are related through thought, and this is an internal relation in that its sense is given by the correspondence of the logico-metaphysical form of reality to the logical form in language (Hacker 2001, 7-9). This can be grasped only through grasping the picture-thought (*Bild*), which has its own form that gives intentionality to the signs of the proposition: hence shows its sense.

understood by showing them to be based on a misunderstanding of the workings of language. Through logical perspicuity it would be possible to grasp the logical form that is obscured in 'ordinary language', but logic alone could never lead to new discoveries or insights about the world: it would only serve to clear up mistaken ones. Hence the position of philosophy is not one of providing foundational systems, whether metaphysical or more logic-oriented ones, ⁴⁸ for understanding the world:

"The right method of philosophy would be this: To say nothing except what can be said, i.e. the propositions of natural science, i.e. something that has nothing to do with philosophy: and then always, when someone else wished to say something metaphysical, to demonstrate to him that he had given no meaning to certain signs in his propositions. This method would be unsatisfying to the other -- he would not have the feeling that we were teaching him philosophy -- but it would be the only strictly correct method." (Wittgenstein [1922] 2001, 6.53)

After writing the *Tractatus*, Wittgenstein abandoned philosophy for a time. He gradually returned to the subject as a result of conversations in 1923 with the young mathematician Frank Ramsey, who discovered a crucial flaw in Wittgenstein's logical framework of the *Tractatus* (Monk 1990, 272-276). In the book it was asserted that all necessity was logical necessity, and as an example it was asserted that the simultaneous presence of two colours at the same location in the visual field was ruled out by the logical form of colour (Wittgenstein [1922] 2001, #6.3751). This possibility appears to be a contradiction, but Wittgenstein reasoned that further logical analysis would show that the colour A would entail all degrees of A and none of B. After Ramsey's intervention, Wittgenstein realised that this could not be true (Hacker 1986, 108-112). Rather, he developed the notion of a system of propositions, in which the presence of colour A in a position in the visual field would be mutually exclusive to the simultaneous presence of colour B (and all others). Yet this undercut the basic formulation in the *Tractatus* that atomic propositions were independent of each other, and therefore the logical framework of the book was in doubt, and neither was he satisfied with working out a complex philosophical grammar for the relations between different kinds of propositions.

After trying to salvage the notion of a comprehensive system of logic for some time, Wittgenstein abandoned it, and with it went the notion of 'transcendental solipsism'. Nevertheless, he was still concerned very much with the original questions and ideas that occupied him when writing the *Tractatus*, but these were put in a different framework that treated them in a quite different way (Hacker 2001, 4). What followed has been described as Wittgenstein's 'anthropological turn (Monk 1990, 260-261),⁴⁹ which corresponded to a very different approach to philosophy. Instead of

This has given rise to very different valuations of the *Tractatus*, with an influential New Wittgenstein school arguing for a resolute reading of #6.54 as seeing the book as nonsensical as a system. Hacker and others disagree based on technical philosophical arguments (e.g. Hacker 2001). This position has an important impact on the continuity between the *Tractatus* and the later philosophy.

⁴⁸ Of course, Wittgenstein himself in a way put forward what seems to be a logico-metaphysical system in the *Tractatus*, but at the same time states, in the last sentences of the book, that:

[&]quot;My propositions are elucidatory in this way: he who understands me finally recognizes them as senseless, when he has climbed out through them, on them, over them. (He must so to speak throw away the ladder, after he has climbed up on it.) (Wittgenstein 1922, #6.54)

⁴⁹ The primary influence on Wittgenstein for this 'turn' seems to have been the Italian economist Piero Sraffa. Another important influence was Oswald Spengler. There are indeed interesting parallels between both thinkers, especially regarding the anthropological context of the conceptual frameworks of mathematics. Yet Wittgenstein does not seem to have espoused Spengler's rigid conception of cultures as organic systems following predetermined paths. For example in 1931, Wittgenstein wrote the following in his notebook:

focusing on achieving perspicuity through logical analysis, Wittgenstein now emphasized what he called an *übersichtliche Darstellung* (which is most often translated as 'perspicuous representation') of the actual uses made of words in 'ordinary languages'. The first reference to this concept is from 1930, soon after his shift of focus, from a foreword to a book he was planning to write at the time:

"Our civilization is characterised by the word 'progress'. Progress is its form rather than making progress one of its features. Typically it constructs. It is occupied with building an ever more complicated structure. And even clarity is sought only as a means to this end, not as an end in itself. For me on the contrary clarity, perspicuity are valuable in themselves.

I am not interested in constructing a building, so much as in having a perspicuous view of the foundations of possible buildings." (Wittgenstein 1980, 7e)

It was in this period that Wittgenstein started to read and discuss Frazer's *Golden Bough* with his friend Maurice Drury, which resulted in a commentary on it in his notebooks of 1931, although the second part is likely to have been written at a later time. It should be emphasized that these notes were unpublished and were not likely to have ever been intended for publication. As with almost all writings of Wittgenstein after the *Tractatus*, the text was composed posthumously by an editor. The somewhat fragmentary character of these remarks on Frazer's *Golden Bough* has not diminished their impact, but at the same time has perhaps added to the differences between various interpreters of the text, with some seeing it as enriching the comparative analysis of social facts (De Zengotita 1989),⁵⁰ but with others decrying its supposed dogmatic opposition to such comparative studies (Rudich & Stassen 1971). There is a clear danger here of over-interpreting someone's unpublished remarks, which are not likely to have been intended by Wittgenstein to be read as fully thought-out with regard to their subject matter.

Wittgenstein starts his critique of Frazer by arguing that we should begin with the mistake, to uncover its source so that we can discover the truth on the road from error (*Remarks*, 1e).⁵¹ The mistake is that of Frazer when he puts forward a theory of magic in primitive societies, that he explains them as primitive science, that is as theories analogous to our own science but mistaken in their content. According to Wittgenstein magic is something quite different from science, pointing out that people in these primitive societies were very adept at practical tasks for survival and thus had a practical 'science' that co-existed well with their magical and religious rituals. To conceive of magic as a scientific procedure is to draw a false picture, one that Wittgenstein argues makes Frazer more of a savage than the supposed savages themselves (*Remarks*, 8e). Unlike as in science there is no progress in magic, indeed in a quotation left out of book but put in the foreword Wittgenstein says that keeping out magic from modern society itself has the character of magic (*Remarks*, vi).

Having thus outlined his objection to Frazer's theory about the comparative cases he collected in the *Golden Bough*, Wittgenstein proposed a different way of looking at them:

"'And all this points to some unknown law' is what we want to say about the material Frazer has collected. I can set out this law in an hypothesis of development, or again, in analogy with the schema of a plant I can give it in the schema of a religious ceremony, but I can also do it just by arranging the factual material so that we can easily pass from one part to another and have a clear view of it – showing it in a 'perspicuous' way." (Remarks, 8e-9e, emphasis in the original)

[&]quot;Spengler could be better understood if he said: I am **comparing** different cultural epochs with the lives of families." (Wittgenstein 1980, 14e, emphasis in the original)

⁵⁰ Of many others who have referred to these writings as useful for comparative studies, the author has been influenced by (Blok 1976) and (Ginzburg 2004, 2010).

⁵¹ The use of 'we' here has to be understood in the sense of sharing a language, if not necessarily a mother tongue.

This *übersichtliche Darstellung* or perspicuous representation is fundamental to Wittgenstein, as it allows us to see the formal connections between facts. For example, when we note the similarity between a ellipse and a circle we might show this by a series of drawings that gradually transform a circle into an ellipse or vice versa, which does not imply an evolution of one into another but rather allows us to grasp how the different shapes can be related to each other (*Remarks*, 9e). In the case of magic it is not possible to draw, but we have words in our language that relate to the gesture-language of ancient rites as does the circle to the ellipse. There is in effect a mythology deposited in our own language (*Remarks*, 10e). How these connections can be explored is not further elaborated in the text, only that it is possible and apparently not very difficult. We can recognise easily enough, from our experience, from life, the gesture-language of other cultures, convincing ourselves that the names of our gods have the same names as theirs, as in resemblances between different family members. Yet for Wittgenstein this in itself would be insufficient:

"The most noticeable thing seems to me not merely the similarities but also the differences throughout all these rites. It is a wide variety of faces with common features that keep showing in one place and in another. And one would like to draw lines joining the parts that various faces have in common. But then a part of our contemplation would still be lacking, namely what connects this picture with our own feelings and thoughts. This part gives the contemplation its depth." (Remarks, 13e)

Wittgenstein brought up the example of the Beltane fire festival, at or around May Day, to elaborate on this. In the practices of this festival Frazer discerns 'survivals' of earlier practices of human sacrifice, as a victim was selected by lot, put through some rather unpleasant experiences and pretended of as dead for the rest of the year (Frazer 1959, 704-708). This practice he argued could be connected historically with the sacrificial rites of ancient Gaul (Frazer 1959, 736-738). The objection Wittgenstein makes to this is not so much whether or not this particular historical connection is true, but that it gives the false impression that it is this theory that gives depth to our understanding of these practices (*Remarks*, 14e). Rather it is our view of the practices as simply laid out before us, what we get from the practices and the people participating in them, that impresses us, and frightens us in the case of human sacrifice. We cannot view such matters from a distance, they confront us not only with the evidence from these practices but also with the evidence and experience from our own lives (*Remarks*, 18e).

From this reading of Wittgenstein's *Remarks* three important arguments can be discerned:

- 1. Frazer's view of magic as a 'primitive science' is erroneous in that it makes a category mistake as to its place within the cases studied by him.
- 2. An alternative to arranging Frazer's cases in an evolutionary schema is to view them through an *übersichtliche Darstellung* or perspicuous representation.
- 3. The depth of our understanding of Frazer's cases derives not merely from arranging the facts, but from their connection to our own life and experiences.

Despite their original obscurity, the *Remarks* and other later work of Wittgenstein, most prominently the *Philosophical Investigations*, have generated rich and many-sided debates in philosophical anthropology, as can be seen in the proceedings of a recent conference on the topic (Padilla Galvez 2010). The focus of the discussion here will be on the method developed by

⁵² There seems to have been a close relation to the notion of *Urphänomen* in Goethe here (Monk 1990, 311). This is true for other features of the later work of Wittgenstein as well, including the notion of aspect-seeing that will be discussed below (Monk 1990, 509-512). Further explorations of the relation between Goethe and Wittgenstein can be found in (Plaud 2010) and the papers in (Breithaupt & Raatzsch 2003). The impact of Goethe's notion of *Urphänomen* is an extremely important but under-explored topic, to do it justice would require much more space than is available here.

Wittgenstein following his 'anthropological turn'. It is important to stress here that Wittgenstein is not putting forward a theory about ritual or ritual behavior nor is he attempting to outline a 'philosophy of the human sciences', as some have argued (Schatzki 1991). The concern is rather with getting a grip on how we talk about features of a different culture like the Beltane fire festival in our language, a task put by Wittgenstein as: "We must plough over the whole of language" (Remarks, 7e). Part of the method he proposed for doing this was gaining an übersichtliche Darstellung or perspicuous representation, which was not further elaborated in the Remarks, but which has been connected plausibly to the notion of the 'language game' by Monk, a term which first surfaces in the Blue Book in 1933 (Monk 2005, 71-74), shortly after the first set of notes on Frazer had been written down.

The language game, as well as a number of other terms closely associated with it, has been best described in the first part of *Investigations*, a book of Wittgenstein published posthumously in 1954. A language game can be seen as a primitive version of a language, demonstrating a certain use of words (*Investigations*, #2). Examples of this are giving and obeying orders, speculating about an event, making a joke, translating from one language to another, as well as many others (*Investigations*, #23). Often a language game is phrased by means of Wittgenstein's imaginative 'ethnography' where the specific use of language under discussion is the custom of a hypothetical tribe. By isolating such a portion of a language it can be understood it in a more precise way. The aim of these games is to demonstrate the multiplicity of language, the very different ways in which words are used in different contexts, and to thus clear up the 'fog' generated by foundational philosophical thinking. They function as intermediate cases, providing the *übersichtliche Darstellung* or perspicuous representation that is lacking in the grammar of full language (*Investigations*, #122). The games should therefore be thought of as having a therapeutic function and not as a means to get to some kind of essentialist understanding of language itself:

"Our clear and simple language-games are not preliminary studies for a future regimentation of language – as it were first approximations, ignoring friction and air resistance. Rather, the language-games stand there as **objects of comparison** which, through similarities and dissimilarities, are meant to throw light on features of our language." (Investigations, #130, emphasis in the original)

A good example of Wittgenstein's use of language games to 'clear up the fog' of philosophy can be seen in the schematic representation (see figure 2) of an account by Socrates in the *Theaetetus* that the primary element basic to more complex forms is the bare name (*Investigations*, #46). This account is similar to Wittgenstein's own ontology in the *Tractatus*, where objects were the primarily elements of facts, and through sharing logical form also of propositions. The language game of coloured squares in figure 2 provides an alternative, with the different monochrome squares representing its primary elements. Yet, as Wittgenstein shows these squares are hardly irreducible simples but are instead related to each other through their shape and colour, forming a pattern that can be read in a variety of ways (*Investigations*, #48).⁵³ That is, the squares do not acquire meaning through the 'bare name' of their colour, but rather through their place within the overall pattern shaped by the language game. The various possibilities of meaning that one can imagine for the language game of figure 2 follow different rules that can be set up to play it (*Investigations*, #53), thus showing that the view put forward in the *Tractatus* of names or objects as primary elements for more complex forms is incomplete.

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⁵³ This, then, is the alternative provided by Wittgenstein to the colour-exclusion problem that brought down the logical framework of the *Tractatus*. The language game of figure 2 allows one to grasp that a patch of colour cannot be determined logically as an independent proposition, but rather that its meaning derives from a grammar that supplies the rules for its representation in logic.

Rules play an important role in the *Investigations*, together with the related concept of grammar. Both are used somewhat idiosyncratically and stand in need of explication. Rules, according to Wittgenstein, are like sign-posts (*Investigations*, #85), they show the way but at the same time cannot provide the kind of crystalline-pure certainty that the propositions of the *Tractatus* could. Grammar should not be understood in the common technical sense of the word but as that which determines whether a rule is valid or not, replacing the logical form of the *Tractatus* in making sense of "what kind of object anything is" (*Investigations*, #373). The emphasis is that rule-following is a custom, a practice, if a practice without any kind of arbitration, as a rule is a rule by merit of it being practiced (*Investigations*, #201). Wittgenstein emphasizes that one cannot obey a rule privately or solely in one's own mind (*Investigations*, #202), which is expanded into what has been called the Private Language Argument (PLA). The PLA can be interpreted as showing the nonsensical notion of a language that would have rules and a grammar private to one person, presumably a philosopher like Descartes conception of a philosopher (Hacker 1997, 14-20).

At this point it is appropriate to take stock for a moment and refocus on method. It is very important to stress here again that concepts such as the language game, rule-following and grammar were not meant by Wittgenstein as a description of language, as an ontology, but rather as therapeutic tools to dispel the 'fog' created by philosophers. A good, basic example of this can be found in his discussion of measuring the Mont Blanc (*Investigations*, pp. 236-237). The 'mistake' (attributed to no one in particular) here is the notion that the length of this mountain is not determined by the method of measuring it. Yet, as Wittgenstein argues, this only holds if one ignores that apart from the physical method of measuring, there is also the conceptual method that allows one to make sense of the procedure. Like the attribution of names to different colours there is a conceptual dimension that arises out of the form of life, which is the perquisite to these particular language games. One can consider '2 x 2 = 4' as a mathematical proposition and 'humans believe 2 x 2 = 4' as an 'anthropological' one, which would allow one to consider different kinds of calculus.

Language games are therefore a key to Wittgenstein's 'anthropological method' with which he sought to provide a different way of doing philosophy. The question can now be raised what constitutes their relation to language as a whole and to each other. Wittgenstein stresses that like the language game, language in its totality is also incomplete, likening it to an ancient city full of mazes, squares and thoroughfares, with houses and neighbourhoods from different periods (*Investigations*, #18). It is quite possible to recognize similarities between different games, as in a family resemblance, but there can be no general theory or form of all games (*Investigations*, #67), nor is it possible to draw a limit to them as a concept or model (*Investigations*, #69-71). Again, Wittgenstein was not concerned with presenting this view of language as another ontology, but emphasized the activity of speaking a language, as part of a specific form of life (*Investigations*, #23), with the philosophical concepts noted in the previous discussion acting as means to a therapeutic clarification of various issues.

This boundlessness of language and the possibility of an infinite number of potential language games can lead one to a relativist position. Indeed Wittgenstein himself once described his aims in philosophy as the complete opposite of Hegel's quest for unity, by showing instead that things that looked the same were actually very different (Monk 1990, 536-537). Yet there is also something that is common, or rather pre-existent, to rule-following and customs: intentionality, the means through which one can grasp something or someone in a non-linguistic way (*Investigations*, #205-206). As Wittgenstein writes in a more universalistic manner: "Shared human behaviour is the system of reference by means of which we interpret an unknown language" (Investigations, #206). The possibility of such interpretation is what constitutes the human form of life (Van Brakel 2005).

According to Wittgenstein intentionality can also be discerned in its most primitive form in his example of a cat stalking a bird (*Investigations*, #647). Hacker (2010, 23-28) has argued that this basic form of intentionality can be seen as the root for language games, from its most primitive form of expression in the phrase: 'going to', and its elaboration in more complex forms of language.

Indeed, Wittgenstein noted that customs or practices were not required for intentionality, yet the kind of understanding this brings of people of a different culture is not sufficient for one to be able to follow their rules naturally (*Investigations*, #207). It might be said that one cannot read the direction of their sign-posts, or as Wittgenstein himself put it: "We cannot find our feet with them" (*Investigations*, p. 235). This brings us back to the third argument of the Remarks, that one's understanding of Frazer's cases comes not only from arranging the facts, but from their connection to one's own way of viewing things. Clearly the comments in the *Investigations* suggest that this is more complicated than one would have expected from the interpretation of the notes on Frazer offered here. There is, however, one more concept of the later philosophy of Wittgenstein that could allow further insight into this question: that of aspect-seeing, elaborated in section IIxi of the *Investigations*. It concerns the idea that there is a kind of seeing that is also a kind of thinking, ideas that he described in a conversation with a friend as being "as hard as granite" (Monk 1990, 537).

Wittgenstein begins his remarks on aspect-seeing by stating two uses of the word 'see', one as a description of what is there, another of seeing a likeness between phenomena such as two human faces (*Investigations*, p. 203). These ways of seeing belong to different categories, and it is the second that is of interest to Wittgenstein's notion of aspect-seeing. If one sees a face and notices its likeness to that of somebody else, one notices an aspect and one's perception of it changes, even if it has not changed physically in any way. He brings up the figure of the picture-rabbit to further illustrate this. What one sees as one moves from seeing it now as a rabbit and then as a duck is the 'dawning of an aspect', as opposed to seeing it in a continuous way if one could only recognise a duck or a rabbit. Entities like the duck-rabbit are picture-objects, and cannot be described in from a purely physical descriptive stance:

"In some respects I stand towards it as I do towards a human face. I can study its expression, can react to it as to the expression of the human face. A child can talk to picture-men or picture-animals, can treat them as it treats dolls." (Investigations, p. 204)

If one would be pressed to further describe such an object, for example a picture-duck, one would refer to other examples of duck and point to their habits or even imitate them, not to simply state their physical parameters. It is also misleading to differentiate between an 'inner picture' of 'seeing something like' alongside an 'outer picture' of a physical description of the shape and colour of the picture-object (*Investigations*, p. 206). Simply copying a shape and showing it to someone will not lead that person to see the aspect, as it is not a question of simply looking but one of concomitant visual experience and thinking. The notion that one can get at one genuine description of an object is misguided according to Wittgenstein:

"Here we are in enormous danger of wanting to make fine distinctions. — It is similar when one tries to explain the concept of a material object in terms of 'what is really seen'. — Rather the everyday language-game is to be **accepted**, and **false** accounts of it characterized **as** false. The primitive language-game which children are instructed in needs no justification; attempts at justification need to be rejected." (Investigations, p. 210, emphasis in the original)

Therefore whether one sees a triangle as a hole, as a mountain, as standing on its base or hanging from its apex, all these aspects have no need of further theoretical qualification. Concepts such as

'rabbit' or 'duck' do not derive from inner experience but are inherently public, and Wittgenstein also emphasises the role of custom in more complex ways of seeing such as the recognition of meaning in different styles of painting (*Investigations*, p. 211). One could imagine a hypothetical tribe who viewed black and white photographs of faces as inhuman due to their reduced scale and colourlessness (*Investigations*, p. 216). Seeing an aspect is therefore part of a form of life, and depends on whether one has mastered the technique of seeing, just as it does for experiencing the meaning of a word. Lacking this skill brings with it the inability to see things in a certain way, as in the lack of a musical ear, an inability termed aspect-blindness by Wittgenstein. Aspect-seeing and aspect-blindness further qualify the way one sees phenomena both in the form of life indigenous to oneself and in that of others.

It is now possible to qualify the second and third points of the *Remarks*, using the above exposition of Wittgenstein's later philosophical remarks as published in the *Investigations*:

- 1. An übersichtliche Darstellung or perspicuous representation can be gained through setting up language games as intermediary objects for comparison to throw light on our language and that of others. In this role these language games can serve as therapeutic means to resolve philosophical confusions. There cannot be a concept of these games, nor a circumscribed model of language, they have to be accepted as part of (a) form(s) of life.
- 2. The connection of one's own experience and one's own form of life and another form of life, the depth referred to in the *Remarks*, is not a simple matter of translation. In the *Investigations* it depends upon being able to 'see something according to its aspects'. Whether one understands something like a picture-object as such depends on whether one can see the right aspect, and hence understand it.

2.3.7: History-based conceptions of human nature and cross-cultural comparison

Having outlined some of the philosophical ideas of Wittgenstein in the previous section, the key issue now is to consider their relevance for history-based conceptions of human nature. First of all, it can be noted that the philosophy of Wittgenstein has been related to many key thinkers of this approach to history. Connections have been made between his work and that of Vico (Riverso 1976; Winch 1964), Hegel (Lamb 1979), Marx (Easton 1983; Kitching & Pleasants 2002; Rubinstein 1981), and even Bakhtin (Eagleton 1982, 74-81). In itself this proves little, as the work of different philosophers tends to form a network or chain of interconnected strands (Collins 2000). In a more substantial sense, however, it is possible to note that the critique of Cartesianism implied by the work of Wittgenstein (Hacker 1997, 14-20), is shared by the history-based conceptions of human nature discussed in sections 2.3.3, 2.3.4, and 2.3.5. One common element, then, would be that previous eras and different cultures have to be treated in their own terms, rather than as conforming to the notion of an unitary rationality. Here it is also useful to remember the broad critique of dualism and rationalist or foundationalist views of human nature of section 2.2. In this sense Wittgenstein and those espousing a history-based perspective of human nature seem to travel on parallel paths. This makes it less surprising that this critique of Frazer by Gordon Childe reads quite similar to that of Wittgenstein:

"For instance, ethnographers of the 'English school' like Tylor and Frazer have tried to translate into the categories of nineteenth-century rationalism the superstitions of savage and barbarian societies. They gave us an entrancing vision of a world-view as coherent as our own, but based on less adequate premisses. If their successors, the functionalists, have nothing so satisfying to offer us, these have at least left no possible doubt that Tylor and Frazer had succeeded in draining rituals and beliefs of all that was vital to the societies that practised and entertained them. Their

Both Childe and Wittgenstein would seem to agree that Frazer had made a category mistake, imposing his own rationalist framework upon ritual. This opens the way to a common appreciation of grasping previous eras and different cultures in their own terms. The level of detail with which the thought of Childe and Wittgenstein has been treated here, makes it possible to provide a clearer picture of where they agreed and differed on precisely this issue. In fact, it shows their disagreement to have been quite subtle. Recalling the discussion of Childe from section 2.3.5, it is clear that he made the point that distinct 'social worlds of knowledge' could differ both in the substance of their knowledge and in the conceptual structures that held it together. Furthermore, it is only through the historical success or lack thereof that different historical cases can be 'judged'. Childe also held that progress was not analogous to a train following a track, but to some degree historically contingent. Even these ideas do not fit those of Wittgenstein perfectly, they show enough broad coherence with the points discussed in the previous section. We may even point to Childe's notion that to conceive of words as things is to make a category mistake, since they are properly to be understood as part of contexts of actions. This is not so dissimilar from Wittgenstein's insistence of the primacy of the act, and the embedding of language in a form of life.

The most substantial disagreement would seem to lie in Childe's emphasis on the primacy of technology as a measure of progress.⁵⁴ As discussed in section 2.3.5 this was not only due to the cumulative and logical process of technological development, 55 but also because of its close relation to the concept of labour power that lies at the heart of Marxism. The latter notion also provides an origin point in its distinction between human labour power and the activities of animals. Based on the work of Wittgenstein treated in the previous section, it can be argued that this view of origins and progress unnecessarily constrain interpretations of the archaeological record. This does not mean that the Marxist view of technology as used by Childe and others is wrong in itself. It is rather that its elevation to a measure of all of history introduces a myopic effect, a case of Wittgensteinian aspect-blindness to other important features of human life. Additionally, the problematic character of an origin of human social labour as distinct from animals can be discerned clearly. An argument may be made that for Marx this was less relevant, as he argued that the capitalist mode of production held the key to the pre-capitalist one, an insight that may have uses for archaeologists (Mrozowski 2014). This would push the need to account for origins to the background, but Engels and others were clearly trying to locate the origin of human social labour in the archaeological record (Patterson 2009, 74-87). It should be noted that Childe himself never even addressed this question in schematic terms, because of the limits of the available evidence (Gamble 2004).

Much has been written in general on the metaphysical issues related to the notion of a clear division between animals and humans (Corbey 2005; Fernández-Armesto 2004). In whatever way it is to be viewed, the Marxist distinction between humans and animals based on social labour seems to be just one example of this. As noted earlier in section 2.3.5, such a view of origins can be understood as being partly mythological in nature. This is not to say that the concept of social labour is useless, for it can be used very well to grasp capitalist and pre-capitalist social formations alike. It is here that Wittgenstein's philosophical work can be used to clear up conceptual obstacles. The same can be said for the ideal and eternal history of Vico. Here too there are clear parallels with Wittgenstein in the recognition of different eras and cultures as cases that need to be understood in their own

⁵⁴ Although there are no indications that Childe and Wittgenstein ever met, the latter did attend a lecture by Farrington at which he crossed daggers over precisely this issue (Rhees 1981, 222-223).

⁵⁵ This may appear to be contradictory to the notion that progress does not following along a railroad track, but it is important to remember that this is an abstraction from the actual historical record and possesses no logical form that transcends it (cf. Childe 1947, 11). Actual historical cases may follow very different paths, especially if they adopt technological innovations from other societies.

terms, as discussed in sections 2.3.3 and 2.3.4. Again, the problem lies with Vico's notion of an origin point and the suppression of multiplicity by the imposition of an over-arching scheme. The reason that Wittgenstein can be used to address the issue of origins in both kinds of approaches is that his work shares some basic tenets with them, but without building up a framework of human history as derived from philosophy.

Here we can recall from the previous section that in addition to the critique of Frazer of making a category mistake with regard to ritual, two other major points were made in the *Remarks*. One of these was that the depth of one's understanding of an ancient ritual like that of Nemi derives not from arranging the facts, but from one's own life and experiences. Related to this are the notions of aspect-seeing and aspect-blindness elaborated in the *Investigations*. Here depth is not something that can be indiscriminately grasped, but depends upon a structured way of seeing that allows one to perceive a coherent picture. One of the interesting things of the discussion of depth and aspect-seeing is that Wittgenstein uses many examples that relate to the bodily element of seeing (cf. Krebs 2010). Elements of this were the gesture-language of the *Remarks* and the picture-men and picture-animals of the discussion of aspect-seeing in the *Investigations*. It can be seen in other contexts as well, notably in the lectures notes of his course on aesthetics compiled by his students:

"If you came to a foreign tribe, whose language you didn't know at all and you wished to know what words corresponded to 'good', 'fine', etc., what would you look for? You would look for smiles, gestures, food, toys. ([Reply to objection:] If you went to Mars and men were spheres with sticks coming out, you wouldn't know what to look for. Or if you went to a tribe where noises made with the mouth were just breathing or making music, and language was made with the ears. Cf. 'When you see trees swaying about they are talking to one another.' ('Everything has a soul.') You compare the branches with arms. Certainly we must interpret the gestures of the tribe on the analogy of ours.) How far this takes us from normal aesthetics [and ethics – T]. We don't start from certain words, but from certain occasions or activities." (Wittgenstein 1972, 2-3)

If we remember the discussion of Vico's treatment of the origin of language in bodily metaphors, then we may note considerable agreement between the views of his thought and that of Wittgenstein on this matter (cf. Riverso 1976, 269-272). However, the key difference is that Wittgenstein never seeks to outline a primordial setting in Originsland in which this language first emerged in its most simple form. This is a key point as it throws into question the notion of a universal history based on clearly defined philosophical criteria. From a Wittgensteinian perspective this is clearly misguided, and this would also hold for the less strongly formulated idea of Winch to use Vico's three elements of marriage, burial and religion as the basis for interpreting all human societies (Winch 1964, 322-324). Rather, what Wittgenstein shows is that the depth of human experience lies not in a far and remote era of prehistory that holds an almost metaphysical sway over the present, but is primarily grasped in one's own surroundings. Of course, this does not mean that people are limited in their knowledge to these surroundings. To the contrary: it is precisely through the basic bodily roots of language that the worldviews of other eras and cultures are accessible. Van Brakel (2005) has used such ideas to look at so-called 'first contact' events (referring to the first meeting of people from cultures previously isolated from each other) from a Wittgensteinian perspective.

According to him 'first contact' situations are very interesting to explore the notion what humans

⁵⁶ Fittingly, in discussing the language-game involved with the description of dreams, Wittgenstein actually brings up the kinds of descriptions used to describe human origins:

[&]quot;The evolution of the higher animals and of man, and the awakening of consciousness at a particular stage. The picture is something like this: Though the ether is filled with vibrations, the world is dark. But one day, man opens his seeing eye, and there is light." (Investigations, p. 193)

have intrinsically in common, as there is no possibility for direct dialogue through language. Instead he discusses a number of cases where European explorers interacted with indigenous groups through things like sign language, gestures, speeches, shouting, music, barter and exchange (Van Brakel 2005, 108-113). These modes of communication and interaction could be relatively successful, but in many cases there were profound misunderstandings of the intentions and motives of each other's actions, some with tragic results, which remained incomprehensible until later clarified. Despite such misunderstandings, Van Brakel argues that the reciprocity of communication and the establishment of shared practices, however embryonic, points to a more or less universal or 'transcendental' capability to deal with an enormous variation of human behavior. What in effect happens in a first contact situation is the establishment of a shared, local world, a form of life made up of very simple language games (Van Brakel 2005, 119-122). The possibility of establishing such interaction does not require strong universals in terms of the contents of different forms of life, as in colour terms and other means of categorisation. Rather it is the basic capability to participate in a form of life that is universal, while its the concrete, empirical realisation has to be understood as inherently plural (Van Brakel 2005, 124-125).

The argument put forward by Van Brakel is not that dissimilar to the 'ontological turn' in recent anthropological work. Focussing on ethnography, researchers inspired by this 'turn' seek to grasp the internal coherence of the ideas and practices encountered in anthropological fieldwork as part of an ontological framework (Descola 2013; Henare & Holbraad 2007; Viveiros de Castro 1998, 2003). There are certainly implications of this for archaeology (Alberti et al. 2011), but this also requires addressing historical time-scales that rarely impinge on ethnographic fieldwork. Of particular importance in this is the relation of history to language and more broadly to different kinds of symbolic systems as well. As discussed earlier in this section for both Vico and Wittgenstein language has a 'bodily root' and is shaped in communal settings. The latter aspect is true for Childe as well, as shown in the discussion of his view of language as facilitating the 'pooling' of human knowledge in section 2.3.5. Here we also saw that Childe argued that the early development of language had saddled it with an animistic confusion of words and things, an error perpetuated by the long-term persistence of these languages.

As with the critique of Frazer discussed at the beginning of this section, the difference between Childe and Wittgenstein on this issue is significant but also subtle. In a basic sense both thinkers view language in a strikingly similar way as being inherently communal and not the property of individuals. As discussed in section 2.3.5, Childe also did not posit the idea of a singular 'primitive logic'. It is not clear whether there lies a real difference between Childe and Wittgenstein in the notion of the 'bodily root' of language, for Childe's views remained rather undeveloped in this regard.⁵⁷ One clear difference, however, is the impact of Childe's view on technology as the basis of human progress, which leads to a view of languages having been formed in earlier contexts as perpetuating patterns of ideas that are mistaken in modern contexts. This is a questionable and very limited perspective, for which the work of Vico had already provided a counterpoint. As discussed in section 2.3.3, Vico argued that modern scientific concepts are dependent upon the more 'primitive' ones because both are ultimately rooted in bodily metaphors. Once again, the two

⁵⁷ Childe did provide some remarks on the connection between thought and language, bringing up the notion of 'mental images' (which seems to refer to *Gestalt* psychology, even if this is not explicitly stated) in a way that may suggest a potential relation with bodily perception:

[&]quot;They [mental images] would be fain reinstatements of the heard sounds, seen letters, etc., of symbols and words – perhaps feeble excitations of the cortical ends of sensory nerves not stimulated in the sense organs proper. In that case they should be detectable by neurologists, and if they are, images will doubtless reappear in the textbooks. Even so, combination of images of symbols will not give an entirely satisfying account of thinking if only because there is no one-one correspondence between symbols and ideas." (Childe 1956, 47-48)

different versions of Originsland of Vico and Childe seem opposed to each other in this regard.

Wittgenstein offers a solution to this, for he would share with Vico the emphasis on the primacy of the 'bodily root' of language but without also sharing Vico's version of Originsland. As there is no notion of Originsland in Wittgenstein whatsoever, it becomes possible to salvage the useful elements of the work of Childe, Marx and Vico in a more flexible yet also coherent setting. The key to this is the interface between the basis of language in bodily metaphor and the diversity of the historical record. Unfortunately there is little in the work of Wittgenstein that sheds light on this, although there is a tantalising account by Stern of the remarks made by him in a discussion club in 1944 (cited in Klagge & Nordmann 2003, 364). Wittgenstein here treated the relation between the terminology of Homer and his own contemporary society, noting how these two were in one way foreign to each other yet also connected as if by a rope. This rope would be made up of many small and interlocking hemp strands, and its strength would be that of tradition. In the discussion he was also asked what this would mean for a term like 'truth', to which Wittgenstein replied:

"Why should the grammar of the word 'truth' be composed differently, he answered, than that of the just-mentioned words." (cited in Klagge & Nordmann 2003, 364)

This is not so dissimilar from Childe's use of tradition discussed in section 2.3.5, but the progressive form assumed by him is, to emphasise it once again, not shared by Wittgenstein. A closer relation can be noted between Wittgenstein's views and those of another contemporary thinker influenced by the Marxist tradition: Walter Benjamin (1892-1940). Although the work of both thinkers in many respects pursued quite different lines of investigation, it has recently been argued that Benjamin's notion of the mimetic faculty has similarities with Wittgenstein's work (Ogden 2010). Mimesis for Benjamin was based on the power to make connections between different kinds of objects, based on basic 'animistic' sensibilities. This notion was partly derived from the work of the psychologist Werner, who sought to shift the discussion of mimesis from representation to expression in psychological terms (Ogden 2010, 58-61). Wittgenstein's notion of family resemblances would share some properties with these ideas, even if as discussed in section 2.3.6 other influences can be noted for this as well. More important is that Benjamin developed these ideas more systematically for the relation between history and language. Over time the continuous and communal process of mimesis builds up within language a specific worldview:

"Intelligibility presupposes shared criteria of communal understanding. In this sense a community draws upon a stockpile of mimetic intuitions. This preunderstanding of the world might be described as a 'map' or 'constellation' that illuminates how to insert actions and utterances into their 'appropriate' contexts. One could call it a linguistic — and, by extension, a political or ideological — unconscious. The transposition of the adult world onto the child's could stand in for the lost world of astrology, or storytelling. Even if we had a translator, we would quickly realize that the astrological community's sense of its own language radically differs from our own rudimentary understanding of it. Patently they would see things differently (where they saw Orion, perhaps we would just see stars). In this sense the community would be drawing upon a different stockpile of mimetic intuitions." (Ogden 2010, 69-70, emphasis in the original)

It makes little sense to try to dissociate technology from this framework and fit the rest within its straitjacket. Instead we can see in the work of Benjamin a sustained attempt to understand the modern world itself as building up 'stockpiles of mimetic intuitions', most notably in his tragically unfinished Arcades project (Benjamin 1999). His view of modernity, then, is not one moulded in a pre-determined progressive shape, but rather is based on an exploration of the multiplicity of the form of life of a modern city such as 19th century Paris. Wittgenstein shares with Benjamin this

critique of technological progress as providing the form of modernity rather than being one of its aspects.⁵⁸ Together they provide the basic philosophical-methodological elements for an approach to history that is able to combine three paramount elements:

- 1. The basic features of history-based approaches to human nature can be retained. This includes the critiques of Cartesian dualism and foundational accounts of human nature, and more positively the notions of the 'bodily root' of language and distinct 'social worlds of knowledge'. Furthermore, the actual reconstructions based on these kinds of approaches can be accepted provided that the empirical evidence they are based on is still valid.
- 2. The basis of language in bodily metaphor provides the capacity for comparison with other eras and cultures, but based on contemporary experience rather than a hypothetical reconstruction of Originsland as provided by Vico. This addresses the critique at the end of section 2.3.3 that the framework of Vico (and Boturini) did not allow for sufficient space for Mesoamerican cultures to be grasped in their own terms.
- 3. The tendency of language to build up sets of mimetic connections over time allows for an appreciation of the multiplicity of cultures in different areas of the world. This provides a counterpoint to the problematical idea that technology can be dissociated from other features of cultures due to its cumulative and progressive character.

As such, the perspective based on the work of Wittgenstein and Benjamin outlined here allows for a combination of Gamble's use of metaphor and Lloyd's notion of 'semantic stretch' discussed at the end of section 2.3.5. ⁵⁹ It provides a coherent philosophical-methodological perspective on the issues related to cross-cultural comparison discussed in the preceding sections. The final question to consider now is the relation between philosophical-methodological ideas and specific methodology, which is the subject of discussion in the next section 2.4. Returning to the structure of archaeological theory outlined in figure 1, the perspective outlined in this section would provide a different take on the relation between the notion of scaling between middle-level and high-level theory. Instead of high-level theories being used to formulate an agenda for middle-level theories to follow, philosophical-methodological ideas can be used to elucidate and clarify conceptual problems with middle-level models. While there are still high-level theoretical ideas about society, for example in the relation between language and history, the relation with middle-level models is one of reciprocity rather than a top-down hierarchy.

This can be seen very well in the notion of archaeological theories being used as a 'toolbox' to address different concrete archaeological issues without succumbing to an overall 'ideopraxist' agenda (Bintliff 2000; 2011). This is so because different forms of language have specific uses and cannot meaningfully replace one another or be cobbled together (cf. Wittgenstein 1972, 1). Because such different 'tools' in archaeology often address subjects at different temporal scales, it can be useful to make use of the *Annales* model of history to consider the interrelations between them (Bintliff 2000, 164). This model will be discussed in more detail in the next section 2.4, which

⁵⁸ There is another, and perhaps more fundamental, way in which the two thinkers are connected, namely the influence of Goethe. It was noted in section 2.3.6 that there was some influence of Goethe's notion of the *Urphänomen* or primal phenomena on the critique of Frazer by Wittgenstein and also on the language-game. Through his teacher Simmel this notion also had some impact on Benjamin, even if he transposed the *Urphänomen* from nature to history:

[&]quot;Now, in my work on the arcades I am equally concerned with fathoming an origin. To be specific, I pursue the origin of the forms and mutations of the Paris arcades from their beginning to their decline, and I locate this origin in the economic facts. Seen from the standpoint of causality, however (and that means considered as causes), these facts would not be primal phenomena; they become such only insofar as in their own individual development — 'unfolding' might be a better term — they give rise to the whole series of the arcade's concrete historical forms, just as the leaf unfolds from itself all the riches of the empirical world of plants." (Benjamin 1999, 462)

⁵⁹ It can also related back to Bakhtin's notion of exotopy or *vnenakhodimost* discussed in section 2.2.2.

makes the transition from the philosophical-methodological framework to the specific methods used in the thesis. The ideas outlined here will be used in two different ways. First of all the notion of the 'toolbox' provides a way of relating different kinds of models to each other, as discussed in section 2.4.2, so that different issues with regard to cross-cultural comparison can be addressed more efficiently. In particular it can allow for a better appreciation of the work of Childe and others on the definition of early civilisations in section 2.4.3. Secondly, the work of Wittgenstein can be used to elucidate the use and misuse of models, as will be shown in section 2.4.4 on the definition and comparison of the art of early civilisations.

2.4: The methodological framework for comparing early civilisations and their art

2.4.1: Introduction

In the following sections the specific methodology to be used for the substantive case studies of the Mycenaean and LPC lowland Maya early civilisations will be discussed. As noted in the previous section 2.3.7, the philosophical-methodological framework outlined in section 2.3 will be used in different ways for this. The first element to be discussed in section 2.4.2 is that of the different approaches to cross-cultural comparison in archaeology. Special attention given to the specific kind of analysis they provide and the sources on which they are based. The work of Childe and those influenced by him will receive the most substantial treatment, given that it forms the basis for the outline of the definition and comparison of early civilisations in section 2.4.3. Here the discussion of Childe in section 2.3.5 can be directly connected with the more practical implications of his work for cross-cultural comparison. The definition and comparison of art owes much less to Childe, and the discussion of this topic in section 2.4.4 consequently focuses on different issues. Of particular importance in this is the way in which art and agency have been conceived of in archaeology. It is here that the ideas discussed in section 2.3 can be used to elucidate underlying conceptual problems, so as to be able to formulate a better approach.

Before turning to the details of these matters, it can be useful to consider the meta-issue of contemporary social contexts of scholarship. Much use has been made in this regard of a scheme originally defined by Bruce Trigger (1984). For him the specific positions of nations within the over-arching modern world-system (see section 2.3.2 for a brief exposition of this system) shaped the contexts for archaeological research in these countries (Trigger 1984, 356). The result was that, taking into account local particularities, three main types of research contexts can be recognised:

- 1. Nationalist archaeologies, which stress the connection between the past material record and the modern nation state occupying the same physical space.⁶⁰ This development started in Europe but with the spread of nation states became a global phenomena.
- 2. Colonialist archaeologies, in which a colonial power and/or settler group dominates indigenous societies and controls archaeological research in the area.
- 3. Imperialist archaeologies, put forward by states with aspirations of global dominance and often involving a world-historical perspective.

It should be emphasised, however, that comparative studies cannot be easily fitted into these three contexts, something which may account for their relative rarity. Hence it is important to grasp comparative studies from within their own research contexts. Often these tend to be rather *ad hoc*,

⁶⁰ Based on purported linkages between material remains and ethnic groups, claims may also be made for connections with regions outside the boundaries of the nation state proper. Consequently, there is a difference between 'state nationalism' based on a territorial unit and nationalism based on the notion of the *Volk* (an ethnically defined people). The clearest expression of the latter can be seen in Hitler's Germany (Arnold 1990).

showing great energy and creativity but no institutional staying power. A good example of this is the so-called Mundial Upheaval Society (MUS), an informal organisation of American anthropologists and archaeologists that was formed just after the Second World War (Lewis 2004, 123-136). Many of them, including Morton Fried, John Murra, Elman Service, and Eric Wolf, would play very important roles in different kinds of comparative projects in anthropology and archaeology over the succeeding decades. Such groups can be recognised in other contexts as well. Dutch anthropology long had comparative aims, focusing both on cross-cultural statistics and comparisons within macro-regions (De Wolf 2002). In the 1970s the *Early State* project carried out by Henri Claessen and Piet van de Velde, along with many national and international collaborators, had started but this effort dissipated during the 1990s (Claessen 2008), even if elements of it have been picked up by others (Bondarenko & Korotayev 2003).

Other archaeological traditions such as those of Germany and Latin America, also occasionally have shown interest in issues related to cross-cultural comparison (Gramsch 2000; Lumbreras 2005), if not at the level of large-scale, global comparison. Formerly, the USSR (and the socialist countries under its sceptre) had a very large archaeological research programme, one aspect of which was the comparative evaluation of different societies within the overarching framework of Marxism-Leninism. This effort ultimately saw only limited success, due to the lack of a good connection between theory and data (Trigger 2006a, 344). Most areas with early civilisations were inaccessible to Soviet researchers, although their work on Mesopotamia received serious attention from Western scholars (Adams 2007). Much work has also been carried out in the territory of the former USSR, for which in particular the sophisticated work on metallurgy in relation to long-term trajectories can be noted (Chernykh 1991, 2011). In the later Soviet period and after Russian independence, archaeologists also developed a greater range of models for comparing different societies (Danilova 1971; Grinin 2004; Kradin 2011, 256-262). Finally, one of the legacies of these efforts can be seen in the initial impetus they provided for Chinese archaeology.

However, the main course of comparative studies in archaeology travels through the Anglophone world, not as being limited to English-speaking countries but rather as a discourse that takes part in this language by participants from many different countries. As such, it remains somewhat anarchistic and *ad hoc*, which can be advantageous for its flexibility to new ideas to address new datasets, but at the same time disadvantageous in its lack of coherent development. Yet a basic common pattern can be noted over time. The early use of archaeological material for comparative

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⁶¹ It would be highly misleading to argue that members of this group belonged within an imperialist paradigm, as might be argued for the cultural evolutionism of Service and Fried. Many of them were in fact monitored by the FBI for their past involvement in the Spanish Civil War and radicalism (Lewis 2004, 165-186). At any rate, the policy impact of anthropology in the USA seems to have derived from an entirely different set of researchers (Meaney 2014).

⁶² Not least because of a number of like-minded Marxist and Marxist-influenced scholars in the West. The most famous impact of course was on Childe, as can best be seen for his book on Scotland (Childe 1946a), but the approaches to recognising social differentiation in burials, still current in Russian archaeology (Kradin 2011, 249-256) also had some impact on Binford (McGuire n.d.). There also seem to have been a number of comparative studies of the Maya and Mesopotamian early civilisations by Gulyaev from the 1960s onwards (Bashilov & Gulyaev 1990, 10), but this author has not been able to find any additional information on this work.

⁶³ In this regard it will be interesting to see what the impact of the continuing development of China as a superpower will be on comparative studies. The basic template for modern Chinese archaeology came from the USSR, before the two countries drifted apart in the 1960s, both in terms of field methods and in terms of Marxist-derived models of socio-economic development and ethnicity (Zhang 2011). These were later adapted more closely to the Chinese context (Trigger 2006a, 267-268; Zhang 2013). As in the Soviet and later Russian case, comparative research in China later moved to merge these models with those current in the West, particularly cultural evolutionary ones (Liu 2004; Zhang 2012), as well as pursue joint projects (e.g. Underhill et al. 2008). China of course has an extensive archaeological and textual record, which for its later phases makes it comparable to the Greco-Roman Mediterranean (Scheidel 2009; Tanner 2009). Scheidel has argued that the easier accessibility of their own record to Chinese scholars will give the country an important edge in future comparative work along these lines (Scheidel 2013a).

research goes back to the work of Childe on the early civilisations of the Near East, as well as to the related work of Henri Frankfort, as noted in section 2.3.5. Childe also recognised the need for an institutional context to further the research goal of understanding the 'long-range trends' of world archaeology (Trigger 1980, 128-130). Developments in archaeology took a turn away from Childe in the decades after his death, with the exception of the book *Urban Society* by Robert Adams (1966), playing no significant theoretical role in the New Archaeology. It was rather systems theory that played an important role in this, seeking to use formal modelling to explore the interconnections between different elements of society in order to explain processes of social change through time (Renfrew 1982, 10-11).

Systems theory presents a road not taken for the comparative archaeology of early civilisations, even if its potential in this regard was expressively noted in the 1970s (Lamberg-Karlovsky & Sabloff 1979, 330-335). In particular, a potential convergence between Aegean prehistory and Mesoamerica can be noted, as in both areas this framework was used to model the emergence of early civilisations (Flannery 1972; Renfrew 1972). Yet a fully-developed comparative study based on systems theory never emerged, which cannot only be attributed to the limits of the data or the later shift away from the New Archaeology. Rather, it seems that this kind of modelling ultimately did not prove satisfactory for the task, resulting in a move back to more historical methods (Trigger 2006a, 440). One of the implications was that Childe's work was again taken up more seriously by a variety of archaeologists. This has not required a renewed engagement with his philosophical-methodological ideas, even if in the case of Bruce Trigger this certainly was the case (McGuire 2006). The outer flexibility and adaptability of Childe's ideas, together with their internal coherence, in fact can be argued to make them very suitable for the *ad hoc* research contexts of the comparative archaeology of early civilisations.

2.4.2: Approaches to cross-cultural comparison in archaeology

Before turning to the specific approach for comparing early civilisations used in this thesis, it can be useful to situate it within the broader spectrum of comparative studies in the historical, social, and biological sciences. This will serve to provide a better understanding of the relation between specific approaches and sources of evidence, which can be evaluated based on the philosophical-methodological work of section 2.3. There has been no shortage of comparative studies of human societies recently. A good example, if outside archaeology proper, can be seen in recent debates on the different trajectories of China and Europe. This involves not only the transition to modernity and industrialisation (Pomeranz 2000; Vries 2013), but also the Chinese and Mediterranean imperial systems of the first millennia BC and AD (Mutschler & Mittag 2008; Scheidel 2009), and extending even further back (Morris 2010). One notable feature of the plethora of recent comparative studies, however, is a great diversity of research methods, which may be partly due to the ad hoc and more marginal character of such work (Scheidel 2013b). A recent review of comparative research in archaeology confirms this picture, showing a wide variety of different approaches (Smith 2006, table 2, p. 25). In table 2.1 below the approaches that will be discussed here are listed, which were selected because of their distinct use of units for comparison and sources of evidence.

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⁶⁴ It is highly unfortunate that no book-length, in-depth comparison of early civilisations using the systems theory framework was developed, for much could have been learned from either the inherent limitations of this method or the means to overcome them. Also, contrary to what is sometimes assumed, the role of art and ideology played a significant part in this line of research (Flannery & Marcus 1976; Renfrew 1972, 404-439). Therefore, a substantial comparative study grown out of this work could have provided an alternative for the polarisation between idealist and materialist approaches in the subsequent development of Anglophone archaeological theory.

⁶⁵ Here the focus will lie exclusively on those approaches that seek to address society as a whole, not limited-domain comparative work that focuses on a specific aspects. This is not to deny the usefulness of such work, as can be recognised for the comparative treatment of politics and the state (Routledge 2014; Smith 2003, 2011).

Approach	Cultural unit	Main source evidence
cultural evolutionism	collective type	ethnographic analogy and archaeological record
cross-cultural statistics	cultural trait	ethnographic and archaeological records
biological evolutionism	meme, cultural group	biological analogy
Childean comparative history	distinct 'revolutions' with characteristic trait complexes	archaeological record

Table 2.1: Approaches to cross-cultural comparison in archaeology.

The first approach to be discussed here is that of cultural evolutionism. Although the roots of this approach can be traced back to Greco-Roman thinkers (Campbell 2006, 47-60), it was developed in its modern form by 19th century scholars like Lewis Henry Morgan in his *Ancient Society* (1877).⁶⁶ This form of evolutionism was fostered both by the scientific determination of the time depth of humankind, and by reports on a great variety of societies encountered in colonial contexts (Carneiro 2003, 9-25). Yet after a sustained critique of its methods, interest in 19th century cultural evolutionism waned, only to be redeveloped as neo-evolutionism in the USA from the 1940s onwards (Trigger 1998, 124-151). Although changed, its key tenets were still the focus on collective types or stages as units of comparison, arranged in a sequence from simple to complex, and the use of ethnographic analogy to grasp the characteristics of each stage. Ideas about development through stages also resonated well with archaeologists at this time, as many of them were in the process of establishing type sequences for the long-term development of different regions around the world (Carneiro 2003, 132-137). Decades of research regional projects have generated much more refined sequences of social development, allowing for a more nuanced approach than the stage-schemes that were used initially (Marcus & Flannery 1996).⁶⁷ Nevertheless, even in this more advanced work, the notion of collective types arranged in a sequence of simple to complex and the use of ethnographic analogies are retained (Marcus 2008, 252-254).

While it can sometimes yield interesting insights, as seen in the rich work of Flannery and Marcus (2012), the use of ethnographic analogies is highly problematic in a methodological sense. Here we can remember the notion of Wittgenstein discussed in section 2.3.6, that modern progress assumes form (simple to complex), rather than being derived from the substance of the historical record. Cultural evolutionism makes the same mistake. Yoffee has recently delivered a critique of neoevolutionism that addresses its selection of comparative units and sources of evidence (*Myths*, 4-21). First of all the archaeological record shows more variability than can be incorporated in a coherent typological framework, making the use of ethnographic analogies based on a similarity of types questionable. Secondly, none of the different ethnographic types placed in a sequence from simple to complex were actually observed by ethnographers to morph into another type.⁶⁸ Hence the

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⁶⁶ Even so, Morgan was directly influenced in his evolutionism by the Roman Epicurean poet Lucretius (Moses 2001, 37-38, 294-295). Also, for his idea that future society "will be a revival, in a higher form, of the liberty, equality and fraternity of the ancient gentes" (Morgan [1877] 1985, 552) can be related to certain Epicurean ideas on historical 'utopia' (Campbell 2006, 58-59). This adds another aspect to the already well-known connection between Morgan and Marxism (Engels [1884] 1972; Marx 1974).

⁶⁷ Here the rethink by Elman Service of his sequence of band-tribe-chiefdom-state can also be noted. Based on the fact that the ethnographic record available to anthropologists was so distorted by colonialism, he argued that his scheme was not really applicable to the distant past (Service 1971, 156-157).

⁶⁸ An exception might be made for the case of state formation from the 17th century onwards in Madagascar, for which

notion of a shift between one level to another depends upon archaeological and/or historical sources, but these are pushed into an ethnographic mould in neo-evolutionary approaches rather than being evaluated on their own terms. A more critical look at regional trajectories in different regions around the world shows that the hypothetical sequence of stages is more often absent than present (Kowalewski 2004). Furthermore, the focus on 'pristine' cases of state formation (Marcus 2008, 259) ignores the broader 'social fields' in which their development took place (Kohl 2008).

As such, even if cultural evolutionism has unquestionably yielded insights for archaeology, it is severely limited by the 'orthogonal' focus that leads it to ignore historical contexts and to favour ill-conceived ethnographic analogies. An approach that had developed alongside neo-evolutionism was the use of cross-cultural statistics. Here the unit of comparison was not a collective type but instead a trait such as a specific kinship system or settlement pattern, which were compared not by analogy but through rigorous statistical methods. This was achieved through the Human Relations Area Files (HRAF) and the Standard Cross-Cultural Sample (SCSS), developed from the 1930s onwards at Yale (Carneiro 2003, 248-249). The idea was to provide basic data on each society that would facilitate comparison on the different aspects of these societies, for example kinship terms or basic subsistence strategies. Archaeologists have recently also started to contribute to HRAF, by defining cultural traditions in the archaeological record and adding, when possible, the same kind of data as on the societies known through ethnography (Peregrine 2004, 295-303).

Cross-cultural statistics can be used for many purposes, but one very useful aspect has been the ability to trace the scale of complexity of societies. One influential early study used data from 30 societies of the SCSS and found strong correlations between the size of the largest settlement, the number of economic specializations and the number of organisational officials (Naroll 1956, 687-689). This finding seems to have been corroborated by more recent research (Chick 1997, 300). Since these traits can also be recognised in the archaeological record, it is possible to trace changes in the scale of complexity over time as done by Morris (2010) for Western civilisation and the Far East. The problem here is that the definition of comparative units is rather vague, with the West changing its boundaries over time.⁶⁹ Related to this is the problem that cross-cultural statistics do not yield the close insights into the relation between traits that is allowed by the more in-depth study of one or perhaps a few clearly delineated societies. As such, this approach has its uses but, as argued for by Trigger, can best be used as a first step to recognise very general patterns before investigating them in a more intensive way (*Understanding*, x).

Of course in the very brief discussion of cultural evolutionism and cross-cultural statistics here it is impossible to do full justice to the varied work undertaken under the very broad wings of these approaches. Comparative work in a social scientific sense in archaeology remains on-going and productive (Smith et al. 2012). This can be seen very well in a recent effort to use a 'collective action' model for comparing the structural properties of dozens of pre-modern states (Blanton & Fargher 2008). It can be very useful to look at societal structures as they can be reconstructed both through archaeology and ethnography, as for early states and modern states (Hagesteijn 2008) and

anthropological and archaeological information is available to study state formation processes there (Wright 2007). However, this certainly cannot be seen as analogous to a 'pristine' state given the impact of the slave trade since the 17th century (Wolf 1982, 195, 228). Indeed the writer (Robert Drury) of a famous and somewhat problematic account of his stranding at the island in the early 18th century later returned there as a slave trader (Parker Pearson 2002). The dynamics of state formation that can be traced at this island are highly interesting and important, but the case cannot function as a direct analogue for the earliest states by virtue of its connection to global exchange networks.

⁶⁹ An early application of measures of complexity to the specific areas of the prehistoric Near East and Anglo-Saxon England showed trajectories that levelled off rather than showing continuous growth (Carneiro 1969). It would be interesting to investigate in more detail the relation between trajectories in different regions in relation to the emergence of mechanisms for ordering large-scale geographical areas such as empires or capitalism. It is the interface between these two that is lacking in the generic categories of 'West' and 'East' in Morris.

for different kinds of societies as well (Wolf 1999). The problems start when societies are separated from their geographical contexts and tied to abstract concepts like 'progress' or 'the West' (Smith 2003). One neo-evolutionist study distinguished between 'specific' and 'general' evolution of human societies (Sahlins & Service 1960), but the problem with the latter concept is that it conflates the yardstick with the subject of measurement.⁷⁰ This is not to deny that the scale of complexity of societies has increased, but rather to emphasise the historical specificity of that process.

The notion that evolution has to be grasped in its specific contingencies is less problematic for biological evolution (e.g. Gould 1999). Unfortunately there exist great conceptual obstacles that so far prevented grasping human societies as part of natural history. Partly this is the result of a scientism that leads to privileging 'harder' sciences such as biology over 'softer' ones such as history and archaeology. Privilege tends to foster complacency, however. One review of recent work on applying biological concepts of evolution to human societies does point to an astonishing disinterest in these studies in dealing with the specifics of the archaeological record (Marks 2012). Neither does there seem to be much interest in such quarters to address the theoretical ideas formulated by neo-evolutionism since it is referred to as 'Spencerian' (e.g. Currie & Mace 2011). This is strange, as Lewis Henry Morgan is arguably a much more significant figure having influenced both neo-evolutionary and Marxist thought, while Herbert Spencer has had little influence outside libertarianism (Carneiro 1981). More seriously, where in evolutionary biology the basic scientific procedures are in order and debates revolve around empirically-defined issues, the move from biology to human societies involves the imposition of analogies from the former on the latter.

The clearest example of this is the notion of the 'meme' as the cultural counterpart of the gene (Dawkins 1976). Another is the theory that selection can operate on groups as a whole (Henrich 2004), a proposition that is seen as questionable in biological evolution (West et al. 2007). Here we can recall from section 2.3.6 Wittgenstein's notion of language as a toolbox, with different language games used for different topics. It would seem that the use analogies such as the meme and group selection to account for human societies is inappropriate, for it involves using language games developed in biology as tools for tasks they are ill equipped to handle. Of course this does not imply that human societies can be understood separate from the biological constitution of human beings, it rather highlights the need to be careful in using analogies. There is much more refined work done by biologists to study the notion of 'animal societies' based on fieldwork that in some ways almost resembles ethnography. A good example is the case of the sperm whales, where the social and even cultural dynamics of the animals is related to their habitat, food supply, predators, and other factors (Whitehead 2003). Many of these factors also operate on human societies, as can be seen in the work of Shennan (2002). However, this work tends to be limited to smaller-scale societies rather than early civilisations. The content of the second content of the s

The reason for this is actually rather obvious: the impact of technology is much less on smaller-scale societies than on those that expanded beyond them. This is no original insight, for technology

⁷⁰ Here we can remember Wittgenstein's remark from section 2.3.6 that related the scale of measuring the Mont Blanc to the specific concept of measuring implied by that yardstick. In this case the conceptual categories of measurement used are those of the societies that have made it to the 'summit'.

⁷¹ To be fair to Dawkins the meme was intended by him as a metaphor to point to broader ideas rather than as the object for scientific study as which it has been interpreted by many, as noted in Burman (2012). This has not stopped some researchers from actually trying to measure memes using neuro-imaging, a quest that so far has found them to be 'immeasurable' (McNamara 2011).

⁷² The contrast can be clearly seen in how Shennan is forced to turn to theories of institutions in order to frame his ideas on property and inheritance in relation to ecological and technological conditions (Shennan 2011, 208-210). While this yields some interesting ideas it is also instructive to compare them with the results of Trigger's study of landownership in seven early civilisations (*Understanding*, 334-337). Trigger's finding that collective landownership was significant and stable in many of these cases presents an interesting challenge to Shennan's focus on kin-inherited land and wealth.

lies at the core of neo-evolutionism (White 1943). As extensively discussed in section 2.3.5 was crucial for Childe, Marxism in general, and to some degree for Vico as well. Unsurprisingly, technology is not studied intensively in evolutionary biology, but it would be nearly impossible to grasp the long-term trajectories of human societies without it. Yet this does not imply that the contrast between human and natural history should be accentuated. Instead more attention should be given to the 'deep prehistory' of technology in relation to the trajectory of human biological development, as explored in Gamble (2007). This work will be discussed in section 2.4.4 and also in the synthesis in chapter nine. At the same time the impact of the biological properties of humans on social organisation can also be increasingly recognised, such as for settlement dynamics (Bintliff 1999a). With further work this could lead to a new perspective combining social, cultural, and technological aspects within the overall framework of natural history.⁷³

The fourth and final approach to be discussed here is what is here referred to as comparative history. In its basic sense this is the comparative treatment of long-term trajectories of different areas in the work of Gordon Childe, but of course broadened to consider later work by other scholars. The philosophical-methodological aspects of Childe's work were already discussed in section 2.3.5, here the focus lies on the practical implications of those ideas. Fundamental in this is the notion of reconstructing a pattern according to the structural properties of the evidence, as could be seen in the analogy of the rebuilding of a church according to its remains quoted in section 2.3.5. Such reconstruction calls for a framework flexible enough to be adapted to new evidence contradicting previous models. Yet at the same time the definition of cultures as comparative units is derived from the philosophical-methodological definition of knowledge as the 'ideal reproduction of the world making possible common action' given in section 2.3.5. This implies from the outset a holistic view of culture that seeks to trace a 'social world of knowledge' from basic tools to complex worldviews. Indeed, the use of such a definition can be seen in many of Childe's works of historical synthesis (e.g. Childe 1942, 8-18). In his more technical work, however, he did acknowledge the difficulties in defining the boundaries and independence of specific cultures (Childe 1951, 38-41).

Based on his comparative historical study of the trajectories of five different areas of prehistoric western Eurasia, Childe (1951, vii) noted that the cases were both divergent and convergent. Divergence here refers to the great differences observed between the five regions, for despite many similar elements in them it proved impossible to delineate common stages of development. This makes it doubtful that ethnographic analogies based on a universal typology of stages can be used, and Childe was indeed very cautious in using ethnographic data to make sense of archaeological patterns (Childe 1946c). 74 Convergence refers to the interaction of societies, especially the impact of exogenous developments on the trajectories of regions. This presents one of the clearest differences with biological evolution, as innovations can cross-cut the boundaries between units, based upon the distinction between the structural and processual characteristics of genetic mutation and technological innovation (Childe 1951, 175-176). As such, human history can be seen as an extension of natural history, to be grasped in its own terms rather than through biological analogies. Hence it is the archaeological record itself that forms the basis for comparative work, while the use of analogies from other fields is avoided. This does not mean, however, that there are no tensions between the specifics of that record and the necessary use of abstractions in comparative work:

⁷³ Reference can be made here to the early work by Morgan along these lines, in particular the work on the American beaver and its works (Feeley-Harnik 2001). Sadly this work remains largely unknown and unexplored.

⁷⁴ In a basic sense he argued that the hierarchical classification of societies made available through anthropology should not be conflated with a historical process (Childe 1946c, 248). Just as the classification of species in biology had given way to Darwinian natural history, archaeology could provide a similar historical perspective for anthropology. Note that the idea of relating similar kinds of societies here is not seen as problematic if taking a functionalist view of their internal properties, given that Childe still accepted a general sequence of development (Childe 1946c, 250-251). This point will be addressed in section 2.4.3 below.

"Qua prehistorian it is the archaeologist's business to go on distinguishing new cultures and to try to fill in his picture of each. The comparative sociologist, on the other hand, may well have to reduce the multiplicity by ignoring certain differences. Of course there are dangers lest by such abstraction really significant divergences may be overlooked. It is in any case better that it should be a deliberate selection from adequate data than that it should be imposed by ignorance and the record's imperfections." (Childe 1951, 41)

One of the ways in which Childe sought to mediate this tension was by focusing on different traits in the archaeological record that could be stretched from the basic sources to higher-level generalisation. The general definition of culture is in such a way operationally defined by 'complexes' that combine different traits. This is true not only for a general comparative category such as the urban revolution, but also for a specific cases such as Mycenaean culture (Childe 1951, 46-53). Such an approach can at times give the impression of being a mere list without theoretical coherence. As we shall see in the next section this is hardly the case for the urban revolution. It is in fact the lack of an overtly theoretical framework that allows for the ability to modify both the interpretation of singular societies, and the comparative patterns established between them. In this sense the use of such 'trait complexes' is completely compatible with the definition of comparative units on the basis of Wittgensteinian 'family resemblances'. For the particulars of individual cases are respected, while the possibility of exploring interconnections between observed similarities is acknowledged. Furthermore, as noted in section 2.4.1, the Childean method can take into account the critique of systems theory by virtue of its intrinsically historical character.

Before turning to the uses of Childean comparative history for the definition and comparison of early civilisations, it is necessary to note later work undertaken along these lines. Adams' book *Urban Society* (1966) was already noted in section 2.4.1. In terms of methodology it made a number of improvements upon Childe. These include an explicit comparison of Old and New World cases as distinct from each other, a more processual view of the urban revolution, and a better grasp of its structural properties. Also important in this work is that it considered the comparability of cases in a more explicit and rigorous way:

"Before contrasting Mesopotamian with central Mexican societies in an effort to elicit developmental regularities, a problem must be introduced to which we shall return repeatedly: to what degree may the observed similarities and differences between these two widely separated regions possibly be only artifacts of accidental differences in the data or in the dominant directions that studies in each of them have followed?" (Urban Society, 26)

The rigorous comparison allowed for by taking such an approach was without parallel in later work, partly because of the focus on ethnographic analogies and on high-level model building efforts such as systems theory. Another limit is that much comparative work takes the form of articles, often collected in edited volumes that address particular issues such as societal collapse (Yoffee & Cowgill 1988) or empires (Alcock 2001). This means that there is less available space to consider the comparability of sources in-depth. More recently, however, two books have appeared that carry the notion of comparative history based on archaeological sources forward, The first of these is Norman Yoffee's *Myths* (2005), which is not so much a true comparative study but rather a work that considers a variety of topics in comparative work based on archaeological sources. As noted earlier, Yoffee is highly critical of the use of ethnographic analogy and instead argues for the primacy of the archaeological record in comparative work (*Myths*, 193-195). Particular notable in this is the focus on the detailed trajectory of Mesopotamia, as seen from the perspective of comparative history (*Myths*, 198-232). Although there is no attempt at a systematic comparison in this work, it shows the potential of the sources now available to improve upon the views on long-

term trajectories that were developed earlier in *Urban Society*.

The most ambitious comparative study using archaeological sources written so far is without doubt Bruce Trigger's *Understanding* (2003). In this book Trigger seeks to compare based on a method that is 'synchronic-comparative', emphasising societal structures over their historical trajectories (*Understanding*, 13).⁷⁵ In this case seven early civilisations, though with varying time-spans of cases, were investigated for the makeup of their overall structural properties. The specifics of this will be further discussed in the next section. Here it is important to note that he had already argued earlier for comparative studies to be composed of a broad set of middle-range theories, ranging from ecological factors to more idiosyncratic cultural patterns (Trigger 1995b, 452-454). As a result topics such as 'conceptions of the supernatural', 'elite art and architecture', and even 'values and personal aspirations' are treated in his work (*Understanding*, vi). Although no high-level theory is developed in Trigger's book to account for the interconnections between the observed patterns, he has argued that this would be required in the future to make better sense of the connections between the different elements (Trigger 2006a, 256).

Both *Myths* and *Understanding* differ from cultural evolutionism and cross-cultural approaches in that they do not select traits or types as the basis for comparison but rather bring together a set of middle-range theories. This has the benefit of adding context to data patterns, and takes into account the relativist critiques of cross-cultural comparison. For example, Trigger's use of emic terms for the Aztec conception of three different souls (*Understanding*, 63-64) provides a clear contrast to Peregrine's use of a generic and etic conception of the immanence of the soul in a sample of 70 societies, simply noted as being either present or absent (Peregrine 1996, table 4, p. 98). The added context can provide much aid in gaining insight in how the statistical correlations played out in actual societies. Of course the downside is that fewer cases can be treated in such a way, at least by a single author or a collaborative work between two authors. Finally, the ability to use a range of different kinds of middle-range theories into a coherent approach allows for a greater scope for innovation, by being able to incorporate new data sources and perspectives.⁷⁶

Although they are certainly not identical in a programmatic sense, it is argued here that a common methodological line can be traced through the work of Childe, Adams, Yoffee, and Trigger. This line is based not only on the inspiration of Childean concepts, but more importantly on the emphasis in all four scholars on the primacy of the archaeological record in comparative work. Such an approach translates into a close attention to the limits it places upon comparison, as well as an avoidance of analogies based on biology and ethnography. Furthermore, unlike in the approach of cross-cultural statistics there is the possibility to grasp the interconnections between traits in their

⁷⁵ Trigger seems to have chosen this particular path in order to address the dichotomy between rationalism and relativism in archaeological theory (see the discussion in section 2.2.1), leading him to formulate the basic research question of his work as follows:

[&]quot;At the centre of this debate is a fundamental question: given the biological similarities and the cultural diversity of human beings, how much the same or how differently are they likely to behave under analogous circumstances? The answer to this question is crucial for understanding human behaviour and cultural change and for shaping the future course of human development." (Understanding, 3)

⁷⁶ One example is a recent study by an Egyptologist and Mayanist on indigenous concepts of the body and embodiment in these two early civilisations (Meskell & Joyce 2003). Their work incorporates a number of perspectives on the human body, including feminism and the psychoanalytic ideas of Lacan. In philosophical terms they see the body not as an inscription or system of signs as it would be viewed from certain post-modern perspectives, but rather from the phenomenology of Merleau-Ponty to view the body and embodiment as it is embedded in its physical and cultural environment (Meskell & Joyce 2003, 17). Through looking at a variety of sources they gain a perspective on Mayan and Egyptian bodies that is very different from the Cartesian mind-body dualism. This work is indeed "an experiment in comparative analysis" (Meskell & Joyce 2003, 1), and opens up interesting new avenues for further research.

specific geographical and historical context. In general terms, this presents a good adaptation of the philosophical-methodological ideas outlined in section 2.3 in a more practical methodological framework. This process of adaptation will be undertaken more concretely for the specific definition and approach to comparison of both early civilisations in general and their art specifically, treated respectively in the two following sections.

2.4.3: Defining and comparing early civilisations

The key task in this section is to turn from the general approach of comparative history based on archaeological sources to the specifics of defining and comparing early civilisations. In order to do this, the first task is to look in more detail at the work of Childe, Adams, Yoffee, and Trigger in this regard. After this the common elements and differences between these scholars will be considered, which forms the basis for the outline of the approach adopted in the present thesis. Starting with Childe, it is important to recall the discussion of some of his ideas in section 2.3.5. First of all there was the clear recognition that stages of development in different regions were homotaxial, that is they followed similar general sequences but not necessarily in synchrony with each other. A major problem in this proved to be the relation between Childe's sociological interpretation of the different phases of metallurgy in western Eurasia and sociological models for global stages of development. The tension between these two kinds of models remained unresolved in his work. Given the primacy placed on technology in Childe's Marxist ideas this is by no means a trivial question. This is an issue that will eventually be addressed in section 9.4. Here the concern is with the global set of models, in particular that of the urban revolution.

The classic formulation of the urban revolution was in an article in the journal *Town Planning Review* (Childe 1950). Here the list of ten criteria was provided, being comprised of: 1) size, 2) full-time craft specialisation, 77 3) the appropriation of agricultural surplus, 4) monumental architecture, 5) use of agricultural surplus to support an upper class, 6) writing, 7) calendrical and mathematical sciences, 8) more naturalistic art styles, 9) long-distance exchange, and 10) state organisation based on territorial unit (Childe 1950, 10-16). While this might seem as simply being a shopping list, there was actually a deeper theoretical coherence to it. This can be seen in the article itself, with its Durkheimian contrast between the 'mechanical solidarity' of pre-urban Neolithic communities of a maximum of 200-400 people organised on the basis of kinship to the 'organic solidarity' fostered by state ideology (Childe 1950, 7, 16). 78 This coherence of ideas can be seen even better in the work on using the urban revolution framework to grasp the trajectories of the Bronze Age Near East (Childe 1954c). It is here that the use of Childe's conception of class as discussed in section 2.3.5 can be observed. Basic to the urban revolution is not only the concentration of surplus, but also a conceptual change that changes 'luxuries' into 'necessities' (Childe 1954c, 44-45).

By this Childe meant that certain goods that were superfluous in earlier social formations became crucial in the ones that succeeded them, a prime example being the case of copper in the Old World.⁷⁹ Further tracing developments in the prehistoric Near East he noted that the 'tribute state'

⁷⁷ The emphasis here lies on the fixed residency of these full-time craft specialists, as before the urban revolution these full-time specialists existed too but rather as itinerant figures not bound to a particular community (Childe 1950, 70).

⁷⁸ To briefly recapitulate these ideas, according to Durkheim mechanical solidarity involves little differentiation between persons with less distinguished social functions, while organic solidarity presupposes much more intricate differences in social roles and (economic) specialisation (Jones 2005, 84). It is likely that the focus on specialisation in Durkheim's contrast between mechanical/organic solidarity would have attracted Childe in particular.

⁷⁹ A key point here is that as long as the social necessity of such goods was not recognised, their introduction would be actively resisted as a threat to the continued existence of the system of social relations (Childe 1954c, 45). This qualifies the view of Childe as a technological determinist. Furthermore, even after the urban revolution different social forms based on kinship would continue in the hinterlands of these cities (Childe 1951, 39-40).

could take different forms, such as the 'temple city' in Mesopotamia and the 'conquering city' in Egypt (Childe 1954c, 47-50). This means that different cases of the urban revolution could take different forms, even within a macro-region such as the Near East. The full ramifications of this diversity for the relations between the ten criteria of the urban revolution were not explored by Childe, however. At the core remained the nexus of the concentration of surplus, the fixed location of full-time craft specialists, and the state and its creation of 'organic solidarity' through ideology. From this starting-point further developments could be traced, such as the first imperial expansion from Mesopotamia in the later 3rd millennium BC (Childe 1954c, 56-57). It is notable that this elaboration of the urban revolution model was only done for the Near East, while for the New World and even other Old World cases it remained generic.

A neglect of the New World was certainly not the case in Adams' *Urban Society*, which was based upon a richer dataset for the Mesopotamian and central Mexican cases that were compared in it. This not only allowed for a robust discussion of the comparability of these cases given the available sources, as noted in the previous section, but also for a sharper definition of the comparative unit. Adams proposed that instead of taking into account all ten criteria used by Childe to define the urban revolution, it would be useful to make a distinction between primary and secondary elements (*Urban Society*, 11). Instead of relying on a holistic view of civilisation as a totality, the focus of comparison would lie on a 'culture core' (*Urban Society*, 14-15). In doing so Adams did not deny the usefulness of the concept of civilisation in itself, but argues that it was in the sphere of societal organisation that the most pronounced changes can be observed for the urban revolution. Hence in the emphasis in the book on accounting for processual change, this 'culture core' was more useful than the wider-ranging concept of civilisation. As a result the substantive chapters focus on 'subsistence and settlement', 'kin and class', and 'parish and polity' (*Urban Society*, ix).

Adams also defined the spatial and temporal dimensions of the urban revolution more clearly. With regard to the ecological environment in which this process took place, the concept of the 'symbiotic region' was used (*Urban Society*, 19). This was used to investigate the ways in which resources were differently available and used in different regions, creating an interaction (symbiosis) at the level of macro-regions such central Mexico and Mesopotamia (*Urban Society*, 51-52). For grasping the trajectory of the urban revolution Adams adopted the metaphor of a gradual ramp versus a more abrupt step-like development, even if admitting that specific cases could be in between these two opposite poles (*Urban Society*, 17-18). One notable finding was that even if the Mesoamerican case was closer to the step pattern, the sequence of developments in both areas appeared strongly homotaxial (*Urban Society*, 172). That is, the same sequence from theocratic state to militaristic and conquest ones can be traced in the same order and in roughly similar amounts of time for each phase (*Urban Society*, fig. 1, p. 25). This observation of strong similarities in trajectories between the two cases seems to underline the usefulness of a processual perspective on the urban revolution, as well as a focus on the 'culture core' of social organisation.

The next study to be considered here is Yoffee's *Myths*. In this book he also provided a comprehensive definition of early civilisations:

"I refer to the larger social order and set of shared values in which states are embedded as a 'civilization'." (Myths, 17)

Closely related to it is the state:

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⁸⁰ This metaphor was derived from an observation of the differences in trajectories in the Old and New Worlds in an earlier work by Braidwood and Willey (1962, 351), see Adams (1963, 407). This work still retains some usefulness and will be addressed in section 9.2.4 on comparing the Mycenaean and Late Preclassic lowland Maya cases.

"It is this governmental center that I denominate as the 'state', as well as the territory politically controlled by the governmental center." (Myths, 17)

Civilisation and the state are coeval in the sense that the former supplies the legitimising ideological framework for one or more states emerging in its physical realm. The interplay between them is therefore a major structuring topic of *Myths*. This framework builds upon earlier work by Yoffee in collaboration with John Baines, which focused on the way order, legitimacy and wealth were expressed in the 'high culture' attributes of the Mesopotamian and Egyptian early civilisations, and how this relates to state power (Baines & Yoffee 1998). Yoffee stresses the role cities played in the development of early civilisations in a chapter on the meaning of cities (Myths, 42-90). Commenting on the recent popularity of the term 'city-state' he wanted to 'unpack' it to look how states, civilisations and cities developed together. A large number of cases (see table 2.2 below) were studied and it was found that while settlements of over 5,000 persons were present in all early civilisations, state forms differed much more, although Yoffee still sees city-states as the predominant form. Also, in many cases a process of ruralisation accompanied the emergence of urbanism, as observed for Mesopotamia, Northern China, and Central Mexico. For Mesopotamia specifically, the start of urbanisation can be traced from the late Uruk period (3400 – 3100 BC), with the eventual emergence of a network of city-states that housed some 80% of the population, and seems to have persisted, despite various attempts at centralisation, until the 6th century BC.

Early civilisation	Size largest city	State form
Egypt (Old Kingdom)	10,000 – 30,000	territorial state
Egypt (New Kingdom)	30,000 - 50,000	territorial state
Mesopotamia (3 rd mil. BC)	10,000 - 60,000	city-states
Indus Valley (late 3 rd mil. BC)	40,000 – 80,000	city-states?
North China (late 2 nd mil. BC)	20,000 – 120,000	unknown
Central Mexico (AD 600)	100,000 - 150,000	unknown
Maya (AD 700)	20,000 - 60,000	city-states
Peru (Moche, AD 500)	5,000 – 10,000	valley-states
Peru (Wari/Tiwanaku, AD 900)	15,000 – 30,000	territorial states

Table 2.2: Cities and state forms in early civilisations, derived from (Myths, table 3.1, p. 43).

Yoffee also explored the alternative pathways societies took that did not lead to the nexus of cities-states-civilisations, such as Chaco Canyon and Cahokia in the US (*Myths*, 161-179). The existence of such different trajectories points to the large number of potential routes societies can take out of a generic lower-limit level of complexity referred to as 'bandishness' (*Myths*, fig. 7.8, p. 178). While societies like Chaco and Cahokia did develop central places and expanded in a demographic sense, Yoffee argued that without the development of an ideology of statecraft linking political, economic and ritual power this would not lead to the emergence of states (*Myths*, 198-232). These cases can be contrasted with Mesopotamia, where basic village life persisted for millennia, on a lesser scale than Chaco and Cahokia, with the first true states and cities appearing almost as 'supernovas' and radically restructuring society. Hence there is no reason to view Chaco and Cahokia in the terms defined by Mesopotamia. They can rather be valued in their own terms, as consistent forms. ⁸¹ This

⁸¹ As such they lend themselves to specific comparative studies as well, as can be seen for a recent collaborative effort

goes against the argument of Chapman (2008) made for Bronze Age south-eastern Spain. He argued that unequal property relations alone signal the presence of a state, with the 'pomp' of palaces, princely burials and the like being relegated to secondary features. Based on Yoffee's *Myths*, however, this can be countered: both urban societies with 'pomp' and smaller-scale societies with unequal property relations can be seen as alternative forms that need not be reduced to a common logic of progressive development.

Trigger in his book *Understanding* compared seven early civilisations, listed in table 2.3 below. rejects the use of single traits or trait lists for defining early civilisations. Instead he developed a more deductive approach based on the proposition that as societies increase in complexity they will need new kinds of institutions to function (*Understanding*, 40-52). In the case of early civilisations, he argues them to be "the earliest and simplest form of class-based society" (*Understanding*, 46). Class in turn being defined as the hierarchical structuring of society based on a strong correlation of power, wealth and prestige, and as opposed to less complex structuring of behaviour based on kinship or ethnicity. This class-based structuring was accompanied by institutions dealing with the exercise of political authority, the mobilisation of labour and surplus for elite and state tasks, and also by economic specialisation and organised religion. Despite this deductive definition, Trigger studied as much as twenty distinct aspects of early civilisations, even if these were grouped under the broader headings of 'socio-political organisation', 'economy', and 'cognitive and symbolic aspects' (*Understanding*, v-vi). Paradoxically, given the strong definition based on class, this gives the book a somewhat encyclopedic character.

Early civilisation	State form	Temporal span
Egypt (Old – Middle Kingdom)	territorial state	2700 – 1780 BC
southern Mesopotamia (Early Dynastic III – Old Babylonian	city-states	2500 – 1600 BC
northern China (Shang/Western Zhou)	territorial state	1200 – 950 BC
Valley of Mexico (Aztec)	city-states	AD 1450 – 1550
Classic Maya	city-states	AD 250 – 800
Inka Kingdom	territorial state	AD 1500 – 1550
Yoruba and Benin	city-states	AD 1750 – 1900

Table 2.3: Sample of early civilisations in Trigger's *Understanding*.

One major emphasis Trigger's definition of early civilisations is on the distinction of two basic kinds of state form: territorial states and city-state systems (*Understanding*, 92-94). Of the seven cases in his study, Egypt, northern China and the Inka were territorial states, while the Maya, Yoruba, Aztecs and Mesopotamian cases were all city-state systems. For the latter category the Mesopotamian and Aztec cases are seen as having had hegemonic city-states which at times dominated the entire system (*Understanding*, 113-119). Both state forms shared that they occupied a large geographical area, from the 120,000 km² of southern Mesopotamia to the 984,0000 km² Inka realm, and also were defined culturally by a unified style, even though that style in city-state systems could have important local variations (*Understanding*, 541-543). Trigger argues that, unlike

that provided an in-depth comparison between the prehistoric south-western USA and the Iberian Bronze Age (Lillios 2011a). Once again, in exercises such as this it is becoming clear how the increased potentialities of the archaeological can allow for at least a partial emancipation from the old reliance upon ethnographic analogies (cf. Lillios 2011b, 284). See for an anthropological perspective on these kinds of societies Rousseau (2006).

in some cultural evolutionary theories, there is no trajectory from one form to the other, instead they represent two structural alternatives for the political structure of early civilisations.

The most important distinction between territorial and city-state forms lies in urbanism and a number of features associated with that, including trade, exchange and elite manifestation. Urbanism in city-state systems tended to focus on a single urban centre in a network of peer polities, with specialists/craft producers in the hands of full-time specialists, exchanging their work in (state-supervised) market exchange (*Understanding*, 123-131). On the other hand, the size of urban centres in the territorial cases was modest (tens of thousands at most) and inhabited mostly by the upper class and groups associated with them, including soldiers and craft producers (*Understanding*, 131-141). No well-integrated network of urban centres existed and commoners predominantly lived in villages and were supplied by their own (part-time) craft specialists. Another important feature is that in the city-state form the focus of monumental architecture seems to have been on temples and, to a lesser extent, palaces for promoting a civic ideology. By contrast in territorial states the focus was on exclusive palaces, fortresses and monumental tombs as expressions of all-pervasive royal power (*Understanding*, 564-582).

Having discussed the comparative work by Childe, Adams, Yoffee, and Trigger, the next question is what kind of a definition can be formulated that is based on a critical evaluation of their ways of defining and comparing early civilisations. This critical approach will involve not just the weighing of one position over the other, but also the introduction of useful new elements. As such the approach adopted here should be seen as a critical engagement with the work of these four authors, rather than as being derivative of it. The first thing to be noted here from the previous discussion is the recurrence of the features of early civilisations at a global scale. Most notable in this regard is Trigger's recognition of two kinds of state forms of early civilisations, those of territorial states and of city-states. Not only is this based on a fairly large sample of seven cases, but their in-depth coverage in *Understanding* also allows for a good overview of the structural differences between the two forms. Certainly for the city-state form extensive research has been done that shows the cross-cultural usefulness of this concept (Hansen 2000, 2002).⁸² More comparative research is needed on the territorial state, which seems to occur less frequently, but in general the usefulness of the distinctions between these two forms is accepted here.

Of course these state forms have to be grasped within their contexts. In that sense the emphasis by Yoffee in *Myths* on a nexus of urbanism, state form, and civilisation is very attractive. It accounts for the societal structures of urbanism, the socio-political contexts within which these functioned, as well as the cultural and ideological *Umwelt*. The last element could either be coterminous with the state in its territorial form or exist in a 'peer polity' network of city-states (cf. Renfrew 1986a; Wolf 1982, 82-83). Emphasising this interrelation between urbanism, state, and civilisation goes against Adams' notion of the primacy of a 'culture core' based on societal organisation in *Urban Society*. There are good reasons for emphasising this nexus over the notion of a 'culture core', however, as class relations can be recognised in other kinds of cases such as Bronze Age Iberia as well (cf. Chapman 2008). Here we need to remember Yoffee's point that such cases should be interpreted as consistent forms with their own trajectories, rather than as necessarily being precursors of early civilisations. If accepted, this weakens the notion that the urban revolution is the sole transition point for the emergence of classes, as could be seen in Childe's classic formulation and in Trigger's

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⁸² One recent work seeks to question the validity of these forms through an argument based primarily on the self-image of the Late Shang state in China as an 'imagined community' (Campbell 2009). The problem with this is that it creates a highly idealised model that does not take into account the more material factors of state organisation. It is precisely on these latter factors that the division between territorial and city-states is based. The idea that states can be delineated based on the ways its elites imagined it for themselves seems quite questionable, even if the notion of the 'imagined community' is by no means a superfluous one.

elaboration of it in *Understanding*.

It is undeniable that Trigger's material shows well-defined class systems that exhibit significant cross-cultural regularities (*Understanding*, 165-166). These cannot be recognised easily in smaller-scale societies that lack significant textual records. Based on the argument provided in section 2.3.5, however, class should be grasped in its basic sense as a relationship of exploitation dedicated to the appropriation of social labour (either in goods or in services). This can be seen not only in Bronze Age Iberia, but also in other areas of Bronze age Europe (Kristiansen 1998), as well as in Formative Mesoamerica (Rosenswig 2010). Rather than insisting upon a more unique relation between class and early civilisations, it would be better to view them as one particular form into which the earliest class-based societies could develop. Instead a common denominator between cases such as Bronze Age Iberia and early civilisations may be grasped through the 'tributary mode of production' (Wolf [1981] 2001, 345-349). In all the cases covered by this concept there is no separation of labour from the means of production, rather it is extracted by non-economic means, primarily through political and military power. This is very useful in that it emphasises class as a relation, which can be actualised in a variety of state and non-state societies.

Based on this it seems more useful to look at the specifics of the nexus between urbanism, the state, and civilisation than to focus on Adams' more circumscribed 'culture core' of societal organisation. The latter can for the urban revolution be seen as one variant of the tributary mode of production, which makes its distinction from 'secondary elements' (Urban Society, 15) less useful. Therefore a more holistic approach will be used here, based on the list of ten elements summarised in table 2.4 below. These elements are chosen to capture as much of the diversity of early civilisations without becoming to cumbersome and encyclopedic. Admittedly this involves a degree of arbitrariness, if informed by the archaeological record, and it should be stressed that it is to be used for heuristic purposes only. The specific elements in the list are more general than in Childe's list of criteria for the urban revolution. Some of his specific elements have been conflated into more general elements, as with monumental architecture and art (in Childe each was treated separately) and with specialised knowledge (in Childe divided between writing and calendrical and mathematical sciences). Other elements have been newly added, including military organisation and feasting and cycles of public festivals.⁸⁴ The resulting list is less about criteria for the urban revolution that about investigating the structural properties of the nexus of urbanism, the state, and civilisation that lies at the basis of the early civilisations so far discovered in the archaeological record.

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⁸³ The use of the term tributary may seem questionable because of its association with its specific usage to denote goods or services from outside polities to a more powerful hegemonic state or empire, but as Trigger notes it can extend to the appropriation of surplus in general (*Understanding*, 388-389). This is accepted here because in an etymological sense the Latin *tributum* originally referred to a tax paid by patricians and plebeians in the Roman Republic (Burton 1998). Only after 167 BC was Italy exempted from this tax and the burden shifted to the provinces. Taking this into account there seems to be little problem in using the term tributary mode of production.

⁸⁴ Warfare was not listed by Childe in his ten traits. Despite some arguments that Childe ignored warfare out of pacifist motifs (Flannery 1994, 105), he did in fact discuss it elsewhere (Childe 1941). It may be that it wasn't included in the trait list because it belonged to the state rather than to urbanism in itself, hence it would be subsumed under the trait of state organisation based on a territorial unit. For the use made of the concept of early civilisations here it is opportune to include it as a separate trait. The concept of feasting and cycles of public festivals has only be developed recently, but is also distinct and important enough to include here, see also (*Understanding*, 509-516).

Elements of early civilisations		
Economic elements		
agricultural means production		
urbanism		
economic relations		
long-distance exchange		
Socio-political elements		
state form		
military organisation		
class and inequality		
Worldview-related elements		
monumental architecture and art		
specialised knowledge		
feasting and cycles of public festivals		

Table 2.4: Elements used to delineate early civilisations.

The resulting framework allows for a greater flexibility to investigate early civilisations as units of comparison. For example, it can be used as a trait list in cross-cultural statistical analysis, as has been done for Childe's list of the ten criteria of the urban revolution (Kradin 2006, 2013). At the same time it can be used in a qualitative way, to investigate the interconnections between the ten elements for a specific case. Although many of the elements listed in table 2.4 are very specific to early civilisations, it is possible to achieve a higher degree of generality by abstracting them into the three broader categories of economic, socio-political, and worldview-related elements. Despite some loss of detail, this would make it possible to compare them with other kinds of societies. A good example of such a study is Wolf (1999), which compares the role of power and ideology in kin-ordered, tributary, and capitalist modes of production. As such the framework used here can be used at various levels of specificity and generality, within the overall fold of a comparative and historical approach. However, in order to be used in a truly effective way it is necessary to consider the broader temporal and spatial contexts of early civilisations as well. For if these were to be left out they would slip back into being a mere typological construct.

The importance of getting a firm grip on the temporal outline of early civilisations can be grasped from the temporalities of the cases treated in Trigger's *Understanding*. As can be seen in table 2.3 the time-spans of these cases vary from as little as 50 years (the Inka) to as much as 920 years (Old – Middle Kingdom Egypt). Those cases recorded by European colonial-period authors in this sample have much shallower time-depths than those that are primarily known through their own indigenous material and textual records. This creates problems for the comparability between cases, even in a synchronic-comparative approach, for the kinds of models developed for these cases will be impacted by the chronological framework, as was already recognised by Adams (*Urban Society*, 28). The potential of grasping the long-term trajectory of an early civilisation can be seen in the

treatment in Yoffee's work of the Mesopotamian case. 85 Here he dealt both with cycles of hegemonic city-states such as Ur, and with structural transformations such as the initial establishment of a network of city-states and the disappearance of the ideological underpinnings of that network in the Seleucid period (*Myths*, 155-159). This provides an exemplary case study that is more intricate than the 'step' and 'ramp' metaphors provided by Adams in *Urban Society*.

One way to streamline this temporal diversity of sources and modes of interpretation would be to make use of the ideas of the French *Annales* school of historical thought. One of the key contributions of this school of historical inquiry has made can be seen in the emphasis on the different temporalities of different historical processes. These can be brought together in either wide-ranging overviews of large macro-regions such as the Mediterranean or micro-histories of single communities such as Montaillou (Tohaneanu 2000, 178-182). In so doing, they can provide a bridge between essentialism (the *a priori* formulation of first principles) and relativism (a refusal to place things within a larger framework) in interpreting history. In archaeology these ideas have been widely adopted, as they allow making sense of the very complex temporalities implicit in the different samples encountered in the archaeological record (Bintliff 1991, 2004; Knapp 1992). A basic division in this is between the *longue durée* (long-term), *conjonctures* (medium term), and *événements* (events) temporalities (Bintliff 1991, fig. 1.2, p. 6). The implication of such an approach is that no definition of specific civilisations can be given, instead they need to be delineated within the broader temporal framework of the *longue durée* (Braudel 1980, 200-202).

One example of such an application especially relevant to the subject of early civilisations is Iannone's (2002) study of Maya state formation using *Annales* concepts. Here the dynamic and structural properties of Maya civilisation are treated together (Iannone 2002, table 1, p. 75). This revealed a complex interaction, often on competing terms, between long-term kinship social structures and their associated 'Little Tradition' ideology on the one hand and kingship, the state and 'Great Tradition' ideology on the other. This can clearly help to grasp cases such as the trajectory of Mesopotamian early civilisation discussed by Yoffee. Using the ten elements as listed in table 2.4 would improve upon this, by allowing for a more refined insight of temporal developments. A basic example of this interplay would be the relation between *longue durée* parameters of the agricultural means of production and the *conjonctures* of urbanism and state formation, but other examples of such interaction between temporalities are possible too. Hence there is no need for an *a priori* definition of the properties of an early civilisation beyond the occurrence of the nexus between urbanism, the state, and civilisation. Using the *Annales* approach to explore the relations between the ten different elements, the specific temporal framework of each case can be grasped quite pragmatically.

Finally, it is important to consider the fact that almost all early civilisations were part of wider cultural spheres. This is not only true for the Old World, but also for the New World where roughly concordant trajectories of growth and decline and the sharing of important cultural traits have been documented very well for areas such as Mesoamerica and the Andes (Willey 1991). Even so, it would be misleading to argue that such larger areas were necessarily integrated into an overarching system on analogy with the modern capitalist world-system defined by Wallerstein (1974). Arguably it was only with the development of imperial powers such as Rome (Woolf 1990, 1992), that relations of domination between centres and peripheral and semi-peripheral areas can be seen.

⁸⁵ This potential was also recognised by Trigger (2006b, 253), given his expressed desire to write a long-term history of Egypt in which the different temporalities of the different elements of this early civilisation could be brought out. Sadly he passed away before being able to complete this task.

⁸⁶ Based on a distinction between rural folk culture (the 'Little Tradition') and urban civilisation (the 'Great Tradition'), which had a fairly strong evolutionist, developmental aspect to it (Redfield & Singer 1953). The application of this theory for the Maya will be addressed in the case chapters.

Even if there were differences in development between regions before such world-empires, it is not really possible to establish relations of political or economic domination between them (cf. Kohl 2011, 80-81). Instead the notion of the 'social field' as originally developed by Lesser (1961) and elaborated by Eric Wolf (1982) may be more useful to grasp the broader social environment of most early civilisations.⁸⁷ This more generic concept allows for a more flexible, empirically based approach to social phenomena that can be traced at very long distances.

The advantage of the idea of the social field is that it can be tied more closely to the archaeological record. This can be seen in its application to Bronze Age Eurasia to trace the spread of technologies such as the horse-drawn chariot and the existence of different 'metallurgical provinces' of similar techniques and sources of metal-working (Kohl 2008). The outline of such metallurgical provinces by Chernykh (1991) is an excellent example of the usefulness of the idea of social fields to accommodate the evidence generated by the scientific analysis of metal remains. Comparisons can also be made between social fields in different areas of the world (Chernykh 2011, 62), as between Bronze Age Eurasia and Postclassic Mesoamerica (Kohl & Chernykh 2003). If done in a systematic and full-scale way this would be more ambitious than any comparative study undertaken in archaeology so far. A more prescient approach in terms of ambition is to compare early civilisations while taking into account their interconnections with broader social fields. Again, the use of a set of traits can help in this, as some of them are more closely connected with outside development than others. The element of long-distance exchange in particular is important in this, and by investigating its relation to other elements the impact of broader social fields can be disentangled.

2.4.4: Defining and comparing the art of early civilisations

The discussion in this section will focus on elucidating the specific approach taken in defining and comparing the element of art, as part of the set of elements used in the previous section for the definition and comparison of early civilisations in general. In order to do so, the section will move from the general views of art in the work of Childe, Adams, Yoffee, and Trigger towards work that is more specific to art itself. To start once again with Childe, we already saw in section 2.3.5 his reliance on Durkheim's notion of 'collective representation' and also his basic argument that art and religion were distinct from knowledge. This latter contention could be connected with the Marxist idea of 'false consciousness'. Interestingly, this false consciousness was not intrinsically connected to art, as can be seen in Childe's discussion of Palaeolithic art (Childe 1954a, 752-754). Here, somewhat ironically, art is discussed as being indirectly relevant to the 'prehistory of science', by virtue of what it reveals about the conception and use of nature in the Palaeolithic. Childe treats the naturalism, symbolism, and geometry of Palaeolithic cave-paintings in some detail, before concluding (again in reference to Durkheim) that these have to be understood as part of a way of life (also seen in contemporary hunter-gatherers) that organised knowledge based on magic:

"What motive could have inspired the execution of elaborate portraits of game animals in very inaccessible positions in the remotest recesses of dark tortuous caves? Perhaps beliefs such as 'As surely as the artist's brush strokes created a painted horse on the cave wall, so surely will there be an edible horse for us to hunt' or 'As I draw this dart transfixing the bison I have depicted, so shall our darts pierce the prey in the chase outside'. If palaeolithic societies did act on some such beliefs, it is certain that faith in the causal efficiency of the pictorial wounding of a painted bison did not deter the huntsmen from inflicting deadly wounds on living bison. Magical causes are not

⁸⁷ Lesser (1961, 47-48) argues that it is the social field rather than the 'isolated' society that should be used as the basis for grasping historical change. Yet this does not rule out looking at individual societies within these social fields, as long as the broader interconnections are taken into account. The notion of the social field also makes it possible to nuance the sharp distinction made between primary and secondary state formation (Fried 1967), since this makes it possible to view the secondary cases as interacting within that field rather than as being simply derivative.

substitutes, but supplements, for physical causes or rather preliterate societies have not succeeded as well as modern scientists in isolating efficient causes." (Childe 1954a, 754)

It should be noted that the concern here is not with the validity of this reconstruction, but rather with its theoretical background. As already noted in section 2.3.5, this does not imply that Childe recognised a singular 'primitive logic' here. In general this reconstruction points to a close link between art and the specific 'social world of knowledge' in which it was embedded, sometimes being able to play a more active role as in the case of Palaeolithic art. This can also be seen for the urban revolution, which saw a shift from the more symbolic art of Neolithic societies to a renewed focus on naturalism, if now in a conceptualised and stylised form (Childe 1950, 15). In general art did not play a very large role in Childe's long-term historical syntheses, however, as can be seen for the rather limited discussion of the art of Classical Greece, although here its relation to the specific societal context is elucidated as well (Childe 1942, 225-228). If there was at least some discussion of art in Childe's work, this more or less disappeared from the radar later on. ⁸⁸ In *Urban Society* it had no place in Adams' notion of the 'culture core', and in the strong ecological and systems theory focus of the New Archaeology (Trigger 2006a, 392-444) it also played no significant role.

This situation clearly changes later on, as can be seen very well in Yoffee's *Myths*. Challenging the neo-evolutionists' view of societies as consistent wholes, he instead focused on the interplay of 'differentiation' and 'integration' (*Myths*, 22-41). These terms refer respectively to how social groups develop specific roles, and how these different groups become part of an overarching institutional framework. These two concepts are meant to show how power emerges out of and is shared between different actors in societies. Power in a material sense here derives from the ability to create wealth through control over agricultural surplus, and also from long-distance exchange. Just as there are two kinds of social relations, based in differentiation and integration, there are two kinds of power. Social power was based on a horizontal segmentation of societies into groups, often tied together internally and externally through (ritual) indicators of cultural commonality. Political power was tied to the ability to impose force through government institutions, including the military, but also in connection with social groups, as seen with efforts by the state to transcend these groups by establishing new offices and central places. These different forms of social relations and power also had an impact on the identity and agency of social actors in these societies, for example on the role of women (*Myths*, 113-130).

Art played an important role in this as well. In an earlier important article co-authored with John Baines, Yoffee had also emphasised that despite the clear differences between Egyptian and Mesopotamian art styles it was possible to discern a more generic pattern underlying them both (Baines & Yoffee 1998). This was centred around three concepts: 1) order, as represented in the style of both civilisations, 2) legitimacy for the elite, derived from keeping the order, and 3) wealth, both enabling power for elite and communicating its role in the civilisational order (Baines & Yoffee 1998, 212-214). Both early civilisation developed 'high culture' complexes of art and a range of other aesthetic items or activities such as royal hunting or special performances. These traditions were very long-lived and, especially for Egypt, mostly for internal use by the elite. In cases such as the early mortuary stelae in the Egyptian desert, works of art did not even address this inner elite but rather ancestors and deities, representing cosmological ideas in a way quite different from modern ideas of political propaganda (Baines & Yoffee 1998, 244).

Yoffee also explored how states often sought to make societies simpler or more 'legible' according to schematic templates so as to achieve closer control over them (*Myths*, 91-112). One example is of

⁸⁸ This can be clearly seen in a recent review of the current relevance of Childe's concept urban revolution, where art is deemed a more questionable trait and discussed only in a short paragraph (Smith 2009, 14).

Erlitou through Shang China, where kingship was thought to have been based on shamanistic rituals, involving elaborate bronze vessels which allowed unique access to the ancestors. Although the capitals were quite sizeable, the king and his retinue travelled around the realm to perform rituals, holding his 'federation of lineages', on which local power was based, together. Such legibility was certainly not only achieved through art, as can be seen in the other example offered by Yoffee of the role of Mesopotamian law codes. Based on this it can be observed that in the nexus of urbanism, the state, and civilisation that constituted early civilisations for Yoffee, art played an important integrative role. It would create legibility in the relations between different social groups through the triad of order, wealth, and legitimacy. Although the sense of order would be shared between a variety of social groups, the notions of legitimacy and wealth can be closely related to elite control over art and ideology. Such ideological and artistic underpinnings can, in their basic fundamentals, persist over very long time periods, even in the case of successive phases of growth and collapse of Mesopotamian city-states and empires (*Myths*, 140-159).

The relation between art, values, and power was also explored in *Understanding*. Concerning power structures, Trigger makes a very strong case for the universality of kingship as the embodiment of the power of the state (*Understanding*, 71-74). Despite important variations between cases in the way kings were selected and the scope of their powers, in all cases the office seems to have been of a very sacred character, with important rituals attached to it. Inequality was the basis of social differences between upper class and commoners in all his seven case studies, and Trigger claims it was perceived as a normal condition (*Understanding*, 142-144). The upper classes used a variety of strategies to keep their position intact, including class endogamy, and social mobility was very limited. Inequality pervaded the different layers of early civilisations. This included families, which were seen as miniature versions of the state, with the father as the analogous monarch and the rest as his subjects (*Understanding*, 167-186). While there were some differences between the cases, a general clear masculine bias is observed and this is thought to increase over time. Similarly, alternative forms of household organisation were strongly discouraged.

To sustain inequality on a society-wide basis, there was a clear need for surplus extraction from farmer commoners, which was achieved by a variety of methods, from direct taxation to share-cropping arrangements (*Understanding*, 399-401). One point stressed by Trigger is that the extraction of surplus and its expenditure on various forms of wealth display cannot be solely explained in functional terms but should instead be seen as a form of demonstrating and reinforcing the power and position of the upper class. ⁹¹ Though specifics differed, religious thought and worship was very similar in making no clear distinction between the natural, supernatural and social realms, and a clear hierarchy of deities to humans and deities among themselves was present

⁸⁹ This can be seen especially well in his discussion of the law code of Hammurabi in place in the early 2 nd millennium BC (*Myths*, 100-109). This code was drawn up after his unification of the southern part of Mesopotamia, and stresses the selection of Hammurabi by the gods and his piety. It also contains a large number of if-then legal rules. Yet from a large number of documented cases from the same period it seems that cases were most often decided within corporate groups, by judges attached to them, and that state intervention was limited to conflicts between (members of) corporate groups. This makes the Hammurabi code seem more like a guideline for, or representation of, actual practice, or perhaps even a propaganda item to legitimise Babylonian domination.

⁹⁰ Not treated in detail by Yoffee is the elite discourse with regard to rebellion in Bronze Age Mesopotamia, which reveals a clear anxiety about the possibilities of such events toppling established power structures (Richardson 2010). Investigating the concept of rebellion remains problematic, however, by the fact that it is not represented impartially in elite textual and artistic records. Before detailed historical records rebellions are likely to be obscured completely and the Mesopotamian case is certainly exceptional for the Bronze Age.

⁹¹ Just as the maintenance of norms facilitating class and inequality is a continuous process, so the same is true for the upkeep of of ideologies of inequality. This latter aspect was explored by Trigger (1990a) for the Iroquois Indian nation. He found that a combination of kinship patterns and cosmological ideas together the enforcement of social norms through gossip and (fear of) witchcraft, could allow for tendencies of aggrandisement and accumulation by individuals to be checked and a general pattern of equality and generosity to be maintained (Trigger 1990a, 143).

(*Understanding*, 639-644). The role of deities and the supernatural in animating the world needed to be sustained through offerings, in households but most importantly by the upper class in large sacrifices and festivals. Trigger views sacrifice as projecting taxation/exploitation into the cosmic realm, with religion acting as a kind of political constitution to regulate and legitimate the relations between the upper class and commoners. Despite idiosyncratic differences, Trigger's cases indicate a generic pattern of inequality from the office of kingship downward and reflected and sustained by the specific worldview of the civilisation in question.

Trigger emphasizes how collective identity was expressed by elaborate upper class culture that included religious beliefs, myths, festivals, art, and architecture, and which symbolized unity and distinction from outsiders (*Understanding*, 638-639). In territorial states the culture of rural commoners tended to vary more, with the upper class having an unitary, state-wide canon, which tended to focus solely on royalty. In city-states the upper class culture tended to be an elaboration of the commoner one, which apart from royalty also stressed communal values. While there was regional variation between city-states, a pan-city-state unity was maintained over long periods of time. Each civilisation had important and highly distinctive values which structured life, such as Aztec militarism, Egyptian self-restraint, and Yoruba competitiveness. But there also existed in all cases similar ways of (symbolic) control of resources by the upper class. Trigger saw these values not as epiphenomenal variations, but as expressing important defining characteristics of these early civilisations, even if the presence of such features in itself can also be related to more strongly cross-cultural generic factors (*Understanding*, 649-650).

Turning to art, Trigger argued (*Understanding*, 543-564) that it should not be seen as art as in 'art for art's sake' or even as simply aesthetic artefacts but as 'elite goods'. In territorial states there tended to exist a more unified elite art style, while in city-state systems such unity also existed, but with greater local variations and less differentiation from commoners. In terms of materials there were great differences between the seven cases, but these could not easily correlated with the availability of specific types of resources. Therefore, art styles were more influenced by their intended meaning than strictly by the availability or limitations of the materials present. Despite the idiosyncrasy of the different styles of each early civilisation, some themes like kingship tended to be represented more copiously in the cases that did have art that represented human figures (*Understanding*, 564). The approach to art taken by Trigger is not very detailed in a technical sense, in contrast to his analysis of writing systems (*Understanding*, 585-603), and assumes art to reflect in some way the broader ideological categories of society. This can be situated within a broadly Marxist approach to art and ideology, a very good summary of which can be seen in the work of Eric Wolf on the relation between modes of production and culture:

"Ideologies codify these distinctions [between people] not merely as instrumental aspects of social relations, but as grounded in the essence of the universe — in the nature of nature, the nature of human nature, and the nature of society. In kin-ordered societies the distinctions of descent and affinity are anchored in the workings of super-nature. In tributary societies the differences in basic social categories are conceptualized as aspects of cosmic hierarchies, and myth and ritual as well as force are deployed to maintain the proper orchestration between Earth and Heaven. In societies dominated by the capitalist mode, distinctions of essence appear in the Calvinist notion that God rewards virtue and that the successful are virtuous, or in the idea that Nature awards the palm of success to winners in natural selection. Poverty is thought to demonstrate lack of worth and failure in natural selection to merit assignment to base occupation." (Wolf 1982, 389)

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⁹² A rather similar perspective can be seen in Patterson (1992), which is particularly strong on the relation between the kinship units that were placed in a hierarchical position relative to the Inka state, and how this was conceptualised in ideological and cosmological frameworks.

This certainly demonstrates a powerful and compelling view of the role of ideology. Even if there are some differences between Yoffee's emphasis on social divisions and Trigger's focus on upper class culture as providing a collective framework, these seem to be more to provide different angles on the same set of issues than being mutually exclusive. Both come a long way from Childe's use of the ideas of Durkheim. As such the ideas expressed so far in this section provide a very solid foundation to build upon. One clear problem, however, is that the study of art itself remains underdeveloped (Corbey et al. 2004, 373). As observed by Gordon Willey (1999, 86-87), there was for a long time an almost conscious neglect of the role of art styles in the emergence of early civilisations. Partly this may be understood from the observations made in section 2.3.5 in the discussion of the relation of the thought of Vico and Marx (and Childe). Vico's more universal view of the role of imagination in human social life was obscured by the specific, somewhat marginal role of art in capitalism as discerned by Marx. In more practical terms the neglect of art has two important aspects to it. One of them is that comparative studies of early civilisations rarely take into account the more technical part of the analysis of art. The other is that art is seen as a passive reflecting mirror of ideology, rather than as playing an active, constitutive role in early civilisations.

The relation between art and society is certainly not an obvious one, and by no means can the former be reduced to a mere reflection of the latter. A telling example of this comes from an African tribe whose members, upon being shown pictures of modern works of art that included a self-portrait of Picasso, interpreted the painter as somebody likely involved with witchcraft (Pasztory 2005, 126-127). Such misunderstandings would have more serious consequences in situations where no ethnographic or textual sources would be available, as is the case for a number of early civilisations. Yet this has not stopped scholars from noting interesting stylistic similarities in prehistoric art from different world regions. For example, Renfrew (2007) has pointed to the occurrence of life-sized figures in such different areas as the Bronze Age Cyclades in the Aegean, and also western Asia, Egypt and Malta in the same period, as well as China and various Mesoamerican cultures. He also noted that while there are some very interesting clues to similarities, the methods for evaluating these have not yet been fully developed.

The pitfalls of trying to discern cross-cultural patterns directly from material categories can be better understood from the example of the clay figurines found in many early post-glacial cultures around the world, including the southern Sahara, Japan, the Near East, China and Mesoamerica and the Andes. Models focusing on the universal meaning of these artefacts had assumed that they could

⁹³ There are no indications that Marx ever analysed the art of pre-capitalist social formations in any detail himself, nor is it clear that he developed a comprehensive theory of aesthetics. This in spite of the fact that many interesting inferences that can be made between this life and thought and aesthetic questions (Rose 1984), especially in relation to Hegel's views on art. Nevertheless, his ideas on the role of art in modern capitalism as opposed to its role in Greco-Roman antiquity are insightful enough:

[&]quot;Regarded from another angle: is Achilles possible when powder and shot have been invented? And is the Iliad possible at all when the printing press and even printing machines exist? Does not the press bar inevitably spell the end of singing and reciting and the muses, that is, do not the conditions necessary for epic poetry disappear? But the difficulty lies not in understanding that Greek art and epic poetry are bound up with certain forms of social development. The difficulty is that they still give us aesthetic pleasure and are in certain respects regarded as a standard and unattainable model." (Marx [1857-1858] 1986, 47)

⁹⁴ These also hold true for other approaches to the art of early civilisations. Most notably this includes the dual-processual model, which uses the distinction between the ruler-focused art of the Classic Maya and the lack of a clear ruler in the art of Teotihuacan as one of the elements to delineate 'network' and 'corporate' means of structuring power relations (Blanton et al. 1996; Feinman 2000). The model has been used as a cross-cultural one in a number of area cases (Beekman 2008; Parkinson & Galaty 2007; Small 2009), but as the application to power structures in the modern US (Feinman 2010) shows that it is not specific to early civilisations.

be closely linked with the coeval appearance of agriculture and pottery, and that the figurines were mostly female and related to fertility cults (Lesure 2007, 31-33). However, in-depth comparison of the six different world regions where such objects occurred, revealed that there was much more variation between their forms, that they were not necessarily tied to agriculture, and that female fertility was not a universal feature of them (Lesure 2007, 39-42). The author ultimately preferred elaborate historical models tailored specifically for the development of specific styles in different macro-regions, instead of contextual studies focusing on single sites or models implying intrinsic universal meaning, as also outlined in Lesure (2011, 207-217).

Another case concerns the recognition of rulership or lack thereof in art, which tends to follow a logic that what is depicted conforms fairly straightforwardly to societal structures. A very good example of this can be noted for the so-called dual-processual theory (Blanton et al. 1996). Here a distinction was made between the 'facelessness' and lack of clearly identifiable ruler imagery in Teotihuacan and the focus in Classic Maya art on clearly defined rulers and their courts (Blanton et al. 1996, 9-12). The former case would express a 'corporate cognitive code' reflecting more collective leadership, while for the Maya 'exclusionary strategies' of aggrandising elite figures could be noted. This distinction between Teotihuacan and the Classic Maya is based on other sources than art as well, but the point to emphasise here is the direct way in which inferences are made from complex styles of art. The pitfalls of this can be clearly seen when considering the case of the Bronze Age city-state of Mari in northern Mesopotamia. It is primarily known for the palace of one of its rulers, Zimri-Lin, which carried an elaborate pictorial programme glorifying the king and aligned with the architecture to make a maximal impression on those visiting it (Margueron 1995).

Without any kind of textual reference it would be possible to believe Zimri-Lin's rulership was total and absolute, and that the art reflected a strongly exclusionary social strategy. Yet, on the basis of the textual evidence from archives it has become clear that council leadership and other corporate forms of governance were crucial to the functioning of the state, and that Zimri-Lin was more of a tribal king seeking consensus than a ruler possessing absolute powers (Fleming 2004, 175-180, 230-241). This provides another counterpoint to overtly straightforward readings of complex iconographic representations. Instead of reading art directly it is necessary to consider the different levels of analysis in art-historical studies made by Erwin Panofsky in his study of Renaissance art. Panofsky ([1939] 1972, 5-9) discerned three levels of analysis, the first being the primary subject matter where the basic properties and elements of a work are recognised. This is followed by the secondary subject matter of the communicative conventions of the work, or what they signify culturally. Thirdly, there is the level of intrinsic meaning where the art is placed in its wider societal context. Although comparative studies of art will be mostly concerned with this third level of meaning, the cases studied need to be based on solid work for the preceding two steps. In order to do so, it is proposed here that the following basic elements, conflating the first and second steps of Panofsky, ⁹⁶ of the analysis of art have to be taken into account:

1. Material forms, which involves the different shapes of art objects and the relations that can be discerned between them.

available (Fargher et al. 2011).

⁹⁵ Other cases for which more corporate societal structures have been proposed are the Indus Valley (Possehl 2000) and Minoan Crete (Driessen 2002). The argument of Trigger is that such proposed 'king-less' cases are usually those without good textual records, and he points out that after the decipherment of the Maya script the Classic period proved to be much less exceptional than had been presumed (*Understanding*, 33, 73). Yet recent work on the Postclassic central Mexican state of Tlaxcallan has revealed a more clearly corporate structure in a context where much better sources are

⁹⁶ It should be remembered that Panofsky's method was for individual works of art. Hence in looking at artistic records as a whole demands some modifications, if keeping with the central thrust of his argument that arguments need to be build up from basic sources to higher-level interpretations.

- 2. Craft and materiality, based on studies both of the craft-work of art objects themselves, such as *chaîne opératoire* approaches, and also on conceptions of the materiality of craft-work and these objects within the worldview of a specific culture.
- 3. Iconography, as comprised of the study of both the conventions for rendering pictorial designs and the relations of pictorial designs to other media such as writing.
- 4. Contexts of art, which involves the spatial settings of art objects, including the relations between material forms, craft and materiality, and iconography.

The neglect of the more technical aspects of the analysis of art in comparative studies of early civilisations has been paralleled by the lack of a more rigorous definition of what constitutes art in these kinds of social formations. As noted earlier in this section ambiguity was expressed by some authors on the relation of past 'art' to present-day conceptions of it. This is less of a concern here, as the Wittgensteinian notion of 'family resemblances' allows for more leeway in classification. Even so, the theoretical definition of art remains problematic. Pasztory (2005, 6-15) has noted the arbitrary selection criteria by which some works are deemed art and others not, as for example the consistent rejection of modern aboriginal paintings by both modern art and non-Western curators. Even if for that particular case the situation may be changing, ⁹⁷ such kinds of selection procedures are incompatible with serious cross-cultural research. Pasztory instead proposes to leave the definition of art as a discussion for its own sake and instead focus on the communicative use of things in general, placed in a continuum from low to high communicative potential, from an explicitly anthropological perspective:

"Western thinking has been unable to relate functionality and aesthetics in a satisfying manner: it has to be either one or the other. But as ethnography after ethnography makes clear, aesthetics are the means of technology in archaic type societies. I would go so far as to suggest that aesthetics are the first technology of communication and control of humanity." (Pasztory 2005, 11)

The conceptualisation of art as simply a powerful social technology has to be qualified much further, however, as has been argued for in the work of the late Alfred Gell. In a 1992 article, Gell provided a critique of then-current anthropological concepts of art encountered in ethnographic contexts, he noted that much of it was heavily influenced by modern biases towards the aesthetic valuation of art objects and less anthropological and social in focus (Gell 1992, 40-43). Instead, he made the case for a 'methodological philistinism' in the anthropology of art, much the same as the 'methodological atheism' of the sociology of religion. This led him to situate what are conventionally recognised as art objects within a wider sphere of 'technologies of enchantment' which also included music, poetry and performances, all forming part of an essential system binding together different social agents in a network of intentionalities (Gell 1992, 43-44). In a later book Gell elaborated his ideas into a broader framework, one that encompassed art not only in ethnographic contexts but in the entire range of cultural formations (*Art and Agency*, 1-5).

In Gell's 1992 article the enchantment of art objects derived not only from their direct visual impact, but more importantly from their connection to the magical ideas associated with what is depicted and in which kinds of contexts (Gell 1992, 46-53). Very important in creating such objects of enchantment is the technical difficulty of making them, as viewers could not have comprehended how it could have come into being, something Gell saw as stimulating a view of their makers as 'occult technicians'. A good example of this are the painted canoe-boards from the Trobriand islands used to dazzle other participants in the *Kula* exchange, and the making of which was not only a matter of craftsmanship but primarily a mental challenge that was facilitated by magical procedures (Gell 1992, 56). The enchantment of technology is therefore not simply created, but

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⁹⁷ Based on the personal observations during a visit to an exhibition at the Musée du quai Branly in December 2012.

rather permeates both the making of the object in question as well as its later 'use', and hence cannot be seen as having a simple communicative function but rather as embodying a powerful force, like Bernini's bust of Louis XIV (Gell 1992, 52).

The later book develops the notion of enchantment in a different direction by looking at the process of 'abduction' (*Art and Agency*, 14-19). Drawing on the semiotics of Peirce and Eco, Gell posits that in specific 'art-like situations' persons will make inferences about art objects or 'indexes' in the same way they will make inferences about other persons or 'agents', rather than linguistic or aesthetic inferences. Hence these 'indexes' should be seen as social agents, possessing personhood of themselves, though the terms of which are inherently anthropomorphic:

"Animals and material objects can have minds and intentions attributed to them, but these are always, in some residual sense, human minds, because we have access 'from the inside' only to human minds, indeed to only one of these, our own. Human minds are inevitably 'social' minds, to the extent that we only know our own minds in a social context of some kind. 'Action' cannot really be conceptualized in other than social terms. Moreover the kinds of agency which are attributed to art objects (or indexes of agency) are inherently and irreducibly social in that art objects never (in any relevant way) emerge as agents except in very specific social contexts." (Art and Agency, 17)

Gell then proceeded to develop an explicitly anthropological theory of art analogous to Mauss' theory of exchange and that of kinship by Levi-Strauss. The key to his theory is the 'art nexus', which connects artists, indexes, prototypes (what is to be inferred from the index) and recipients through the aforementioned process of abduction. Each of these elements can act on another both in an active way or in a passive or patient way (*Art and Agency*, table 1, p. 29). Formal formulae and graphs are then used to outline the different relations between these elements, for example that of: Prototype A > [Index P > [Recipient P]], where the prototype is a deity or supernatural force, the index the performance of a shaman-like figure and the recipients the participating audience (*Art and Agency*, 67). Related to this is his adoption of the concept of 'distributed personhood' of ethnographers working in Oceania, and discussed in section 2.2.2, which together with his own concept of the 'distributed object' allowed Gell to formulate a view of art as facilitating an 'extended mind' that shaped social interaction between the individual members of society (*Art and Agency*, 221-223). Art in this view does not impose some kind of collective consciousness, but rather operates as a mediating force of individual and group agency.

A clear distinction is made in the book between decorative and representational art. Regarding the former, Gell posits that it should be understood as having an agency function purely through its own enchanting effect on the recipient, lacking any kind of prototype (*Art and Agency*, 74-77). Through a number of visual effects, particularly the complex part-whole relations of certain motifs, the recipient is drawn into an incomprehensible whole. The drawing of such motifs can perhaps be connected to dance performances, and they serve to captivate and attach the recipients to the social contexts, such as ritual, in which they are employed. Gell also hints at hypothetical cognitive universal features of decorative art in a number of similar cases with similar motifs (*Art and Agency*, 86-90). Examples of this are the maze design, which he sees as captivating evil spirits or demons by making them get lost in it, thus protecting the structure or body they are depicted upon. Yet here, again, it is the enchanting and captivating effect of the maze that constitutes the force of the agency of the art object, without referring to prototypes.

By contrast, the chapter on representational art is exclusively concerned with the relation of art object and prototypes. Gell's primary conceptualization of such art is that they represent idols, that is, they embody the agency of deities or phenomena associated with supernatural forces, either in

iconic objects like true portraiture or in aniconic ones such as the *baitulia* (sacred stones) of ancient Greece (*Art and Agency*, 96-99). The embodiment of supernatural agency is realized through sympathetic magic, which should not be seen as the kind of pseudo-physics Frazer imagined it to be, as discussed also in section 2.3.6, but rather as socially intentional with a causative arrow between the desire of an agent and magical accomplishment (*Art and Agency*, 106-115). This process is explored in more depth with two case studies. The first concerns a Maori ritual which involved an exchange between priests offering an aniconic art object, the *mauri* (a fertility stone) to the *hau* (a principle of growth) of the forest, which in return provides the hunters with birds. ⁹⁸ Through the incorporation of *hau* in the art object and placing it in the forest the Maori priest provide gifts of birds to the hunters (in which they can later share) through the passive intermediary of the forest. A similar situation can be observed for the other case study of Tahiti, where the *ti'i* objects play a similar role in agriculture, fishing and other important life-sustaining activities.

As a proto-state culture, however, Tahiti also possessed the centralized Oro cult, together with a number of deities ancestral to important kin groups. These deities were represented by a different kind of idols, the *to'o*, which can be seen as both the iconic depiction of the pillar put up by the creator god to preserve the world and as the aniconic representation of Oro as the formless originator of this pillar form. Like the passive agency of the Maori *mauri*, the *to'o* acquires its social role in Tahitian society through the active agency of humans. In this case that of the chiefs who competed vigorously to gain the most important *to'o* for their temples, thereby enhancing their reputation and influence. This competition was expressed during the *pa'iatua* ('the unwrapping of the gods'), where images from different persons and groups were assembled near the temple, eventually to be carried in procession into the building. There, in the presence of the most important chiefs and priests only, the objects would be unwrapped, together with the presentation of feathers from the secondary *to'o* to the primary *to'o*, which in turn would distribute feathers of its own to them. These feathers were both the most potent symbolic 'currency' of political authority in Tahiti as well as being closely associated with Oro, and thus this ceremony, and the role of the *to'o*, can be seen as passive intermediaries for this important socio-political event (*Art and Agency*, 110-113).

Gell viewed this passive and intermediary role of art objects in the contexts described above as animism, which he meant not in the 19th century classificatory sense of superstitious 'false physics' but rather as a universal tendency to anthropomorphism in human cognition, including in modern technological cultures (*Art and Agency*, 121-126). This anthropomorphism, however, is not to be found in superficial resemblance to humans and the human world, but rather in the attribution of agency and intentionality to inanimate objects:

"That is to say 'social agents' can be drawn from categories as different as chalk and cheese (in fact, rather more different) because 'social agency' is not defined in terms of 'basic' biological attributes (such as inanimate thing vs. incarnate person) but is relational – it does not matter, in ascribing 'social agent' status, what a thing (or a person) 'is' in itself; what matters is where it stands in a network of social relations. All that may be necessary for stocks and stones to become 'social agents' in the sense that we require, is that there should be actual human persons/agents 'in the neighbourhood' of these inert objects, not that they should be biologically human persons themselves." (Art and Agency, 123)

There are two important aspects of the attribution of agency and intentionality (*Art and Agency*, 126-133). The first is that of external/practical agency, where one makes the intuition that others

⁹⁸ The account by the Maori informant Ranapiri on which this is based also formed the basic evidence for the famous discussion of gift-exchange among the Maori by Marcel Mauss ([1954] 1990, 13-16). See for a recent discussion of this that supplements Gell's discussion of this case (Godelier 1999, 49-56).

have a mind like one's own from observing their behavior, which follows a custom (as part of the social and public sphere, the 'way of life') that can be reconstructed. There is another aspect, however, and it concerns the attribution of intentionality of others based on our own mental representations, the thoughts, intentions and wishes within ourselves. Although it is not difficult to pursue a sociological approach to art objects as 'social others' based on the external conception of agency, it is more difficult to imagine idols having an inner life of their own, as nothing seems to correspond to the actual physical manifestation of internal agency. Gell cites Dennett on internal representations, who argued that there cannot be intrinsic representations of anything in itself, but only for/to someone, thus requiring an interpreter external to it, a sort of homunculus. This insight is applied by Gell to art, especially the idea that a mind (or soul or spirit) requires such a homunculus. Hence when attempting to depict (social) intentionality it will take the form of homunculi, whether in iconic or aniconic form.

This insight leads Gell to further qualify personhood as it relates to agency and intentionality within societal contexts, as the homunculus reduplicates within the body of the person the relationship between that person and the web of his/her external relationships (*Art and Agency*, 137-143). This is made clear in his example of a Polynesian sculpture, the *A'a*, of a deity which in the carving itself consisted of smaller representations of deities which correspond to different kinship groups. The *A'a* thus represents divinity as an assemblage of homunculi, and cannot be individuated from them. Gell compares its 'fractal character' to the concepts of 'fractal' and 'dividual' personhood explored by anthropologists working in Melanesia. This perspective allows for a better understanding of how both persons and things like art objects can become ensnared together in collective ancestry-based and ideological 'forms of life'. It is also further demonstrated by examples of the consecration of images in Hindu religious contexts, which involve rituals in which spiritual life-substances are introduced in newly made idols and where mourning and burial rites are performed for the deceased idols, as befits community members (*Art and Agency*, 144).

The role of the agency of art was not limited by Gell to portable objects but can also be recognised for architecture, most notably in his discussion of Maori meeting houses (*Art and Agency*, 251-258). These large houses, which were constructed in the late 19th and early 20th century AD, played a crucial role in Maori society, serving as means to materialise the wealth, skill and ancestral endowment of the community. The houses were also lavishly decorated through carvings and painting, all of the decorative form that Gell saw as primarily enchanting and captivating viewers. In the case of the Maori meeting house this would serve to ensnare the member of the community within the genealogical framework of the house and greatly impress visitors from outside. The house can actually be conceived of as embodying the community, joining its members both spatially through its architecture and mentally through its decorative program. In Maori terms it is possible to see it as the actual reinstatement of the ancestor, not just as a purely symbolic representation. This particular architectural form thus demonstrates that the spatial context of art plays a crucial role in understanding the social agency of art. Gell did not have the chance to develop these ideas much further, though his even briefer discussion of Egyptian idols offers an interesting clue for understanding representational art spatially:

"If we situate ourselves, not inside the innermost sanctuary, but outside in the courtyard, with the ordinary worshippers (who rarely if ever saw the idols themselves) then we may readily imagine that the idols (immured in the temple complex, and animating it like a giant body) come to stand for 'mind' and interiority not just by physical resemblance to the human body, but by becoming the animating 'minds' of the huge, busy, and awe-inspiring temple complex. Just as the 'mind' is conceived of as an interior person, a homunculus, so the idols are homunculi within the 'body' of the temple." (Art and Agency, 136)

Art and Agency has both been lavishly praised and harshly criticized (Bowden 2004). One obvious problem with it was its posthumous publication, with little scope for revisions and elaborations of the initial argument. Also relevant is the fact that the style in which many of the arguments were presented in the book derived from the lively, provocative-yet-critical settings of British academic seminars at Cambridge and the LSE (Macfarlane 2003, 132). These factors make it not very strange that even open-minded researchers have found the book to be "hard going and hard to apply" (Elsner 2008, 270). Rather than as a complete, well-rounded theory, the different elements of Gell's work are treated here more as working hypotheses that need further elaboration and critical modifications, much as has been advocated for in a recent volume applying his ideas in a diverse set of archaeological contexts (Tanner & Osborne 2007). Before doing so, however, it is necessary to relate Gell's work briefly to other recent approaches on material culture (Hodder 2012; Ingold 2011; Knappett 2005; Malafouris 2013). One distinguishing feature of Art and agency is the emphasis by Gell on human agency as a prime mover, something that is not shared with much recent work that seeks to adopt a post-humanocentric approach (Webmoor & Witmore 2008).

What this post-humanocentric or non-anthropocentric approach implies is that instead of seeing humans as prime movers, the relation between human and the material world is to be conceived of as a symmetrical one. The best formulation of this is actor-network theory, commonly known as ANT (Malafouris 2013, 123-130). In its basic form ANT views both humans and material factors as actors or 'actans' that interact with each other in a network, with the interaction being symmetrical rather than driven by a prime mover. The position taken here, however, is that ANT is not a suitable framework, and that Gell's insistence on humans as prime movers in contexts of artistic agency is correct. The reasons for taking this position are based on the philosophical-methodological ideas discussed in section 2.3. First of all it can be noted that in ANT the interface between humans and material forces is never really accounted for, except in rather descriptive, story-like accounts of specific situations. This severely limits the possibility for explanation based on the recognition of some set of causal principles, whether deriving from humans or material forces. ⁹⁹ By contrast Vico's notion that the 'order of ideas follows that of things', discussed in section 2.3.4, captures the complexity of the interaction between humans and things while also supplying a basic principle in the notion of human agency in making history.

Much the same can be said for the Marxist tradition and its use of the concept of human social labour to grasp the characteristics of the relation between humans and nature in different historical eras and regions, as discussed in section 2.3.5. Gell's work can be seen as an extension and addition to these approaches, as it provides another causal framework to evaluate the relation between humans and art objects in different societies. Furthermore, even if a more explicit explanatory approach were to develop out of the ANT framework, it would still need to account for the language through which it is formulated. As noted in sections 2.3.6 and 2.3.7, for Wittgenstein the fundamentals of language could be located in basic forms of intentionality, hence the pervasive use of bodily metaphors. Recognising this is what allows for a cross-cultural approach that can grasp different cultures in their own terms yet retain a degree of universality. It also enables one to make sense of one's own position, allowing for self-reflection and intellectual agency. In contrast to this the ANT approach seems oblivious to the linguistic framework within which its ideas are formulated, putting the person using it in an almost disembedded position. 100 Because of this Gell's

⁹⁹ The notion of entanglement as developed in (Hodder 2012), should be kept somewhat distinguished from the ANT framework. For this some use is made of notions such as 'structure' to make more precise sense of the relations between humans and things (Hodder 2012, 212-213).

¹⁰⁰ The impetus behind this can be noted in one of the first books of Latour, in which his central claim concerns the observation that 'we have never been modern' (Latour 1993). This uses ANT to argue that modernity was misguided to consider things as separate, and as materials for Promethean projects. As such it forms an almost reverse-anthropology

approach is favoured here over the ANT framework and other non-anthropocentric approaches.

It should be noted, however, that there is a problem with the model provided by Gell as well. The ultimate aim of *Art and agency* was to provide an anthropological theory of art, for which a variety of cases from different cultures were investigated. Yet little attention was given to history, and none to the long-term trajectories so important for archaeology. One implication of this is that the human relation to art is conceived of as fully-formed, without considering the process of its development in early humans or in the later trajectories of cultures in different macro-regions. As noted at the end of section 2.3.5, these two kinds of processes involved different kinds of models. The discussion of material metaphors is connected closely to the development of early humans, while sophisticated 'stockpiles of mimetic intuitions' were built up in the cultures of anatomically modern humans in different areas around the world. This means that if Gell's anthropological theory of art is to be used fruitfully in archaeology, these two aspects need to be considered first separately and then in relation to each other. To start with metaphor, the use in this regard by Gell of the concept of the homunculus is best placed within the broader framework of bodily metaphors. The role of such bodily metaphors in the developing relation between early humans and material culture was explored by Gamble (2007), a study already referred to in sections 2.3.5 and 2.3.7.

Gamble (2007, 66-72) argues that the ways in which discourses on Originsland are structured involves not just metaphor itself but also metonymy and synecdoche, for which the body supplies the basic terms. ¹⁰² The body and its various parts also informs the conceptualisation of the relation between humans and material culture. Based on Gamble (2007, fig. 4.4, p. 104), some of the most important of these are:

- 1. Containers, as based upon the metaphor of the trunk of the body as well as its head. Examples of this are pots, clothing, and masks, but also architecture, and even kinship networks (cf. Gamble 2008).
- 2. Instruments, as derived metaphorically from the limbs of the body, which allow it to act upon the world. Examples of this are sticks, axes, and ploughs, but also the painter's brush.
- 3. Other elements such as gestures and surfaces, which are not investigated much further by Gamble. Surfaces are especially important because it can capture phenomena such as colour patches, and later surfaces with complex semiotic patterns such as writing and figural art, that cannot be categorised for either containers or instruments. They also allow for an exploration of relations between different material forms.

It is noted by Gamble (2007, 109) that there can be some overlap between the categories of containers and instruments for some material forms, but on the whole they are distinct enough to be analytically useful. He uses them in his book to trace the relation between early humans and material culture over a period from roughly three million to five thousand years ago (Gamble 2007, fig. 9.1, p. 278). This is a complex argument with regard to Palaeolithic archaeology that cannot be addressed here in full. The main thing to consider here is that this analysis involves not only the

⁽cf. Latour 1993, 100-103), but one arguably in the spirit of Frazer in seeking out the 'mistakes' of the 'natives'. See for a considerably more nuanced position the work of (Descola 2013), in particular chapter three.

¹⁰¹ This is because the notion of the homunculus carries very specific and complex meanings in a diversity of subjects, including alchemy, art and literature, as well as Early Modern science. The use of a more simple set of bodily metaphors avoids these more specific associations.

¹⁰² This can be closely compared to (Vico [1744] 1948, #404-411). Gamble does not cite Vico and no influence needs to be assumed as these are very generic categories used widely. It may be noted that the trope of irony is absent in Gamble's discussion of bodily metaphors. There is no scope to investigate this idea here, but there may be something to irony as a bodily metaphor in 'composite beings', made up of parts of different creatures or even inanimate features. These are well-recognised in protohistoric contexts (Wengrow 2014).

relation between biological bodies and artefacts, but also the social dynamics of groups as they derive from the capacity of the brain to handle social information. In this sense the analysis of the role of bodily metaphors intersects with the social brain hypothesis (cf. Gamble et al. 2014; Gowlett et al. 2012). A key issue in this concerns the so-called 'release from proximity', that is, the ability of early humans to form groups beyond the limits of face-to-face contacts (Gamble 2007, 211). Based on extensive research this limit is estimated at about 150 persons for modern humans, a figure known colloquially as Dunbar's number (Gamble et al. 2014, 19-24). To transcend this limit new forms of communication were necessary, and the human capacity for language played an important role in this (Gamble et al. 2014, 142-143).

The impact of language, however, was not merely on communicative abilities, for it also allowed for the formulation of linguistic metaphors deriving from the body and this raises the question of mimesis and intentionality as well (Gamble 2007, 220-222). Based on the linguistic capabilities of modern humans it is possible to achieve five orders of intentionality regularly and six in more exceptional cases (Gamble et al. 2014, table 5.2, p. 146). This means that basic bodily metaphors were now expressed in more complex symbolic forms, where they acquired a syntactical structure of their own shaped by these orders of intentionality. Parallel to this it is possible to recognise the elaboration of the first artefacts that can be broadly classified as art (Gamble et al. 2014, 153). It is not easy to relate these developments to each other very precisely in causal terms, but certainly both complex linguistic metaphors and a range of material forms of art were present already for a long period before the end-point of Gamble's investigation five thousand years ago. The next question, then, concerns the semiotics of the complex symbolic systems made possible by the capacities for language and making art objects. Here it is important to recall the emphasis put in section 2.3.7 on the long-term development of 'stockpiles of mimetic associations' in different areas of the world. This is a question of considerable importance, especially to account for the more idiosyncratic patterns in the art and values of early civilisations noted by Trigger (see above).

One of the most obvious problems with Gell's theory is that he disregards the quite different cultural ontologies that underpin the attribution of intentionality and agency to art objects, as in the case of Aboriginal art which has been observed to have derived from very distinct ideas about intentionality and materiality (Layton 2003, 457). This question has been explored in much more depth by Jeremy Tanner, who compared three different cases of portraiture, a statue dedicated in AD 1280 to the Buddhist patriarch Eizon, a portrait of Epicurus, originally from c. 270 BC and a 6th century AD Christian icon from Sinai (Tanner 2007, 70-73). All can be grasped by the following 'Gellogram': [[[Prototype A] > Artist A] > Index A] > Recipient P. All three cases derive from religious and philosophical communities, and the portraits in question could be argued to have played roughly similar functional roles in them as passive agents in ritual behavior. Yet it is also clear that while there were superficial resemblances in the physical shape of the portraits, the cultural ontologies in which they actually functioned, and which profoundly impacted the scope of their capabilities for agency, were very different. Chinese thought on portraiture seems to have been far removed from Greek thought as known from formulations such as Plato's famous cave analogy:

"Influential strands of Chinese thought, from the Book of Changes onwards, conceptualized the relationship between different levels of reality in terms of 'correspondences'. Thus the auspicious images on an emperor's robes – dragons, the sun and the moon, the constellations – were the iconic 'doubles' of their heavenly counterparts. As such they effected a harmonious correlation between the ritual movement of the emperor on earth and the celestial movements of the planetary bodies, which were both indexes and determinants of the good governance of the Middle Kingdom.

¹⁰³ This number is not only useful for the study of early humans, but has also been used to study settlement patterns and state formation, as will be discussed in section 3.4.2 for the Mycenaean case specifically.

Whereas in Plato the analogy of the mirror can be used to devalue painting as a childish plaything, merely replicating superficial appearances, in Chinese thought the iconic reduplication effected through mirrors permitted its users to 'discern and manipulate the underlying structures of reality.'" (Tanner 2007, 74-75)

This cultural perspective on portraiture was accompanied by a specific view of the agency of the statue of the Buddhist patriarch Eizon, which both embodied the spiritual qualities of the deceased abbot and his previous role in the community through the incorporation of disciples' signatures and parental ashes into the statue (Tanner 2007, 73-78). It also was used in ritual contexts, including processions that emphasised the intervening agency of Eizon in the wider community. This contrasts with the agency of Epicurus portrait, who as the founder of a philosophical community was part of an ancestral ritual that involved sacrifices, shared meals and drinking and the reading of memorial literature (Tanner 2007, 78-84). In accordance with the Epicurean understanding of *eikon*, which was derived from a different epistemology than Plato's, the portrait was meant to rectify and calm the soul of the viewer, without any kind of intervening potential for agency. The question of whether portraits could truly represent the divine prototype was the subject of intense controversy in early Christianity, perhaps due to the need to break with pagan practices (Tanner 2007, 84-90). Eventually the iconophiles view of icon portraits allowing a glimpse into the divine and ethereal prevailed, if sharply distinguished from the demon-like agency of earlier pagan statues.

The importance of culture-specific conceptions of art can also be seen in decorative art forms that Gell saw as lacking any kind of prototype and solely used to enchant the viewer. Readings of Andean art, which except for the Moche is almost exclusively non-representative, have revealed that many of the abstract patterns can be connected to the *quipu*, a knotted-string device for recording information (Pasztory 2005, 198-201). The cultural ontology this was based on emphasised spatial relations and mental patterns, as well as a lack of interest in visual representation. Its aspect of agency can be observed in the *ceque* (sight-line) system around Incaperiod Cuzco. Here a large number of shrines (which included natural points in the landscape such as views) was laid out as an imaginary *quipu*, binding together the social groups of the region spatially and also temporally through the calendar. It is clear that the kind of force of agency of art has a quite different form than the general model provided by Gell, perhaps with art in this context possessing more active agency relative to that of humans. The culturally-embedded understanding of art objects circumscribes Gell's project to create an anthropological theory of art similar to those of exchange and kinship.

It follows that more traditional hermeneutic methods of interpretation are essential for understanding art, which carries with it clear interpretive limits for those cultures where such information is not available for the researcher (Quilter 2007, 135-136). Yet his conception of the agency of art objects is ground breaking for understanding both the character of the objects themselves as something more than mere information-carrying containers and in grasping their role in their wider societal context. Tanner (2007, 90-91) likens Gell's ideas to Panofsky's third level of interpreting art, that of iconology, viewing them as a meta-language for comparing different institutions of artistic representation across cultural boundaries. The notion of institutions, however, also brings up the position of art objects in society as a whole. As can be inferred from the discussion of Gell's *Art and agency* earlier, this was a question very much present in the different cases explored in the book. Yet the relation of art to society as a whole remained implicit in this. An exception can be noted for his discussion of the role of art objects in the *Kula* exchange network in Melanesia (*Art and Agency*, 228-232). The totality of painted canoes and valuables exchanged create a kind of 'extended cognition' in space and time that powerfully shapes the agency of individuals participating in it:

"In his own person, the operator must reconstruct a working simulacrum – a dynamic space-time map of the maze of Kula transactions, so that, with somnambulistic dexterity, he knows which delicate strings to pull. Everything depends on the coherence of inner strategic intentions grounded in accumulated experience and memory, and the historically produced world 'out there' – the real world in which minds, objectified in exchange objects, expand, meet, and contend. The successful Kula operator controls the world of Kula because his mind has become coextensive with that world. He has internalized its causal texture as part of his being as a person and as an independent agent." (Art and Agency, 231)

Phenomena like the *Kula* exchange sphere bring together metaphor and semiotics in what may be termed the praxis of the agency of art. In this regard a connection can be made to the work of Bourdieu (1977) on habitus and praxis. ¹⁰⁴ Yet while the work of Bourdieu is certainly useful in many ways it is also somewhat generic in its approach, and applies to a much broader set of phenomena than art. This can be seen very well in his concept of symbolic capital (Bourdieu 1977, 112-121). Here notions of honour and prestige are treated as symbolic resources (capital) that exist parallel to the economic ones, and can be just as effective in social action. A key aspect in this is the convertibility of symbolic resources into desired social outcomes, even if the scope of conversion is limited by existing social mores. There are good reasons to refrain from extending the notion of convertible symbolic capital to art, however. First of all, the analysis of symbolic capital is based not on art as such but on notions like prestige and honour, especially in the case of the Kabyle from Algeria where Bourdieu carried out his fieldwork. Secondly, his later work on art and cultural capital as convertible (Bourdieu 1993) focused on modern society and its class distinctions.

It should not be assumed that these ideas can be applied in a straightforward way to other kinds of societies, such as for understanding the praxis of the agency of art in early civilisations. Renfrew (2012, 255-257) has provided a strong warning against assuming a convertibility in values and value in the numerical sense between different phenomena in pre-capitalist settings, based as it were on the extreme promiscuity of monetary value in contemporary societies. This does not invalidate Bourdieu's work for the cases discussed by him, but it does serve as a necessary caution against using ideas such as symbolic and cultural capital as universal categories. Instead, the praxis of the agency of art needs to be situated in its specific context, first of all through studying the interaction of metaphor and semiotics in practice, especially for contexts of art. Secondly, the patterns discovered in this way need to be related to the different ideas about the role of ideologies and worldviews in early civilisations, most importantly those of Trigger, Yoffee, and Wolf discussed at the beginning of this section. This enables the notion of an active, social agency of art as outlined by Gell to be used to generate new insights into the causal factors behind these patterns. Earlier such explanatory insights would be lacking because of the notion that art would serve as a passive reflection of ideology and worldviews (themselves reflecting materialist causes).

Basic analytic categories art	High-level analytic categories art	
material forms	metaphor	
craft and materiality	semiotics	
iconography	praxis	
contexts		

Table 2.5: Basic and high-level analytic categories for the interpretation of art.

¹⁰⁴ An important early influence on the work of Bourdieu seems in fact to have been the work of Panofsky (Hanks 2005). The notion of habitus of course goes back to (Mauss 1973).

Based on the discussion in this section there are two practical steps in investigating the agency of the art of early civilisations. As outlined in table 2.5 above these consist of the basic analytic categories of material forms, craft and materiality, iconography, and contexts of art, together with the high-level analytic categories of metaphor, semiotics, and praxis. What constitutes art in early civilisations, then, is that part of the archaeological record that can be studied using these analytical categories (cf. Corbey et al. 2004, 359). One further step in the analysis is to consider the relation between art in general and the other nine elements of early civilisations outlined in table 2.4. Of course in the evaluation of each case study the specific sources available for both kinds of interpretation will be evaluated as well. The result is a theoretically-informed framework, yet also one that can accommodate different kinds of empirical patterns. Rather than to be seen as a weakness, this is in fact a strength for comparative studies. The basic way to evaluate the methodological framework provided here is to question whether it fits the different middle-level theories together, in a way that does justice to the complexity of the archaeological record. This evaluation will take place in section 10.2.

The notion of the 'family resemblance' put forward by Wittgenstein has been used to sustain a more pragmatic definition of art for cross-cultural comparison (Corbey et al. 2004, 361; Morphy 2010 272).

CHAPTER THREE: INTRODUCTION TO MYCENAEAN EARLY CIVILISATION

3.1: Introduction

This chapter provides the introduction to the Mycenaean case. It is divided into three main parts. The first of these is section 3.2, which discusses the terminology and chronology of Mycenaean early civilisation, situating it within its spatial and temporal context. Close attention in this will also be given to the terms used to define different periods and their impact on the conceptualisation of the historical trajectories of the Bronze Age Aegean. The second part in section 3.3 treats the different sources available for the interpretation of the Mycenaean case, focusing on their strengths and limitations. The detailed attention to terminology and chronology together with the sources makes it possible not only to grasp the case itself but also to more robustly ascertain its comparability with the Maya case in chapter nine. This follows the argument that more consideration should be given to basic source-criticism in comparative studies, as noted in section 2.4. In that main section the approach to early civilisations was also provided, based on the interaction of ten distinct elements or traits in a *longue durée* framework. The application of this framework to Mycenaean early civilisation will be outlined in section 3.4.

3.2: The terminology and chronology of Mycenaean early civilisation

Before turning to the chronology of Mycenaean early civilisation proper, it is necessary to consider it as part of the broader terminology of the Aegean Bronze Age. The most important of these terms is that of the Bronze Age itself, which, as discussed earlier in section 2.2.4, had been modified from its typological use in the Three Age system by Gordon Childe to be considered in terms of societal structures. As we saw there, the Bronze Age as viewed primarily in metallurgical terms was ultimately rejected by Childe as a distinct sociological stage. Yet the idea that the Bronze Age in a more generic sense can be connected, if loosely, to different kinds of cultures than the Neolithic era, can still be seen in some works on the Bronze Age (e.g. Earle 2002). Work along these lines in the Aegean envisions a division between two very different clusters of socio-economic institutions of the Neolithic and the Bronze Age (Barrett & Damilati 2004, 150-153). The former can be seen to have been characterized by a predominance of household organisation and balanced reciprocity, in contrast to the Bronze Age political economy with institutionalised differences of status through wealth accumulation. However, more recent research has shown that the developments in the Neolithic were of such a nature that this distinction has become problematic, and that therefore the definition of the Bronze Age has to some extent to be rethought.

There are two aspects to this revisionism. The first of these is a recognition that the Neolithic communities in various parts of the Aegean were more complex. Elements of this are the connections between various household forms, communal organisation, and exchange, even if this complexity should not necessarily be interpreted in terms of hierarchical social relations (Halstead 2006; Perlès 2001; Souvatzi 2008). The second aspect concerns the recognition that some features of the succeeding Minoan and Mycenaean early civilisations can already be recognised in the Late and Final Neolithic. This concerns not only the long-known larger sites of Sesklo and Dhimini in Thessaly (Halstead 1994, 203-206), but also Knossos and other sites in Crete (Isaakidou & Tomkins 2008). In both regions there seems to have developed an elaboration of architecture, as well as feasting and new kinds of ceramics and other remains associated with this (Halstead & Isaakidou 2011a; Schoep & Tomkins 2012). Yet despite the significance of this, it would be stretching the point too much to see these developments as indicating that a true state had emerged in this period. In addition to this, important cognitive tools such as writing and complex weighing systems were

also still lacking in the Neolithic.

More interesting in this regard is the suggestion by Wright (2004a, 68-69) to conceptualise of the various communities in the Aegean from the Late Neolithic onwards as 'transegalitarian' communities. It is necessary, however, to 'unpack' Wright's general anthropological model, which is crucial for understanding the processes of how these transegalitarian formations gave rise to what may be termed the 'microstates' (cf. Wright 2010, 250) of the Minoan and Mycenaean early civilisations. This question will be addressed below in section 4.4.3 on the position of the Mycenaean case in the *longue durée* of Aegean prehistory. At the other end of the chronological scale, the end of the Bronze Age was signalled by the collapse of the different Mycenaean states around 1200 BC, even if a post-palatial material culture persisted to circa 1050 BC (Dickinson 2006, 72-76). When states eventually re-emerged in the 8th century BC, they had very different characteristics than the Minoan and Mycenaean ones (Bintliff 1997; Morris 2006). Outlining these temporal boundaries allows for the Aegean Bronze Age to be understood in its own terms, while also bringing into focus the continuities and discontinuities with the Neolithic and Iron Age eras.

Of course, the broader geographical context of the Aegean Bronze Age is also part of its definition. In general terms the Aegean occupied a middle position between on the one side the early civilisations of the eastern Mediterranean and the Near East, ¹⁰⁷ which had developed earlier, and on the other side the western Mediterranean. In the latter area no early civilisations developed in the Bronze Age, although cultures of considerable complexity can be seen in El Argar and related cultures of the southern Iberian peninsula (Chapman 2008). Considerations of the Aegean trajectory relative to its wider environment took a sharp turn towards emphasising indigenous development in the early 1970s (Renfrew 1972, 236-244). Since then, the development of world-systems theory has renewed attention to interconnections on a broader geographical scale (Sherratt 1993). The debates on this matter are far from settled and involve both evidence for long-distance exchange and the 'technology transfer' of domesticates, metallurgy, and the wheel, as treated in various papers in Wilkinson et al. (2011). There was also the system of 'international relations' between the different states and empires of the eastern Mediterranean (Liverani 1990). These political and economic aspects of macro-scale interaction were paralleled by a *koine*, involving the exchange and emulation of art objects and iconographic themes (Feldman 2006).

Having demarcated the Aegean Bronze Age in time and space, it is necessary to consider its internal characteristics, starting with its chronology. The basis of Aegean chronology consists of three tripartite divisions, two temporal ones of Early, Middle, and Late with associated Roman numerals of I, II and III (sometimes elaborated by adding letters and Arabic numerals), and one geographical division of Cycladic, Minoan (Crete) and Helladic (mainland Greece). Northern mainland Greece followed a different trajectory, partly due to its different land-use potential, and only became part of the Minoan-Mycenaean world in the Late Bronze Age. Originally this proved a simple and elegant scheme, though a bit artificial and associated with outmoded ideas of growth and decline (McNeal 1973). But as more data has accumulated over the decades the system has been become very complicated and, according to one authority, "has in fact become a bed of Procrustes, to which material must be fitted willy-nilly" (Dickinson 1994, 11). Yet at the same time the scheme has

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¹⁰⁶ Certainly not incomparably different (cf. Renfrew 2003b, 317-318), but the impact of factors such as iron-working technology, alphabetic writing, and the use of coined money created a very different set of longue durée parameters for the different kinds of states to emerge in.

¹⁰⁷ See figure 3 for a geographical outline of the eastern Mediterranean in the Late Bronze Age.

¹⁰⁸ The term *koine* of course derives from *koine* Greek, the form of Greek used as a *lingua franca* in the Mediterranean and Near East in the Hellenistic and later periods. In the Bronze Age, however, the concern is not so much with language but with artistic repertoires that are, to some degree, shared between different cultures, a phenomenon already recognised by Helene Kantor and others in the 1940s (Feldman 2006, 9-13).

proven indispensable, as it forms the backbone for organising the archaeological material. Therefore many archaeologists have found it useful to define broader phases, corresponding better to cultural and historical developments on an Aegean-wide scale, as a complimentary way of understanding the Aegean Bronze Age chronology.

Colin Renfrew (1972, 49-52) provided one such broad scheme for Aegean prehistory, starting with hunting and gathering and later village farming to four important Bronze Age phases: 1) the development of proto-urban communities, 2) the emergence of palace economies on Crete, 3) the expansion of Mycenaean civilisation, and 4) the collapse of Minoan-Mycenaean civilisation. The basic outline of these phases remain in use in most textbooks on the Aegean Bronze Age (Cullen 2001; Shelmerdine 2008a), even if modified to a more refined sequence of the Pre-Palatial, ¹⁰⁹ First Palatial, Second Palatial, Third Palatial and finally Post-Palatial periods (Dickinson 1994, fig. 1.2, p. 13). It should be stressed, however, that these Aegean-wide phases are partly masking important regional divergences. Pre-Palatial proto-urban communities developed in Crete, the Cyclades and mainland Greece in the Early Bronze Age, yet the first palaces emerged only on Crete, while in the other parts of the Aegean state-like forms of social organization did not develop until the Second Palatial period. Therefore, we will here use both the regional outlines of trajectories and Renfrew's broad scheme of the main, pan-Aegean phases of development. Finally, the application of scientific dating techniques has allowed for more refined sequences, but methodological problems remain. ¹¹⁰

¹⁰⁹ As noted earlier, there are some indications that some architectural features of the palaces already were present in this period at sites such as Knossos, Malia, and Phaistos (Schoep & Tomkins 2012). However, the shift to the First Palatial period was profound in terms of material culture and in the scale of urbanism, as can be seen in the expansion of the town of Phaistos (Watrous & Hadzi-Vallianou 2004, 253-256).

¹¹⁰ Quite apart from the debates concerning the different dating techniques and their results, which are numerous and contentious, there exist many problems when trying to interpret developments historically. Although Manning (1998) has argued that technical developments would result in much more fine-grained chronologies to allow tracing historical developments in a more precise way, this has yet to occur. The stakes can be high, for example in the question whether the last palace at Knossos should either be dated to LM IIIA2 or LM IIIB, although LM IIIA2 remains the most likely date (Preston 2008, 316-318). Even more contentious and with far-ranging historical implications is the debate concerning the precise dating of the Thera eruption during the Neopalatial period (Tartaron 2008, 86-89). Except for the case of Knossos, for the period of the Mycenaean palaces proper there is much less controversy as regards the main outlines of the absolute chronology.

Crete	Cyclades	Mainland Greece	Dates
EM I	EC I	EH I	3100-2700
EM IIA	EC II	EH IIA	2700-2400
EM IIB		EH IIB	2400-2200
EM III	EC III	EH III	2200-2000
MM IA	MC I	MH I	2000-1900
MM IB	MC II	MH II	1900-1800
MM II			1800-1700
MM III	MC III	MH III	1750-1700 (high)
			1700-1600 (low)
LM IA	LC I	LH I	1700-1600 (high)
			1600-1500 (low)
LM IB	LC II	LH IIA	1600-1490 (high)
			1500-1430 (low)
LM II		LH IIB	1490-1430 (high)
			1430-1390 (low)
LM IIIA1	LC III	LH IIIA1	1430-1390 (high)
			1390-1370/60 (low)
LM IIIA2		LH IIIA2	1390-1300 (high)
			1370/60-1300 (low)
LM IIIB		LH IIIB	1300-1200
LM IIIC		LH IIIC	1200-1050

Table 3.1: Aegean Bronze Age chronology (based on Shelmerdine 2008a, figs. 1.1 & 1.2, pp. 4-5).

Mycenaean early civilisation is confined to the presence of palatial forms in the LH IIB through LH IIIB periods. But important elements of the culture associated with it can be found earlier, especially in the so-called Shaft Graves at Mycenae dated to MH III – LH I (Voutsaki 2010a). There are also important chronological subdivisions within the period of the Mycenaean palaces. The most important one is the distinction between the LM/LH II-IIIA and LH IIIB periods. In the former Crete retains an important position within the Aegean, even if there is now a heavy Mycenaean influence on the island. After the destruction of the palatial complex at Knossos in LM IIIA2, the mainland occupies the predominant position within the macro-region. Hence, Mycenaean culture can be seen to have followed a trajectory consisting of three important phases: a) emergence within a Minoan-dominated Aegean in MH III – LH IIA, b) the LM/LH II-IIIA period with the Knossos palace and the emergence of palaces on the mainland, and c) the ascendancy of the mainland palaces in LH IIIB. After the collapse of the palaces at the transition to LH IIIC there was a revival of some aspects of Mycenaean culture, which extends to Cyprus (Iacovou 2006) and possibly to the Levant (Yasur-Landau 2010). This phenomenon is more reminiscent of a *koine*, and there is no connection to clear socio-political units as with the Mycenaean palaces.

3.3: The main sources for interpreting Mycenaean early civilisation

The three main internal sources of Mycenaean early civilisation are the archaeological datasets derived from surface survey and excavation projects, as well as the textual source of the deciphered Linear B script. There are also important sources external to the Aegean Bronze Age, both from the contemporary eastern Mediterranean and Near East and from the later Archaic-Classical Aegean. To start with surface survey, it can be observed that, after pioneering work in the 1960s and 1970s, a 'new wave' of projects crescendoed in the 1980s with over 100 projects in progress or completed so far (Cherry 2004, fig. 1.2, p. 6). This has allowed for the reconstruction of settlement patterns and land-use patterns over long-term periods, though precise diagnostic material is often scarce and the bulk of the material can often only be classed in general MH or LH categories. Most of these projects cover areas of 10-100 km², and this had led to criticism of study areas being too small to address questions of state formation that require areas of 100-1,000 km² at the very least (Blanton 2001). However, macro-regional studies incorporating data from multiple projects can work around this problem quite effectively (Alcock & Cherry 2004, 7-8; Bintliff 1997).

One of the more surprising finds of surface survey, in combination with a variety of other techniques, has been to confirm that urban sites of modest sizes did exist in the Aegean in the Bronze Age (Cherry 2004, 12-14). This is in clear contrast to earlier hypotheses of Aegean Bronze Age early civilisations as being without cities (Dickinson 1994, 51; Renfrew 1972, 236-244). This is most pronounced in Crete, where the largest site of Knossos has now been estimated to have had circa 25,000 – 30,000 inhabitants in the Neopalatial period (Whitelaw 2012, table 4.1, p. 150). But increasingly large settlements can be recognised for the mainland as well. Many of the larger palatial sites have been estimated to have had occupied areas of 20 to 30 hectares (Whitelaw 2001a, fig. 2.10, p. 29), which would generate estimated populations of about 4,000 – 6,000 inhabitants. Significantly, research on secondary sites has shown that they could be relatively large as well, such as the 14 hectare site of Iklaina in Messenia (Cosmopoulos 2006, 220) and the 10 ha site of Kalamianos in the Saronic Gulf (Tartaron 2010, 177). Not much is known about the layout of these urban sites (Cavanagh 2001), but on-going work at many of them, including Mycenae (Maggidis & Stamos 2006), should provide a much better picture of Mycenaean cities.

The excavation of the major palatial centres still forms the backbone of Mycenaean archaeology, and work at these sites continues at a fairly extensive scale. The main known ones are Knossos and possibly Chania on Crete, Mycenae and Tiryns in the Argolid, Pylos in Messenia, Thebes and Orchomenos in Boeotia, and Iolkos in Thessaly (see figure 4 for the major sites on the Greek mainland). For other regions, such as Laconia and Attica the evidence for a palatial center is less clear and remains to be determined, while for the Corinthia it has been proposed that there never existed a palatial complex as a geographical focus at all (Tartaron 2010, 166-172). A set of large tholos tombs near Troezen may indicate the presence of an important centre here as well (Konsolaki-Yannopoulou 2004, 75-76). A variety of secondary, non-palatial sites have also been excavated or are in the process of being excavated, including funerary, religious, and settlement sites. The more extensive work on secondary sites in many of the regions also allows for a better

¹¹¹ One controversial problem is that some of the surface ceramics may be impossible to classify beyond a 'generic prehistory' category, due to reasons of taphonomy (Bintliff et al. 1999; Bintliff 2005a). However, this problem may to some degree be regional (Mee & Cavanagh 1999), and does not seem to extend to Crete, even in the LM III period (e.g. Watrous & Hadzi-Vallianou 2004, 298-304).

¹¹² Another theory is that the location of Mycenae is very suitable for domination of both the Argive plain and the Corinthia as well (Bintliff 1977b, 346). Crucial to resolving the matter is more research on the Mycenaean road network in the Corinthia, and on possible Mycenaean fortifications there as well.

¹¹³ Beyond the secondary centres there are also the tertiary sites and even smaller ones, which are gradually becoming better investigated as well. An example of this is the site of Geraki in Laconia.

reconstruction of the regional economic and political structures of Mycenaean society, not only in well-known regions like the Argolid (Sjöberg 2004), but also in regions previously seen as marginal such as Thessaly (Adrimi-Sismani 2007).

The introduction of new scientific techniques in the archaeology of the Aegean Bronze Age has been one of the major sources for increasing both the quality and quantity of the data available, as well as for facilitating entirely new kinds of analysis (Tartaron 2008, 121-122). Examples of these include bioarchaeology and archaeozoology, the analysis of human burial remains, as well as the study of more conventional artefacts, including, but not limited to, metal objects, lithics, and pottery (Tartaron 2008, 126-129). For some categories of artefacts, such as vitreous materials (e.g. Tite et al. 2008), it has also been possible to use various scientific techniques to trace exchange throughout the eastern Mediterranean. Another very important development is the introduction of new ways of analysing the material remains in terms of its descriptive properties. A good example of this are studies of pottery that investigate their contextual use and consumption, for example in drinking or feasting contexts (e.g. Haggis 2007), alongside more traditional typological analyses. Taken together, the modes of analysis from the physical sciences and those providing detailed quantitative and qualitative descriptions of the material, have allowed for a much greater interpretive potential of the Aegean Bronze Age archaeological record.

The indigenous syllabic script known as Linear B was deciphered in the 1950s as to have been written in Greek, and has proven immensely important for the interpretation of Mycenaean early civilisation. It was part of a broader tradition of syllabic scripts that originated in Crete around 2100 BC, and included Cretan Hieroglyphic and Linear A on Minoan Crete and Cypro-Minoan on Cyprus (Singer 2000), none of which have so far been convincingly deciphered. Linear B itself is directly derived from Linear A (Palaima & Sikkenga 1999). It is thought to have started on Crete at Knossos in LM IIIA1 and ended at the LH IIIB/C transition on the mainland (Driessen 2008, table 3.2, p. 76). But a recent discovery from the site of Iklaina in Messenia has been tentatively dated to LH IIB-IIIA and points to an early mainland presence of the script (Shelmerdine 2012). It may not be possible to pinpoint the exact origin of Linear B, but since the 'spelling rules' seem to derive from Linear A (Palaima 2010, 362-365), considerable Cretan influenced can be assumed. The bulk of the material with Linear B consists of some 5,000 inscribed clay records from sites on Crete and the mainland (Palaima 2010, 358), most of them accidentally preserved through being fired in destruction events, together with shorter texts on Inscribed Stirrup Jars (Van Alfen 2008).

Almost all Linear B tablets are from palatial sites, with the exception of the new find from Iklaina. The largest records are those from Knossos and Pylos, which are followed by lesser amounts of tablets from the sites of Mycenae and Thebes. These textual records are almost exclusively concerned with administrative matters as part of a running year, although they can occasionally look back or forward one year, thus gaining a maximal temporal span of three years (Palaima 2010, 358-9). The tablets have yielded important insights into palatial administration, in particular the political and economic hierarchy, as well as military matters, and also for technology, cult practices and the names of deities. No literary texts or other complex narratives have been found on the tablets. One very interesting characteristic of the records of the different palaces is the uniformity they show in terms of the terminology that is used (Palaima 2003b, 162). At the same time it should be emphasized that the Linear B record represents an incomplete and fragmented record, forged by calamitous contingencies, and cannot be seen as a true historical record. 114

¹¹⁴ There is a distinct possibility that the clay tablets represent a preliminary step in the formation of a true archive which would have been recorded on perishable materials (Driessen 1994-1995, 244). The material evidence for this is scant (Perna 2007, 226-228). The most important evidence comes from the use of clay nodules to seal parchment, used in conjunction with Linear A in Neopalatial period Crete. This practice has not been observed for the Mycenaean period, however, and the Linear B tablets contain much longer and elaborate recordings. Another piece of evidence comes from

Apart from the internal archaeological record of the Mycenaean Aegean, important external sources of information exist in the contemporary eastern Mediterranean and Near East, and in the later Archaic-Classical periods of the Aegean itself. The participation of the Aegean palatial states in the eastern Mediterranean system of 'international relations' is well attested by the presence of *orientalia* on Aegean sites and by Aegean artefacts found in other regions, as well as a number of references in Linear B (Cline 2007; Mee 2008). From Egypt there is also evidence for what are likely Mycenaean warriors on a painted papyrus from Amarna, along Aegean influences on tomb paintings, as well as textual references to the *Keftiu* and *Tanaja* (Cline 2007, 197). These names may respectively refer to Crete and the Greek mainland, while a number of specific Aegean sites are also listed. A number of different letters from Hittite Anatolia refer to a kingdom in the land called *Ahhiyawa*, which has been interpreted as most likely located in the Aegean (Beckman et al. 2011; Mee 2008, 374), which may be further substantiated by Syro-Palestine texts (Cline 2007, 198). Such texts and images need to be understood in a source-critical manner, as we shall discuss in more detail in section 4.3.2 for *Ahhiyawa*.

The connection between the early civilisations of the Aegean Bronze Age and the succeeding Archaic-Classical city-states is interesting but problematic. It is clear that the dramatic character of the destruction of the palaces (Dickinson 2006, 43-46), and the disappearance in the Aegean of writing, large urban centres, monumental art, a large-scale economy, and the state constitutes a major break (Morris 2006. Yet, on the other hand there are important indications of some degree of continuity. Many of the important deities of the Archaic-Classical period are listed in the Linear B tablets (Palaima 2008, 348-349), although some disappear and cult practices also change (Dickinson 2006, 223-228). The question whether sources from the Archaic-Classical period can be used for the Bronze Age then becomes one of weighing continuity versus discontinuity, and nowhere is this more poignant than for Homer. While it is clear that the society depicted in Homer has important elements from the Archaic period when it was written down (e.g. Crielaard 1995; Morris 1997), it should not be seen as simply a sociological reflection of the era. Rather, the epics reflect an ontology, a worldview rather than a society, that is expressed in living communities of performance. The question is how far such communities can be traced back, and what kind of changes occurred in what continued to be performed and what not.

Oral tradition has been proposed as a possibility through which poetry would be transmitted through the generations (Foley 2005). There is some evidence of linguistic features in Homer that predate the language-use of the Linear B tablets, and hence such formulations would have been preserved in the traditional *Kunstsprache* of oral tradition (Bennet 1997, 523-527). The existence of oral poetry in Mycenaean early civilisation is therefore likely, especially if one considers that such poetry was of central importance in many similar Indo-European cultures (West 2007, 7-11). Furthermore, the contemporary Near East also had important poetic traditions, especially those of Sumer and Akkad in Mesopotamia, but also in Egypt (Sasson 2006). The problem is, of course, that without Mycenaean-period texts the only way to investigate continuity and discontinuity is to connect the later texts to the archaeological sources. Sherratt (1990, 2005) sought to correlate specific features of material culture in Homer with archaeological reconstructions of material culture, yielding an 'evolutionary model'. This model creates an layered temporal structure in which different features

the Uluburun shipwreck off the Anatolian coast, dated to the 13th century BC, where a wooden diptych was found that likely was used to document the accompanying goods. Some possible indications for the use of such a script carrier comes from Pylos and Knossos in the form of small bronze hinges. They are also known in Homer (*Iliad*, Book VI, 198-200) and from several Near Eastern contexts from both the Late Bronze Age and the Iron Age. According to Perna (2007, 229) their most likely function was to accompany and document travelling goods.

A somewhat different phenomenon is the ritual activity that took place at palatial sites after their collapse, as can be seen at Knossos (Prent 2003) and on different sites on the mainland (Antonaccio 1994).

of Homeric material culture can be related to different periods (Sherratt 1990, fig. 4, p. 817). The linguistic evidence makes it more likely that these features were not mere antiquarian references, but rather derived from oral tradition, and therefore can be used as comparative reference points for selected features of Mycenaean material culture.

Finally, there is also the question of even longer-term continuity, stimulated by ethnographic fieldwork in more traditional areas of early modern and modern Greece. Scholars have noted the problematic character of this, citing the effects of the modern state and the connection, however weak and indirect, to international trade, not to mention the impact of the Greek Orthodox church (Dickinson 1994, 5-6). For this reason attention has been focused on traditional agricultural practices and crafts, though here too important changes can be observed due to the impact of different technologies on agriculture (Bintliff 2011). Although it is important to remain cautious of the imposition of dichotomies between modern and pre-modern to contrast regional stability as constructed through ethnography with national and international narratives of progress (Fotiadis 1995), there may be some long-term adaptations to the material conditions of the landscape. These were referred to by Braudel in his master-work on Mediterranean history as the 'civilisation of the rocks' (Braudel 1972, 775), a concept that remains tantalising but underdeveloped.¹¹⁶

3.4: Interpretations of Mycenaean early civilisation

3.4.1: Introduction

Before turning to the substantive interpretation of Mycenaean sources, it is important to briefly discuss the overall framework in which these sources are interpreted. Aegean Bronze Age archaeology today is very much part of a broader world archaeology, both in terms of techniques used to analyse data and in the kind of interpretive questions asked of that data (Tartaron 2008). An early impetus for this came from Renfrew's (1972) account of the emergence of civilisation, in which he used systems theory to bring together diverse factors in a coherent framework. These ranged from the ecology of olive cultivation to religious symbolism (Renfrew 1972, 489-494). All of these factors have received more study in the decades since, but arguably their interaction has been studied to a lesser degree, in particular with regard to the symbolic and cognitive aspects (Renfrew 2004, 268-270). We shall return to this issue in section 5.3. Here it is important to note the societal context of Mycenaean archaeology in terms of its position in 'Originsland'. The founding of the modern Greek state in 1821, together with the pivotal position of that state in the geopolitical balance of the eastern Mediterranean, helped shape this. In the terms of Trigger discussed in section 2.4.1, they respectively gave rise to nationalist and imperialist perspectives.

This has led to different conceptions of Mycenaean 'Originsland', with the national discourse stressing more the long-term continuity between the different phases of the Greek past without major breaks, as exemplified in the work of Christos Tsountas (Andreou 2005). By contrast the imperialist strand placed the Aegean Bronze Age within the context of a pan-European identity, though different aspects were emphasised in this. One strand glorified the Mycenaeans for their

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¹¹⁶ Some interesting proposals have been put forward for the relation between neural networks in the brain as responses to the social and physical environment and the model of habitus developed by Bourdieu (Bintliff 2005b, 130). From a somewhat different perspective, it has been argued that Bourdieu's concept can be connected with the results of geoarchaeology: with the data from the latter to be seen as impacting habitus at various scales (Jusseret 2010, 700).

¹¹⁷ A large number of studies have been devoted to the role of modernism in Aegean Bronze Age studies recently. Rather confusingly the term is used to refer both to artistic and literary appropriations of the past (Gere 2006, 2009; Leontis 2005; Ziolkowski 2008) and to the 'modernist' work of Evans, Childe and Renfrew as carrying forth an 'archaeology of progress' (Schoep & Tomkins 2012, 2-4). Normative ideas concerning progress and civilisation have already been discussed in chapter two, and this discussion informs the positions adopted here.

masculinity and aggression, even involving fascist appropriations (Gere 2006, 117-144). On the other hand Minoan Crete was put forward by Arthur Evans an an island characterised by an internal peace, even if backed up by a large naval force to ward off outsiders (Papadopoulos 2005, 94). With the fading of the European empires after the end of the Second World War, a new emphasis on Classical Greece became an important defining element of the new NATO alliance (Gress 2004). The Mycenaean case did not fit in well in this narrative. The similarities of the Mycenaean palaces to those of the contemporary eastern Mediterranean and Near East, as indicated by the decipherment of Linear B in the 1950s can be seen as one reason for this. It was partly responsible for a characterisation of this society as 'Asiatic' and thereby completely different from the citizen-farmer society of the Archaic-Classical *polis* (Palmer 2001, 43-50).¹¹⁸

Caught between the focus on the rise of the Minoan palaces and of the Archaic-Classical *polis*, the Mycenaean case can be viewed as an aberration in the 'Originsland' of Western civilisation. From the philosophical-methodological perspective outlined in chapter two, however, the 'landscape' of the Greek past offered up by Tsountas is much to be preferred for its lack of gross distortions. It is also a view that lends itself to a Braudelian focus on the *longue durée* of Greek history, as exemplified in (Bintliff 2012). Of course, modern political boundaries are not neatly coterminous with past social formations, but the embedded view of historical trajectory allows for the kind of comparative framework outlined in the previous chapters. It also has the potential to connect closer to the *demos* of the country itself, and thereby to make archaeology more relevant than as a self-contained intellectual construct. Based on a comparison of evaluations of the rise of social complexity in Bronze Age Iberia and the Aegean, it has been proposed that researchers should address more closely the connection between these debates, heritage and current affairs (Legarra Herrero 2013, 247-8). To this may be added questions regarding the representation of different periods of the past in educational curricula, as for Minoan Crete (Simandiraki 2004), and more broadly in literary and artistic movements as well.

3.4.2: Elements of Mycenaean early civilisation

The discussion of Mycenaean early civilisation starts with the first element of the list outlined in table 2.4 of section 2.4.3, that of the basic agricultural means of production. A key stimulus in this was the work of Renfrew (1972). His main thesis was that the Mediterranean triad of cereals, vines, and olives was not only a basic constituent of Classical Greek civilisation, but also crucial to the emergence of civilisation in the Aegean during the Early Bronze Age (Renfrew 1972, 280-288). The role of the olive in this early development has been questioned by some scholars (Halstead 2004, 192-193), and an alternative exists in the form of the so-called 'secondary products revolution' first formulated by Sherratt (1981). This involved the secondary exploitation of domesticated animals for wool, milk and traction from the late 4th millennium BC onwards and was applied to the emergence of complexity in the Aegean (Van Andel & Runnels 1988). However, the accumulation of more data, especially using new scientific techniques, has called into question the revolutionary impact of this development as well. Furthermore, by the Late Bronze Age the olive did in fact

¹¹⁸ Most extreme is the case of Hanson (1995). He takes a very negative view of the agricultural system of the palaces, titling the chapter on the demise of the palatial system 'the liberation of agriculture' (Hanson 1995, 25). In fact the Mycenaean system is explicitly compared to the collective farming systems of 20th century socialist regimes (Hanson 1995, 30). Leaving aside this more extreme example, it is remarkable how many negative normative statements continue to be made about the Mycenaean state system, contrary to the more nuanced views that come from a closer reading of the evidence (e.g. Palaima 2007). It may well be that such ideas are one of the reasons why there have been so few comparisons of the Mycenaean and Archaic-Classical states.

¹¹⁹ The accumulation of data from zoological and botanical remains shows that the developments of secondary forms of exploitation should not be seen as a single event spreading across regions, but rather more as a series of more local adaptations spread out over a longer chronological range (Halstead & Isaakidou 2011a).

play a large role in agriculture (Riley 2002, 65), as did the vine (Palmer 1994). With regard to livestock, significant numbers of cattle were used for agricultural purposes (Killen 1998; McInerney 2010; Palaima 1989, 1992a), and large flocks of sheep were kept for wool, which was used to make large quantities of textiles (Burke 2010). Hence it can be noted that, even if their origins and their role remain less clear, all elements of Mediterranean polyculture were present in the Mycenaean period.

The importance of polyculture in the Mycenaean palatial period seems to be corroborated by the observation that the geographical distribution of the palaces is largely confined to the southern Aegean, mirroring the spread of the succeeding Archaic-Classical *poleis*. The main reason for this was the different potential for agricultural development in the southern and northern Aegean. The south was more suitable for polyculture due to differences in geological and climatological conditions, especially temperature, the kinds of soils available, and the amount of rainfall (Bintliff 1997, 24-26; Halstead 1994, 196-198). This should not be seen as ecological determinism, however, but rather as 'possibilism' in that in many other areas in the Mediterranean with similar land-use potential never developed large urban centres and early civilisations (Lewthwaite 1983). Furthermore, there were considerable differences in settlement densities and trajectories between different southern mainland regions (Bintliff 2005a), as noted originally by Dickinson (1982). Yet for all these historical contingencies, there did exist general constraints at the macro-regional level. Included in these were the fact that the elements of the polyculture triad were fixed in biotechnological terms, and that the ability to create surpluses depended largely on the investment of animal and human labour, as well as on technology.

To understand this better it is important to consider the central role of wheat and barley, which occur in large quantities in the Linear B tablets (Palmer 1992, 2008). In later Greco-Roman times these crops accounted for 70-75% of calorific intake (Foxhall & Forbes 1982, 68-71). A variety of land-use strategies were possible for Bronze Age farmers to grow wheat and barley, including prolonged fallowing and intensive horticulture (Van Joolen 2003, 103-104, 110). A system of rotational fallowing and the use of draft animals for ploughing would be the prime way to mobilise surpluses of wheat and barley. 120 Recent scientific restudy of zoological remains from Knossos have shown that in the Neolithic cows were likely used for ploughing in combination with intensive horticulture, changing in the Early Bronze Age to the use of oxen for this purpose (Isaakidou 2006, 2008, 2011). The preliminary data from Middle Neolithic Kouphovouno also seems to indicate the use of cattle for traction (Vaiglova et al. 2014, 207) The connection between oxen and the ability to create surpluses of wheat and barley is not only the key way to create surpluses, but the ownership of such animals was also an important basis for socio-economic power (Gilman 1990, 160-161; Halstead 1995, 17-18; Manning 1994, 236-237). On the mainland the use of oxen goes back to at least EH II (Pullen 1992), and both the Cretan and mainland Linear B tablets list large numbers of them (Killen 1998; Palaima 1988, 1992a). These were used not only for agricultural work but also for sacrifices as part of the calendar of public festivals and feasts that will be discussed below.¹²¹

¹²⁰ The reason for this is based primarily on the constraints of the two 'labour bottlenecks' of ploughing and harvesting in the pre-industrial Mediterranean, as the plough is far superior to the hoe in tilling the land in being able to work an area of about 6 ha over a 20-30 day campaign (Foxhall 2003, 79-83). Since the energy requirements of the farming household itself are considerable, it is hardly possible to create large surpluses of wheat and barley through the manual tilling of the soil. This created a dichotomy between intensive horticulture cultivation, including the use of cows for ploughing, and extensive cultivation of wheat and barley for surplus mobilisation using oxen, with the intensive system being limited to a catchment of a 500 metre radius on the basis of ethnographic evidence (Isaakidou 2008, 101-4).

¹²¹ The tablets from Pylos seem to be more focused on the role of oxen in religious ceremonies, which may be due either to the specific part of the agricultural season they record or to a more decentralised system of herding cattle in Messenia (Palaima 1992a, 472-473). Even if there had existed significant numbers of oxen that would have been owned and used outside of the palatial sphere, the need to sustain large-scale populations would require close management by the palaces (McInerney 2010, 52-53).

Palatial involvement can also be seen in different landscape-modification projects such as the possible creation of a harbour in Messenia (Zangger et al. 1997, 613-623), and drainage works in the Argolid (Zangger 1994) and in Boeotia (Iakovidis 2001, 155-157). Other proposed cases exist that have not yet been sufficiently proven (Hope Simpson & Hagel 2006, 216-224). A plausible case has recently been made that at least some of the terraces in the hinterland of Kalamianos on the southern shore of the Saronic Gulf were constructed in the Late Bronze Age, despite the difficulties of dating these structures precisely (Kyapil 2012). Parallel to such interventions we can see the involvement of the palaces in handling cereal surpluses. At the site of Gla the capacity of the storerooms, their function indicated by large storage vessels and remains of wheat, would potentially have been as much as 2,500 metric tons (Iakovidis 2001, 83). The Linear B harvest records from Knossos list almost 800 tons of cereals from da-wo in southern Crete (Killen 2008, 172). 122 Recent work on storage facilities at Avia Triada and Mycenae seem to indicate a similar scale of cereal storage, and based on find patterns also suggest that this surplus was used to feed dependent personnel or alternatively to store fodder for (ploughing) oxen (Privitera 2014, 444-445). Given the constraints on Bronze Age farming technologies, the control over grain surpluses of this magnitude show considerable palatial impact on agricultural production.

Turning now to the second element of urbanism, it is important to stress the limitations of the available evidence. As noted in section 3.3, this is particularly acute for the issue of the layout of (urban) sites, but also hinders demographic reconstructions because of the 'hidden landscape' problem in survey. Overall, however, it is possible to observe that the agricultural technologies available in the Bronze Age placed clear limits on the scale of urbanism, with maximum sizes of towns within 5 kilometre radius catchments at 12-14 hectares and of larger centres drawing on larger hinterlands at 80 hectares (Bintliff 2002, fig. 1, p. 160). This is in line with the sizes of Mycenaean towns and larger centres listed in section 3.3, and comparable, even if occupying a lower place on the ladder, to urbanism in other areas of the eastern Mediterranean (Whitelaw 2001a, fig. 2.11, p. 30). Moving from the parameter of scale to the structural properties of Mycenaean urbanism we see that the survey evidence, notwithstanding its limitations, has powerfully stimulated the development of human ecological models. Important in such models are the limits of practical face-to-face interaction to a group of roughly 150 persons, the minimum of 500-600 persons for an endogamous reproductive community, as well as a 5 kilometre radius limit for agricultural catchments (Bintliff 1999a). Between them, these factors would create a constant process of settlement fissioning and landscape infill, unless socio-political means could be developed that allowed for communities to transcend the limits of face-to-face interaction.

When a community succeeded in overcoming the face-to-face threshold and reached 500-600 persons, thus allowing endogamy (if rarely completely so), structural changes occurred within it. The socio-political innovations that allowed for larger groups to coexist at the same time created the conditions for the development of small city-states, perhaps better termed village-states or *Dorfstaaten* (Bintliff 1999a, 532-537). Yet the typical scale of these at 2,000 – 4,000 persons still allowed for face-to-face interaction among a group of less than 200 adult males, which in the case of the Greek *poleis* would constitute the hoplite class of warriors (Bintliff 1999b, fig. 7.1, p. 136). 123

¹²² Southern Crete has also revealed a more long-term record of cereal storage, as can be noted for the site of Ayia Triada where storage regimes from the Neopalatial through Post-palatial periods can be traced (Privitera 2014). Interestingly, the trajectory shows a contrast in storage capacity and uses between the LM IIIA2 administration from Knossos (when the harvest from *da-wo* was recorded on the tablets) and the preceding and succeeding periods (Privitera 2014, 443).

 $^{^{123}}$ A similar kind of argument, even if approached somewhat differently, is outlined by Kosse (1990, 282-284), who argues for a threshold of 2,000 – 3,000 persons for villages to retain an ethos of egalitarianism based on the face-to-face interaction of adult males. Furthermore, the threshold seems to correspond to changes in socio-political elaboration as well, at least as can be inferred from cross-cultural statistics (Feinman 2013a, 39-41). It is important to emphasise here

For the Bronze Age the same kind of processes can be recognised, starting already in the Neolithic (Bintliff 2012, 54-59). However, the limited impact of metallurgy on agricultural production before the development of iron-working circumscribed the potential for state formation, especially for smaller regions. Notably, when iron tools became widely available the productivity of crops did not increase, but rather the capacity of working the land and reaping the harvest relative to labour did. This allowed for greater farming surpluses. Yet in those regions where Mycenaean states developed, fairly dense population densities were achieved using Bronze Age technology, as can be seen for the settlement pattern of the Argive plain (Cherry & Davis 2001).

As noted earlier, it has long been recognised that there existed considerable differences in the trajectories and densities of settlement across different regions, and this impacted state formation processes as well (Cavanagh 1995). In some cases the trajectories of smaller sites and secondary centres seems bound up with the (political) expansion of the largest centres. A study of intensive and extensive survey data from the north-eastern Peloponnese shows this clearly. Here the number of small sites grew concurrently alongside the larger centres in areas immediately surrounding them, while in other regions such growth occurred only suddenly in LH IIIA-B, seemingly spurred by the expansion of the state (Wright 2004b, 127-128). In the region of Messenia a similar pattern can be observed in more detail, as the Linear B evidence allows some insights into the expansion of the state centred on Pylos to regional primacy (Bennet 1995, 1999). 125 This process also seems to have had an impact on the growth, or lack thereof, of certain sites (Shelmerdine 2001, 125-128). It should also be noted that in both regions many of the secondary sites were of sizes comparable to the *Dorfstaat* model, but they never developed into such states due to the development of regionalscale polities. Hence alongside a process of growth and landscape infill in the core regions like the Argive plain, in less central regions a pattern can be observed in which the socio-political factor of regional state formation impacted local settlement patterns and trajectories.

Economic relations are the third element of Mycenaean early civilisation to be discussed here. Before turning to the specific aspects of this, it is important to note briefly the overall paradigms that have shaped debates on this issue. Early work was greatly influenced by the concept of redistribution. This can be generically defined in the Mycenaean case as the mobilisation of resources by a centre which subsequently distributes them (Killen 2008, note 37, pp. 173-174). Originally this concept was based on parallels with the Bronze Age Near East and on anthropological models developed by Karl Polanyi and his collaborators (Finley 1957; Polanyi 1968a; Renfrew 1972, 480-482). However, the notion of redistribution has been comprehensively questioned recently (Nakassis et al. 2011). In part this is based on the realisation that palatial control was less extensive than previously thought in both the Aegean and Near East, an issue that will be further explored below. Another factor can be found in a shift in favoured anthropological models away from redistribution towards market exchange (Parkinson et al. 2013; Sjöberg 2004). Based partly on Mesoamerican parallels (Feinman 2013b), this approach seeks to broaden the recognition of a market considerably. This can be seen in the notion that "any negotiated exchange of goods is,

that this threshold should not be identified with a strongly determined typology based on differences in scale. Rather, it can be used to compare the different solutions adopted to address the socio-political problems inherent in the limits to face-to-face communication, as these derive from universal human biological features.

¹²⁴ This can be seen very well for a number of different survey areas on the Greek mainland that in the Bronze Age yielded small sites or even only a few sherds, but in the Archaic-Classical period saw the emergence of one or more *Dorfstaaten*. Perhaps the best example is that of the Argolid Exploration Project. In the LH period a pattern of small villages can be seen, with only scant evidence for hierarchy and a total estimated population of 1,800 people spread over 18 sites (Jameson et al. 1994, 368-372). By contrast in the Classical-Hellenistic period the population is estimated at 10,885 people, concentrated primarily in the two city-states of Halieis and Hermion (Jameson et al. 1994, 383-386). Although the Bronze Age landscape may be partially obscured due to taphonomic factors, the difference in population size and socio-political development is very clear.

¹²⁵ See figure 5 for a schematic outline of this process in Messenia.

in fact, a balanced, reciprocal market exchange regardless of the scale or degree of institutionalization of the market" (Aprile 2013, 430; cf. Parkinson et al. 2013, 418). 126

Even those sympathetic to the idea of Mycenaean markets have noted that this definition is rather too broad to be very useful (Shelmerdine 2013, 450), and in fact it has very little to recommend it. There is no credible evidence that the courtyards of Mycenaean palaces and settlements may have functioned as marketplaces, as recently proposed by Parkinson et al. (2013, 419). While we may acknowledge here the limited evidence for Mycenaean site layouts and households, it is revealing that the much better known Minoan settlements have not revealed any significant indications for the existence of marketplaces.¹²⁷ This implies that the actual function of a market-based system in the Aegean Bronze Age is far from proven. It is argued here that it is more useful to move away from typological uses of terms such as redistribution and market exchange, and explore the specifics of economic relations in more detail (cf. Earle 2011, 239). The first of these specifics to be considered here concerns landholding, on which the Linear B tablets give some tantalising if hard to interpret clues. The most important of these clues can be found in the Pylos E-series tablets, which deal with landholdings mostly in areas near the palace itself (*Documents*, 240-269). ¹²⁸ The property relations described in these tablets appear highly complex and somewhat oblique, involving estates of various sizes belonging to individuals of different statuses and occupations, as well as involving tenancy and obligations of services (Killen 2008, 162-168).

Although some of the plots listed in the E-series were held by the *wanax* and other state officials, most of the land was held by the *da-mo* (Killen 2008, 164). The interpretation of the *da-mo* is not straightforward, but in Pylos refers to administrative districts controlled by dedicated palatial officials (Shelmerdine & Bennet 2008, 300). On analogy with the later Greek *demos* it has been connected with long-term village-communities (Donlan & Thomas 1993), but this seems too specific and here the association with districts is retained. It is interestingly, there are indications that the landholding system and the service obligations associated with it, were based on a pre-existing system that was kept in place by the Pylos palace (Shelmerdine 2006, 74-75). Also relevant for landholding is the control and allocation by the palace of large numbers of working oxen, the crucial importance of which was noted earlier for the element of agriculture. Teams of oxen may have been supplied to the *da-mo* in a share-cropping arrangement (Halstead 1999). We might expect

¹²⁶ It is arguably a small step from such formulations to Adam Smith's idea of an innate human tendency to 'truck and barter'. The usefulness of Polanyi's work lay precisely in showing that such ideas have to be demonstrated as functioning within historically defined institutional settings (Polanyi 1968b). The main contemporary critique of Polanyi is of his rigid dichotomy between market and non-market societies (Heejebu & McCloskey 1999, 288-90), one that is often repeated in archaeological discourse (Parkinson et al. 2013, 418; Smith 2004, 75-76). While it is clear that sometimes Polanyi overstated his case on market-less exchange (Dale 2013), in other work he devoted much attention to investigating the role of markets alongside redistributive systems in the Greco-Roman world (Polanyi 1977, 145-276). The key to this is the distinction between markets as places of exchange, alongside other forms of economic relations, and the use of a market system for the ordering of societies as a whole (Polanyi 1977, 123-126). This point is accepted here, based on its likeness to Braudel's distinction between markets and capitalism discussed in section 2.3.1.

¹²⁷ The only feature that can be interpreted as a market, even if in name only, is the so-called *Stoà del Mercato* that was built in LM IIIA2 at Ayia Triada, which featured a stoa-like structure in combination with a large storage area and was

built in LM IIIA2 at Ayia Triada, which featured a stoa-like structure in combination with a large storage area and was associated and later connected with a Mycenaean-style corridor house (McEnroe 2010, 136, 144). A similar association between a stoa-like structure and storage facilities can be seen at the same site in the Neopalatial period (McEnroe 2010, 110). These structures have not been used to argue for marketplaces in Minoan and Mycenaean Crete, and rather may be a site-specific feature. Furthermore, as noted earlier the storage practices at Ayia Triada can be understood as part of a a regional, long-term system involving administrative control.

The more sparse references to landholding from other sites suggests the same terminology was used here (Palmer 2002, 224). A detailed analysis of the Pylos landholding record suggests that these terms formed part of a well-developed template for administrative purposes (Lane 2012, 100-101).

¹²⁹ This can be seen in that the almost 800 tons of cereals appropriated by the Knossos palace came from the *da-mo* of *da-wo* in southern Crete (Killen 2008, 172). This amount of agricultural surplus clearly transcends the boundaries of what can be mustered by a village, and more clearly fits a larger district focused on a second-tier centre.

that as in Mesopotamia (Moorey 1999a, 2-3) metal farming implements would be distributed by the palaces, but the tablets are silent on this. The rather meagre record of metal agricultural tools from the Aegean Bronze Age is dominated by sickles (Blackwell 2011, 79-80), which were used to augment human muscles in the farming labour bottleneck of harvesting. As such, with landholding the Mycenaean palaces seem to have adapted to pre-existing systems and used them for the extraction of agricultural surplus rather than impose direct bureaucratic control over farming.

Of crucial importance in moving the debate away from typology is the question of how exchange and the determination of value functioned in technical terms. There is no evidence for coinage or any other all-purpose money in the Bronze Age Aegean (Killen 2008, 173-174; Schaps 2004, 57-62). This implies that the four main uses of money as means for payment, as standard of value, as store of wealth, and as means of exchange (cf. Polanyi 1977, 102-103) were not as yet fused together in a single object. The result of this was that different equivalencies had to be calculated or established by different means for the different uses of money. ¹³⁰ Polanyi (1968, 321-328) had tried to make a contribution to this through his concept of 'sub-monetary devices' that posited a composite tax unit, which would yield a number of different materials and/or goods in fixed proportions to each other. Although this was only a brief formulation, subsequent research has shown that taxes were first calculated for the state as a whole, and then divided over the different administrative units (Shelmerdine 2008b, 146). These taxes consisted of raw materials, except for simple garments (Killen 2008, 189-191). Much research has been done since, however, showing that the notion of redistribution has to be greatly qualified.

Within the palatial sphere redistribution can be recognised in the *ta-ra-si-ja* system, where a given amount of raw materials was supplied to craft-workers who were obliged to produce a certain number of products, primarily textiles and metals (Burke 2010, 72-74; Killen 2008, 177; Nosch 2006). The greatest amount of palatial control can be seen in groups of textile-workers dependent on rations, to be discussed in more detail for the element of class and inequality. While this can still be seen as part of a redistributive economy, there are many crafts that are not covered in the tablets, or at least not at a scale that would cover the total production of the kingdom. A case in point is that of pottery, where the Pylian evidence shows only limited needs and palatial intervention (Hruby 2013; Whitelaw 2001b), while the data from Mycenae and the Argolid seems to show more elite control (Galaty 2010; Pullen 2013, 440). Where with pottery there was at least some palatial involvement, an analysis of chert in the Argolid shows that it seems that its production and exchange took place completely outside the palatial sphere (Newhard 2003, 118-119). As such there seems to have been a continuum of complete palatial control of craft through dependent workgroups to other kinds of craft seemingly practiced without palatial control at all.

Because of this variation a 'two-sector' model has been proposed, with one sector controlled by the palaces and another independent of that, if still interacting with the palatial sphere (Halstead 1992, 116). The problem with positing such 'sectors' is that the Linear B evidence is so fragmentary, and indeed may not have covered all palatial involvement. This makes it nearly impossible to ascertain whether any archaeologically recovered location of craft production was truly independent or not.

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The claim for references to monetary-like exchange in Linear B, as argued for in (Sacconi 2005), cannot be seen as analogous to the use of an all-purpose money like later Greek coinage. That is, even this claim were to be accepted, the four money functions of payment, storage, exchange, and treasure remained distinct from each other (cf. Seaford 2004, 16-19). The term *qi-ri-ja-to*, which etymologically related to later Greek *priato* ('bought') only occurs in the context of humans, as in Homer (Killen 2008, note 38, p. 174). There is no abstract measure of value applied to the exchange of these humans. With regards to archaeological finds, it has been proposed that miniature metal axes found at a few sites on Minoan Crete may have been used as money (Michailidou 2003, 311-314). Even if they indeed functioned as means of payment, rather than as votives or for other ritual purposes, there is nothing to suggest that they were used as an all-purpose money like coinage.

Instead the analysis of personal names suggests that it may be more fruitful to consider dependence and independence in a common framework (Nakassis 2013, 173-186). The metal-workers seem to have enjoyed a relatively high-status and acted independently, in clear contrast to the dependent textile-workers, but the smiths remained within the palatial context (Nakassis 2008, 2013). Similarly a survey of the various kinds craft-work carried out in sanctuary contexts leads to a conclusion that here too there is no dependence upon the palace, but rather the assertion of a certain degree of independence within the overall framework provided by the palace (Lupack 2008, 162-167). To be able to more fully comprehend these forms of independence, it can be useful to consider in more detail the means of exchange that connected the different individual and institutional actors.

Of central importance in exchange was the use of weighing instruments in accounting for the different raw materials and products and establishing equivalencies between them, even if measurement by volume also occurred (Michailidou 2010, 74-75). Analysis of weights within and outside the Aegean have shown that it was fully integrated in the weighing *koine* of the eastern Mediterranean (Alberti & Parise 2005; Pakkanen 2011). More problematic is the role of seals in the Mycenaean administration and exchange, as the manufacturing of hard-stone seals ceased by the end of LH IIIA and only soft-stone and glass ones were made in LH IIIB (Krzyszkowska 2005, 234). This has led to the observation that seals were not as important as in the preceding Minoan palaces, mostly limited to the movement of goods to and from the palaces and outlying regions (Younger 2010, 337). An analysis of the evidence from Pylos suggests more complex uses (Flouda 2010). There also was a connection with Linear B in the form of inscriptions on some sealings (Palaima 2000, 262), and as with the tablets the evidence from the different palatial sites shows a high degree of uniformity (Krzyszkowska 2005, 284; Panagiotopoulos 2010, 299-300). Furthermore some evidence points to the transfer of goods over significant distances, as with the Thebes sealings that describe the mobilisation of resources for a feast from far-flung sites (Dakouri-Hild 2005).

The standardisation of Linear B, weights, and sealing systems indicates the importance of the overall framework of the Mycenaean states for facilitating exchange. It was already noted by Morris (1986, 185) that within this overall framework there may well have been scope for markets, in particular at the local level. As noted earlier such markets cannot be recognised in the archaeological record so far. Furthermore, the interaction between local communities to acquire goods from distant places was already present in the earlier phases of the Neolithic, and can be grasped along the lines of reciprocal exchange (Perlès 2001, 294-296). More interesting than the hypothetical notion of marketplaces is the question whether the so-called 'corridor houses', like the Ivory Houses at Mycenae, ¹³² can be said to have had a 'private' or 'public' function (Burns 2007; Pantou 2010; Tournavitou 1995, 2006). There are some indications that the attribution of such functions was more flexible and could actually change over time (Pantou 2010, 266-70). As such, it seems that a rigid distinction between 'public' and 'private' should be avoided. This point seems to be reinforced by an analysis of the personal names in the Pylos Linear B tablets referred to above.

If accepted, it makes possible another perspective in which certain (elite) houses play an important role in socio-economic relations. The idea of houses as 'actors' in their own right is an idea has already been explored for Minoan Crete (Driessen 2010). The role of houses can also be seen for

¹³¹ A generic pattern of metallurgical production being small-scale and spread out seems to have been current for the Aegean Bronze Age as a whole, with little evidence for centralised, state-based control over this form of craft-work (Tzachili 2008, 25-26). This observation sits somewhat uneasily with the seeming elite-based control over copper ingots used in exchange discussed below.

¹³² These four houses immediately show the complexity of the issue as in fact they are not really separate houses but can be seen as being part of a larger complex, albeit including residential areas (Burns 2010, 148). There are other examples of elaborate houses at Mycenae as well, however, such as the Panagia group (Shear 1987). Some of these houses will be discussed for contexts of art in section 5.2.

LC IA Akrotiri, where different houses seem to have been involved in significant economic activity using weighing systems (Michailidou 2010, 77-9). Find contexts of weights in houses can in fact be observed for the palatial societies of Crete and the mainland as well (Michailidou 1999, table 1, pp. 89-91). It is certainly not inconceivable that Mycenaean elite houses could have played a similar role, using the standardised system of weights and perhaps also Linear B and sealings. Rather than to seek to develop this idea through Levi-Strauss' (1982) notion of 'house societies', it would be better to look for parallels with recent work on the role of households and patrimonialism in the Bronze Age Near East. Based on work at Late Bronze Age Ugarit, Schloen (2001, 310-311) argues that the evidence of the houses at Mycenae points to some similarities. This does not imply that such a template can be directly imposed on the Mycenaean evidence, but it does point to a way to investigate in more detail the role of houses. Although much remains to be investigated, elite houses would make for more plausible foci of semi-private economic activity than marketplaces.

One very interesting point concerns the question where the input for these equivalencies derived from, which brings up the matter of consumption. Here the role of prestige-objects and ritual feasting have been recognised as especially relevant, something already recognised in the 1980s (e.g. Morris 1986). The idea developed by Killen (1984, 254, 262) of the palaces as producing highprestige goods for both gift-exchange and display within the palaces is of some use here. He cites analogies with the Near East and Homer to argue for the prestige associated with the storage of at least some of these items in palatial contexts (Killen 2008, 177-181). The larger-scale textile production capacity may have played an important role in this as well (Burke 2010, 104). The notion of storage is tied up closely with the model of redistribution, while others seek to stress the expenditure of resources on performance in feasting activities, coupled with a form of wealth distribution (Nakassis 2010, 138-139). Citing these two positions hides much underlying complexity, but in general terms the palaces can be seen as places where value was created (cf. Dakouri-Hild 2012, 477-479). The precise balance between the storage and display of prestigeobjects, as well as performance in feasting and ceremonies more generally remains to be determined. In this the agency of monumental and non-monumental art plays an important role in evaluating the specifics of this balance, and this question will be addressed in detail in section 5.3.

An element closely connected to economic relations is that of long-distance exchange. In a way this would seem to merely extend the reach of the previous element, but the different geographical context also implies differences in the character of exchange relations. First of all it is important to briefly note the main things that were exchanged. Very important were the metals, with the demand for copper and arsenic or tin to produce bronze alloys creating a need for long-distance imports given the limited Aegean resources in this regard (Bintliff 2012, 85-86). Such ingots were exchanged in the form of ingots of copper and tin (very rarely of bronze), as can be seen in the Uluburun shipwreck dated to the end of the 14th century BC (Mee 2008, 364). These ingots are more closely associated with high-level exchange among states (Sherratt 2000, 83), and this would extend to the glass ingots found in the Uluburun wreck as well, as will be discussed in section 4.3.2. However, evidence from another shipwreck at Cape Gelidonya, dated to the late 13th

¹³³ The model of Levi-Strauss is held to be problematic here because it is used to do two things at the same time. On the one hand there is the notion of a 'house society' as a recurring if not universal form of social organisation, and on the other hand it also serves to look at the social, economic, and political roles of houses (Gillespie 2000). It is argued here that these should not be conflated, as the investigation of the role of houses transcends 'house societies'. Furthermore, as a model it almost harkens back to cross-cultural typology based on ethnographic parallels, a method that was strongly critiqued in section 2.4.2. In contrast to this the role of households and patrimonialism in the Bronze Age Near East can be grasped within the context of its macro-regional *longue durée* (Schloen 2001, 101-116).

¹³⁴ It has been argued that the copper ingots functioned as a standard of value in exchange over a wide area stretching from the western Mediterranean to the Black Sea (Kassianidou & Knapp 2005, 237-238). As such they would have been convertible not only in the sense of being exchangeable for something else, but through metallurgical processing could literally be converted in to a variety of forms and objects (Sherratt 2000, 83). The older idea that the 'oxhide' shape

century BC, shows the exchange of scrap metal as well (Mee 2008, 365). This is suggestive of the long-distance exchange of metal separate from direct state control, quite possibly by smiths and merchants themselves (Muhly 2009, 26; Sherratt 2000, 87-88).

These notional merchants could also have been responsible for the widespread distribution of Mycenaean ceramics, especially in the eastern Mediterranean but also in its western part (Van Wijngaarden 2002). A key question in this is how these merchants would relate to the palaces, an issue already noted by Finley (1957, 135-136) as being very hard to determine. Based on the finds of personal items in the Uluburun wreck it has been proposed that there were palatial emissaries on board (Pulak 2005, 308-309). More systematic insights can be derived from the weighing systems used over a wide area, stretching from the Aegean to the Indus, since the third millennium BC, a development closely related to both long-distance exchange and internal administration (Rahmstorf 2010, 2012). Weights functioned as cognitive tools for converting equivalencies over long distances, but at the same time also allowed for the control over exchange as they required specialised knowledge and some kind of authority (Mederos & Lamberg-Karlovsky 2004, 204-207). This created in effect an 'international marketplace' in which merchants of various stripes could interact, but this should not be conflated with an over-arching market system, as concluded by Aubet for Old-Assyrian trade:

"The merchant speculated on prices and the value of the merchandise and calculated profits as a function of the prompt delivery, either plentiful or inadequate, of metals and textiles; this, in turn, depended on the regularity of the caravans. Hence, as the evidence indicates, price fluctuation was a circumstantial rather than a structural factor and not a determinant in the Old-Assyrian economy. Nor does the use of silver as a measure of value and means of exchange imply the existence of a market economy. The real determinant in the Old-Assyrian colonial circuit and the chief source of income for the commercial firms and the Assyrian administration was the difference in the prices of tin, silver, gold, iron and textiles between Assur and Anatolia." (Aubet 2013, 369)

As noted earlier for economic relations weighing systems were very much present in the Aegean, and in fact evidence for them can be traced as far back as the Early Bronze Age (Rahmstorf 2003). However, based on a comparison with typical 'merchant assemblages' from contemporary eastern Mediterranean regions most finds of weights in the Aegean seem to indicate use in local economic activity (Hafford 2001, 347-348). Only in the Late Bronze Age can coherent signatures of merchant tools be recognised, including for the Mycenaean mainland (Hafford 2001, table 9-6, p. 367). Just as with the intra-polity economic relations discussed earlier, a mix of 'private' and 'public' roles in long-distance exchange can be inferred from the distribution of weights and the exchange of scrap metal and pots. One good model for this has been developed for the Late Bronze Age city-state of Ugarit in Syria, where a network-based approach has been used to understand the connections between the different groups involved in long-distance exchange (Routledge & McGeough 2009). The further development of such models can allow for a better causal understanding of the impact of broader shifts in trading patterns on the Mycenaean palaces (cf. Sherratt 2000, 89).

Moving from economic to socio-political patterns, the next element to be considered is that of state form. Models proposed for this show considerable variation, ranging from the notion of micro-states embedded in their regional contexts and resembling in some ways, if at a lower scale and with important differences, the Classical city-state (Wright 2010, 250-253), to the theory that a Great

signals a close relation with oxen as a standard of value seems now an obsolete conjecture (Muhly 2009, 18).

Much more research in this regard can be done for medium-distance exchange and especially for the role of elites and the palaces in this. For example, it has been suggested that sealed stirrup jars from the House of the Oil Merchant at Mycenae indicate the longer-distance transfer of oil from western Crete (Krzyszkowska 2005, 289).

Kingdom dominated the mainland (Kelder 2010). In order to grasp the weight of the evidence relative to these two opposite poles, it is best to start at the regional level. It was already noted for the element of urbanism how in the Argolid and Messenia settlement patterns were impacted by the expansion of palatial authority, incorporating incipient *Dorfstaaten* as secondary centres. ¹³⁶ In this sense it is more appropriate to refer to them as regionally embedded city-states, rather than as territorial states. This model is strongly backed by, where it is available, the Linear B evidence. 137 The elaborate hierarchy of administrative, religious and military offices of the Mycenaean state was closely embedded within a regional framework (Nosch 2008, 603). This includes offices that were tied to administrative units like the da-mo-ko-ro in charge of a province and the ko-re-te and po-roko-re-te who oversaw districts (Shelmerdine 2008b, 133).

At the apex of the state hierarchy stood the wanax, which has been commonly interpreted as a monarch (Documents, 120). From the tablets it can be inferred that the wanax had religious and administrative duties, in addition to being closely involved in a variety of economic activities that seem to have formed part of a royal domain (Shelmerdine 2008b, 128-129). Below the wanax a variety of offices existed to exert close control over those issues that were deemed important for the state, with many of their occupants also involved in economic matters, as will be further discussed below for inequality. While Linear B gives a brief glimpse into the workings of the state, only archaeology allows for tracing the *conjoncture* of its emergence. An important feature in this regard is the funerary record, which, just as with the settlement data, shows considerable regional variation. 138 The case of the Argolid is again instructive, owing to the early elaboration of the Shaft Grave circles at Mycenae. The tombs point to a conspicuous display of the wealth of certain lineages, using the prestige goods or keimelia mentioned above, which were often gained through long-distance exchange (Voutsaki 1999, 109-112; Wright 2008, 238-239). In due course with the elaboration of palatial architecture and administration, however, it is possible to observe a shift to state structure, whether conceived of as from chiefdom to state (Wright 1995) or from a kinshipordered society to one based upon a political economy (Voutsaki 2010a, 104-105).

At the transition from LH II to IIIA it is possible to argue that incipient regional city-state systems were emerging on the Greek mainland. This does not mean that stability reigned thereafter, however, as can be inferred from the destruction of Gla already before 1200 BC (Iakovidis 2001, 156-157) and the fact that the 'further province' of Messenia was not brought under the control of Pylos until the LH IIIB period, after a period of gradual expansion (Bennet 1999, 142-149). Meanwhile the Linear B references to administrative linkages between different regions are scant (Bennet 2011, 150-151). Even so there are some indications from finds of soft-stone sealings in peripheral areas that the 'bureaucratic field', rather than direct control, of the palaces extended beyond their core regions (Eder 2007a, 40). All of this puts into considerable doubt the notion of a

¹³⁶ There are good parallels for this in the megalopoleis of Classical Greece, which also grew to regional levels by incorporating nearby communities as districts, dependent settlements, or dependent poleis. The territorial size of such megalopoleis could range from 1,000 to 12,000 km² (Hansen & Nielsen 2004, 72). See for a human geographical account of the expansion of megalopoleis (Bintliff 1994). The difference for the Bronze Age is that the available technology and social system, such as the means of exchange, constrained the emergence of very large cities.

¹³⁷ It is unfortunate that the Linear B record of the different sites in the Argolid has very little to say about the geographic outline of the state(s) present here (Bennet 2011, 156-157). The result is that it is not possible at present to determine whether the palaces of Mycenae and Tiryns, among many other larger sites here, formed part of a single regional state or were divided into two or more states. It should be stressed, however, that the existence of multiple palatial structures certainly does not rule out that they were part of the same state (Crouwel 2008, 270).

¹³⁸ This concerns not only different types of tombs favoured in different regions of the mainland, but can also extend to the societal significance of these patterns, for example in the more gradual trajectory of Pylos and other centres in Messenia as compared to the sudden emergence of Mycenae (Voutsaki 1998, 55-56). An even bigger difference can be observed between the mainland and Crete in this regard, even if there are clear Mycenaean influences in the funerary record of the LM II-III period (Preston 2004).

large territorial state called *Ahhiyawa* on the Greek mainland, in particular because the earliest references to this name in the Hittite record date from the late 15th and early 14th centuries (Beckman et al. 2011, table 1, p. 7). Yet as notes earlier at this point even the regional city-states were only weakly developed. Nor is it altogether proven, even if there is some plausibility to the idea, that *Ahhiyawa* was necessarily located on the Greek mainland (Bennet 2011, 161-162). If it was, then it may not so much have constituted a hegemonic polity but rather a bonding together of forces, as can be seen for the Greek military formations under Agamemnon in the *Iliad* (Beckman et al. 2011, 5-6; Bintliff 2012, 186).¹³⁹

Closely related to state form is the next element to be discussed here, that of military organisation. The broad outlines of what may be termed a 'warrior culture' can already be seen in the Shaft Graves of Mycenae (Blakolmer 2007; Harrell 2012). The broader geographical extension of such images and their relation to the art of the later Mycenaean palaces will be discussed in section 5.2.3. In terms of organisation there is a clear shift from this 'warrior culture' to palatial hegemony and control of military forces (Acheson 1999; Harrell 2009, 165-167). Although the Linear B tablets give no blueprint of the military organisation of the Mycenaean palaces, several important aspects can nevertheless be noted. One of them concerns the recording of military equipment, especially that relating to chariots (*Documents*, 360-381). This implies some degree of control over weaponry by the palaces, even if the extent of this cannot be reliably estimated based on the limited evidence. The tablets from Pylos also point to palatial involvement in the organisation of military forces such as 'rowers' and 'coast watchers' in association with certain place names (*Documents*, 183-194). One notable feature in this is the relation at Pylos between these military duties and the landholding terms (Shelmerdine 2006, 78), which were discussed earlier for the element of economic relations.

The impact of the emergence of the palaces and the extension of their control can also be observed in the 'infrastructure' of warfare, primarily in fortifications and roads. Fortifications can already be noted for the LH I-II period, but the large-scale 'Cyclopean' fortifications had to wait until LH IIIA (Fitzsimons 2011, 103; Hope Simpson & Hagel 2006, 26-27). At the same time it should be noted that not all palaces seem to have had the Cyclopean-style fortifications so well-known for the Argolid. This can be seen in the lack of clarity with regard to the presence and character of fortifications at the Pylos palace (Bennet & Davis 1999, 105-106). The best evidence for road networks also comes from the Argolid (Cherry & Davis 2001, fig. 10.1, p. 143). There is some debate on whether these roads would have been used primarily for military purposes or to transport goods for economic reasons (Hope Simpson 1998; Jansen 1997). The most plausible military use is for the rapid movement of forces using chariots (Hope Simpson & Hagel 2006, 170-175). Apart from such land-based evidence for warfare, the palaces could also extend their power

¹³⁹ Some Near Eastern references point to the use of such terms to denote 'lands' rather than states, as in the Hittite usage of the 'land of Hatti' (Postgate 2010, 31-32). This could point to a possibility that the frame of reference in these sources is more accommodating to political divisions within Ahhiyawa, a notion to be explored further. In her diachronic model of the development of Mycenaean political economy Morris (1986, 186-187) pointed out that it may have been possible that a centre such as Mycenae would have established reciprocal relations with the other regional centres through the control and redistribution of prestige-objects, especially those acquired through long-distance exchange. From the analysis of the number of 'contacts' between the Greek mainland and the eastern Mediterranean it appears that Mycenae dominated in this regard from LH I through IIIB (Parkinson 2010, fig. 2.2, p. 23). The rich finds from the citadel of Thebes, in particular the imported lapis lazuli cylinder seals, belie the picture of a complete dominance of Mycenae, however. Furthermore, it should be noted that the single reference to a 'Great King' of Ahhiyawa is considered ambiguous by some Hittite scholars (Bryce 2003, 70-72).

¹⁴⁰ The case is quite different for Crete, where the introduction of martial elements in burials from LM II onwards (e.g. Alberti 2004) takes place in a context in which palatial states had existed for centuries. The role of warfare during this period is subject to reinterpretation (Molloy 2012), but the different trajectory in the articulation of weaponry in burials compared to the Mycenaean mainland is clear.

The so-called *e-qe-ta*, translated as 'followers', seem to have acted as intermediaries between these locally-based forces and the palace (*Documents*, 544).

geographically through naval forces. This adds another dimension to the territorial scope of the palatial states and that of smaller-scale polities as well, as has been explored through the concept of 'seascapes' in different regions of the Greek mainland and their coasts (Tartaron 2013).

The seventh element to be discussed is of class and inequality. This aspect of Mycenaean early civilisation remains somewhat underexplored at the level of synthesis, with analysis focusing mostly on specific sources such as Linear B and the burial record. One exception is the model of 'transegalitarian societies' developed by Wright (2004a), but this is a long-term model that has so far not adapted to the Mycenaean case in detail. Scholarship on the Near East (Boer 2007; Schloen 2001) and the Greco-Roman world (De Ste. Croix 1981; Finley [1973] 1999; Kamen 2013; Rose 2009) by contrast has allowed for sophisticated debates on class and inequality involving both source-critical analysis and synthesis. It is not possible here to review these debates in detail, but one notable insight that has emerged from them is that the relationship between class in an economic sense and its impact upon political mobilisation is a tricky one. For example, factors such as political roles or status may have played a more determining role (cf. Finley [1973] 1999, 49-51). This is not the place to provide a synthetic account of Mycenaean class and inequality, yet inspired by the work just mentioned at least a few patterns can be discerned.

The first of these concerns the question of slavery. The term *do-e-ra/ro* occurs in the tablets and has an etymological connection to the later Greek term *doeros* for slave, but its identification as slave is in many cases not straightforward (*Documents*, 123-124). Some of the *do-e-ra/ro* are in fact subjects of deities and can own plots of land. A better interpretation of the term may be as a 'servant' (Nakassis 2013, 14-15). Apart from the people designated as *do-e-ra/ro*, there are also groups of female textile-workers that are seen as comparable to slaves (Shelmerdine 2008b, 139). The reason for this is that they were organised as coherent groups and dependent upon the palace for rations. The presence of such work-groups involving hundreds of textile-workers is attested at both Knossos and Pylos (Burke 2010, 93-94, 97). The existence of such groups is well-known for the Near East as well (Uchitel 1984), where the initial emergence of textile workshops is related to the development of a political economy and the subordination of female textile-workers (McCorriston 1997). Based on the evidence from the tablets it is likely that the members of some of these groups derived from outside contexts, perhaps taken as captives (Chadwick 1988) but this only constitutes a minority of 468 out of a total of 2,899 recorded dependent groups of workers in the polity administered by the Pylos palace (Efkleidou 2002-2003, 274).

Another pattern concerns the notion of patrimonialism that was discussed for the element of economic relations. Given that even the economic function of the Ivory Houses and similar cases remains to be fully determined, it is best not to go too far in interpreting them in social terms. More information can be derived from the Linear B sources. The analysis of personal names in the Pylos tablets suggests that alongside the 100 or so officials listed in them about 800 personal names can be discerned, which points to a broader elite group (Nakassis 2013, 173). The tablets only point to individuals, however, whereas they would have been part of families and broader kinship networks. Here the burial evidence can be more informative, even if it is not possible to relate it in any way directly to the Linear B evidence. Most notable in the LH IIIA-B periods is that the so-called chamber tombs seem to become accessible to a broader group of people, with richer and poorer versions being grouped together in clusters (Mee & Cavanagh 1984; Cavanagh & Mee 1998). Taking into account the evidence from all kinds of burial, a fairly large 'elite' group may be

¹⁴² There have been suggestions based on the burial evidence that women were under-represented, even if there are no clear differences in the wealth deposited in burials that can be identified as male or female (Mee 1998). It has been suggested that for the position of women considerable differences can be observed in the Linear B tablets from Knossos and Pylos, with more expansive roles for women in the former case (Olsen 2009).

¹⁴³ The authors conclude that this indicates a form of patronage between families:

discerned (Dickinson 2006, 39). It should be taken into account that both the personal names and the burial evidence (which are by no means identical) combine aspects of status and economic roles.

Not to be neglected is the role played by the corporate bodies of the *da-mo* and the sanctuaries. As noted earlier, their relation to the palace entailed a degree of independence within the over-arching state system. Especially interesting in this regard is a text that shows arbitration by the palace in the case of a conflict with regard to landholding between a priestess and the *da-mo* (Nakassis 2013, 170-171). This is just one isolated example of what must have been a wider set of judicial relations, if not necessarily codified in law, which would have regulated social and familial relations as well. Of the reach of the palace in these matters little can be said, even if it is likely that through the locally-based officials it would have had the ability to be involved. Having briefly outlined these patterns, it would seem that just as for the Greco-Roman world the pattern that can be observed for class and inequality in the Mycenaean case is multi-dimensional. Direct economic exploitation can be seen in the groups of female textile-workers, taking place within the bureaucratic framework. For the majority, however, it is likely that inequality was structured through the two parallel lines of patron-client relations and the corporate bodies of the *da-mo* and the sanctuary. This represents a mixture of economic, status, and judicial relations.

The element of monumental architecture and art will of course be extensively discussed in the next two chapters, but here some remarks need to be made with regard to the use of over-arching terms such as Minoan and Mycenaean as cultural signifiers. Analogies with modern conceptions of ethnic identities for these terms, which are etic ones invented by modern scholars, are highly doubtful (Preston 2008, 311-312). References to (parts of) the Aegean in contemporary texts from other eastern Mediterranean early civilisations would refer more to a polity or geographical area, rather than a specific and well-defined ethnic group in the modern sense. A significant number of the names listed in the Linear B tablets indicate different origins in terms of language and geography, including from areas outside the Aegean (Nikoloudis 2008a). It would seem more promising to relate the notion of Mycenaean-ness to socio-political patterns and their ideological manifestations in monumental architecture and art. In particular it is important in this regard to consider the interaction between the palaces and the social subdivisions they incorporated. For example, it has been proposed that Mycenaean culture was limited to the upper class, interacting in a peer polity network (Feuer 2011, 528-530). The emergence of this culture before the emergence of the palaces and its persistence for a considerable period thereafter calls for further qualifications to this. 144 As with the impact of Minoan culture across the Aegean, the impact would not have been limited to material culture (Broodbank 2004), but also includes other factors like linguistics (Renfrew 1998).

Turning now to the element of specialised knowledge, the first aspect of this to be discussed is that of Mycenaean conceptions of the supernatural. From the Linear B tablets it can be inferred that the vocabulary for key aspects of religion such as *theos* (deity) and *hieros* (holy) were the same as for the Archaic-Classical Aegean, and many of the names of deities are the same as well (Palaima 2008, 348-350). This indicates the presence of a pantheon of (predominantly) anthropomorphic deities, even if there are important absences of Archaic-Classical deities and presences of gods that would

[&]quot;Thus the conclusion reached in our earlier [1984] paper was that each cluster may have consisted originally of a nucleus of one or two tombs but by LH III the clusters might comprise the tombs of up to a dozen families, rich and poor. Because of the disparity in the size and wealth of tombs, and thus in the status of the families concerned, we would propose some loose political alliance whereby the poor associated themselves with the rich in death. That side by side with the hierarchical divisions indicated by the tablets, there were local associations and alliances which bound together families of different wealth and status." (Cavanagh & Mee 1998, 234)

¹⁴⁴ Of course these qualifications do not rule out that elite groups would have been involved in this, a question that will be further explored in chapter five for the contexts and agency of Mycenaean art.

later disappear. A pantheon can also be seen in Minoan Crete (Moss 2005), but as this is based mostly on iconographic sources the relation to the Linear B names remains unclear. This is a question that will be briefly addressed in section 4.4.2. A substantial priesthood, both male and female, served these gods (*Documents*, 128-129), many of them organised in the sanctuaries discussed earlier. Deities could be closely associated with natural forces, as the epithet Earth-shaker on a Knossos tablet makes clear (*Documents*, 309), and some of these forces may possibly have been worshipped directly as the title 'priestess of the winds' indicates (*Documents*, 307).

Neither the tablets nor art allow for precise interpretations about Mycenaean conceptions of the cosmos and cosmogony. For Minoan Crete at least some archaeoastronomical work suggests that a sophisticated lunisolar calendar was used to keep time (Henriksson & Blomberg 2011), but much more work is needed in this regard. There is no recording of astronomical phenomena in the Linear B tablets, making it impossible to know whether astronomical knowledge in the Aegean was as developed as it was in Mesopotamia (Watson & Horowitz 2011). It is possible to note, however, the geographical ordering of the regional kingdom of Messenia by the Linear B scribes (Bennet 1995, 1999). This can be seen as a basic example of the state creating 'legibility' by simplifying reality into a clear theoretical framework (cf. *Myths*, 94). The creation of geographical order through textual recording of lists of toponyms can also be seen in the contemporary Near East. This includes not only the conception of the boundaries of kingdoms (Liverani 1990, 89-90), but also the description of the trip of an Egyptian emissary to the Aegean (Cline & Stannish 2011). Yet it is not known whether the more complex forms of knowledge that can be inferred for the Near Eastern scribes can be held to have been present in the Bronze Age Aegean as well. 146

Writing was just one of the 'control mechanisms' of the Bronze Age states exiting in an area stretching from the Aegean to the Indus, alongside seals and weighing systems (Rahmstorf 2012, 312-316). Seals have already been discussed for economic relations, so here the focus will lie on mensuration. The use of weighing systems in socio-economic systems involves two interrelated tasks: a) the determination of the weight of a material or object, and b) ascertaining the value of the material or object within specific exchange relations (Michailidou 2005, 15). As such, the weighing *koine* discussed earlier can be grasped as part of a 'commodity nexus' that developed in the eastern Mediterranean, Near East, and the Indus Valley (Renfrew 2006, 2012). In this nexus measure and value worked together to make possible the exchange of materials and objects as commodities (Renfrew 2012, fig. 12.1, p. 254). It is important to stress the role of metallurgy in the development of these weighing systems, as they allowed for the accounting not only of metal, but also of semiprecious stones and material for pigments (Rahmstorf 2010, 95).¹⁴⁷

One great qualification in all of this should be made. As discussed for the element of economic relations, there was no all-purpose money such as coinage present in the Bronze Age Aegean. With the development of coinage in Archaic-Classical Greece, the specifics of the commodity nexus changed as well. Coins as indices of standardised units of value created important changes in the

¹⁴⁵ It is likely that long-lived, symbolically significant sites like Knossos were conceived of as cosmologically significant (Soles 2001), and may well have been important for astronomical observations. Another question concerns the long-term use of certain iconographic motifs and their possible relation to cosmological ideas (Goodison 1989).

¹⁴⁶ One contentious issue for the Bronze Age Near East remains the notion that writing made possible new modes of thinking, as argued by Goody (1977) in his 'literacy thesis'. Particularly relevant for the present discussion is his idea that the abundant use of lists in Near Eastern texts led to a different mode of classification than was possible in orally-based communication (Goody 1977, 105). This distinction between oral and written has since been nuanced, but nevertheless the scribal lists are still held to be structurally different from classifications based on oral representation only (Watson & Horowitz 2011, 26-30). Something similar could be present in the Linear A and B scripts, although less research has been done along these lines.

¹⁴⁷ The connection between metallurgy and value systems was also developed in another way for the gold objects in the 5th millennium BC burials of Varna in Bulgaria (Renfrew 1986b). This particular issue will be addressed in section 5.3.

(philosophical) conception of objects and materials, which can now be tied to abstract and universal principles of value (Seaford 2004). This was not the case in the Bronze Age. Even if certain metals could have money purposes, as with silver in Mesopotamia (Moorey 1999a, 137-138), it was not as an all-purpose money. The combination of material and money-sign (stamped by the state) was lacking. Furthermore, metals were convertible in more than one sense, being able to be shaped in many different kinds of forms including art objects (cf. Sherratt 2000, 83). Hence the qualities of materials and objects in the Bronze Age would be convertible in the sense of being exchanged with another material or object, or in the sense of being physically transformed into something else through the process of craft-work. Yet these qualities would not be transferable to an abstract, universal measure of value represented through coinage. This makes it unlikely that a theoretical distinction between nature and culture was made during the Bronze Age, nor earlier at the onset of the Neolithic (cf. Trigger 2006, 465-466).¹⁴⁸

The tenth and final element of Mycenaean early civilisation to be discussed here is that of feasting and the cycle of public festivals. Aegean prehistoric archaeology has made much use of models of feasting derived from anthropology, as can be seen in two recent collections of papers (Hitchcock et al. 2008; Wright 2004c). Feasting activities can already be observed for the Neolithic (Halstead & Isaakidou 2011b), but in the Bronze Age there is the impact of state formation on feasting practices. One of the changes induced by this development would be the greater focus on the 'diacritical' aspect of feasting, that is the highlighting of status distinctions in the way such activities were carried out (Bendall 2004, Haggis 2007). Another change would be the development of a calendar of religious public festivals tied to the state, as can be tentatively and partially reconstructed from the Linear B record (Younger 2007). This does not mean that feasting and public ritual should be seen as identical (cf. Wright 2004d, 46), and more private feasting events would have continued alongside the public events. 150

Instead the evidence points to the close relation between cycles of festivals and feasting and the state in the Linear B tablets, for which good parallels exist in similar societies (Palaima 2012, 350-351). A good example of this relation can be seen in Pylos tablet Un718, which lists the contribution of various state officials and corporate bodies to a ceremony in honour of Poseidon (*Documents*, 282-284). The relation of this tablet to art will be discussed in section 5.2.2. Such festivals would involve sacrifices, often followed by the consumption of the resulting meat in festive contexts. Scientific analysis of bone remains has made clear that burnt animal sacrifices of cattle (Cosmopoulos & Ruscillo 2014; Isaakidou et al. 2002), and of pigs as well (Hamilakis & Konsolaki 2004) did take place in the Mycenaean world. The role of cattle in particular has been emphasised

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¹⁴⁸ A famous argument put forward by the Frankforts contrasted the mythopoeic thought of the Bronze Age Near East with the later development of Greek philosophies of nature, contrasting them as a personalized or I-thou conception of nature to a later impersonal I-it relation (Frankfort & Frankfort 1946). They did not argue that people in the Bronze Age Near East could not think logically, but rather that they did not care to do so in theoretically significant ways. This view clashes with the level of development of weighing systems discussed here, as well as with the use of geometrical forms in Mycenaean iconography that will be discussed in section 4.2.2. Both imply a significant role of logical reasoning. Perhaps a better way to rephrase this argument is that in the Bronze Age there was no conception of 'I' and 'it' as separate entities. Only with the abstract, universal measure of coined all-purpose money could conceptions of individualism and discrete elements of matter be formulated (cf. Seaford 2004, 292-317).

¹⁴⁹ Much of the anthropological work on feasting focuses on its role in fostering social inequality (Hayden 2001). This is a somewhat one-sided view, as the classic study of carnival in Medieval and Early Modern Europe by Bakhtin (1984) showed that festivals can have a very serious counter-hierarchical dimension. Parallels to this are not very conspicuous in Mycenaean art, but some Minoan scenes like the miniature wall-paintings of crowds in ritual at Knossos (*Aegean Painting*, plates 22-23) and the Harvester Vase (Koehl 2006, plate 12) may be more amenable to such a perspective.

¹⁵⁰ As noted in Bendall (2004), feasting would have taken place in different architectural contexts with different levels of exclusivity, as also indicated by the finds in these contexts. A similar division between communal and more elite-based feasting activities can be recognised in Homer (Sherratt 2004, 304).

as part of a 'ritual economy'. This view entails that oxen or bulls could be used as payment in religious obligations, drawing the basic economic activity of stock-breeding into a palatial orbit through ritual activities and obligations (McInerney 2010, 65-67; Nikoloudis 2008b).

Linguistic aspects furthermore point to a distributional aspect of such sacrificial feasting events (Nikoloudis 2008b, 378),¹⁵¹ perhaps even connected to a broader notion that certain palatial officials were seen as 'nourishers' (Palaima 2012, 349). The amounts of meat inferred from faunal remains do indeed suggest that large numbers of people participated in such events (Weilhartner 2008, 412-413). One element to be developed further in this is the role of sanctuaries as corporate bodies in this 'ritual economy', which is related to earlier models of the 'sacred economy' (Bintliff 1977b, 155-164). As noted earlier, the sanctuaries could operate to some degree as corporate bodies in their own right, but their degree of autonomy is uncertain. Some sanctuaries were clearly located in palatial centres like the Cult Centre at Mycenae (Albers 2004), while others were located in peripheral areas like Ayios Konstantinos on Methana (Konsolaki-Yannopoulou 2004). More information is needed on the development of sanctuaries as institutions in their own right alongside feasting in the development of the Mycenaean state.

3.4.3: Interpreting Mycenaean early civilisation in its *longue durée* context

The aim of this section is to relate the ten elements of Mycenaean early civilisation discussed in the previous section to the overall framework of the *longue durée* of Aegean prehistory. The first task is to define what is meant by the *longue durée* in more precise terms. As noted in section 3.2, certain features of the Minoan and Mycenaean palaces can already be recognised in the Late and Final Neolithic periods while other features only appear later. Table 3.2 below shows the different starting-points for each of the ten elements of Mycenaean early civilisation discussed in the previous section. The establishment of each of the starting-points of these elements is based on the introduction point of their basic qualitative characteristics, only to be elaborated later. This will be discussed in more detail for each of the elements below. It is important to emphasise that this table is based on a subtle interplay of historical developments, involving not only different temporalities but also different geographical scales. Its purpose is not to give an *Annaliste* overview of developments in the Aegean as a whole, but rather to grasp the Mycenaean *conjoncture* as it intersected with previous developments in the area and with other contemporary early civilisations.

Weilhartner (2008, 421-422) has pointed out the possibility that such sacrificial feasting my have been the primary way through which meat was distributed at a communal level, based on analogies with the Archaic-Classical periods. A strong ethic of distribution in relation to ritual sacrifices of animals can also be recognised in Homer (Seaford 2004, 48-67). Sherratt (2004, 309-310) notes that even if the Homeric and Linear B terminology is not identical, a focus on distribution of portions of meat can nevertheless be recognised in the latter.

Initial development	Later elaboration in the Mycenaean palaces
Neolithic	
agricultural means production	large-scale polyculture
feasting	ritual calendar, diacritical
Early Bronze Age (EH I-II)	
economic relations	embedded within palatial framework
long-distance exchange	larger-scale in number/range goods
Shaft Grave period (MH III – LH I)	
warrior culture	state-organised forces, infrastructure
class and inequality	embedded within palatial framework
artistic representation	large-scale monumental art
Mycenaean palatial period (LH IIIA-B)	
urbanism	none, coterminous with rise palaces
state	none, coterminous with rise palaces
specialised knowledge	none, coterminous with rise palaces

Table 3.2: Starting-points of each of the ten elements of Mycenaean early civilisation.

The first development to be considered entails the introduction of the elements of the agricultural means of production and feasting in the Neolithic. This is not the place to give an overview of developments in the Neolithic, instead the focus lies on discerning the basic parameters of these two elements. For agriculture it was noted in the previous section that apart from the presence of cereals and sheep and goats, there are also some indications that traction was already present in the Neolithic sites of Kouphovouno and Knossos. The most likely pattern of exploitation here would have been a combination of animal husbandry and intensive horticulture. Yet in its basic elements this formed the basis for the later extensification of cereal cultivation in Bronze Age political economies, there supplemented by vine and olive cultivation. This pattern can be seen as an elaboration rather than as an intrinsic, qualitative change from the Neolithic. Much the same can be said for the feasting activity that can be discerned especially well in Crete and northern Greece. However, the Neolithic deposits that can be linked with feasting activities are different from those of the Mycenaean palaces. This can be seen especially well for the faunal remains, in that in the Neolithic such deposits are not indicative of the ritual sacrifice that can be observed for the Late Bronze Age palaces (Isaakidou & Halstead 2011b).

Significantly, it has been argued that such feasting activity was closely connected to agriculture, since the demands of agricultural work would have required some degree of solidarity between subgroupings (Halstead 2006, 26-31). This brings up the question of social organisation. Much work has been done on investigating the relation between community and household in the Neolithic in different areas of the Aegean. A very general scheme has been proposed of the following phases of the development of households (Tomkins 2010, 36-42):

- 4. The 'submerged household' (7000 5500 BC), in the sense that they were subverted under an over-arching communal organisation.
- 5. The 'emergent household' (5500 3500 BC), during which it becomes possible to recognise architectural and other markers of (extended family) households. At the same time it is still possible to recognise strong forms of communal organisation.
- 6. The 'modular household' (3600/3500 3100 BC), with households becoming more sharply defined as economic and social units, including in contacts outside the community.

Of course this is a very general, Aegean-wide model of development. Yet similar trends have been recognised by Halstead (2006, 13) for Thessaly in particular, even if here it is often possible to observe counter-developments. Although the southern Mainland is less well-known for the Neolithic, in the future the full publication of sites like Kouphovouno should change this situation. The implication of these Neolithic patterns in agriculture and feasting is that they provide the basis for 'transegalitarian' social forms (Wright 2004a), and thereby ultimately for the palaces that take these basic patterns and transform them into surplus economies and cycles of ritual festivals. Yet it would be incorrect to assume that the basic features of the Late Bronze Age can already be observed here. This can be readily grasped when considering the next set of developments in the Early Bronze Age, which involve the two elements of economic relations and long-distance exchange. Of course there were economic relations already in the Neolithic, but the key point is that these underwent a qualitative change in the Early Bronze Age. That is, they were intrinsically different rather than constituting an elaboration of the Neolithic pattern. Furthermore, these specific developments were part of changes at a much broader geographical scale:

"One could argue that balance weights, tin bronze, the administrative use of seals and some specific types of elite jewellery and precious materials distribute rather similarly in the vast area between the Aegean and northwestern India in the third millennium. This geographical area was the home of the early advanced cultures in Egypt, Syro-Mesopotamia and Pakistan/northwestern India as well as of many urban or protourban cultures in the regions between or at the peripheries. Through the spread of similar economic strategies (sealing practice, metrology, advanced metallurgy with various complex techniques such as alloying, cupellation and granulation) regions at the periphery became transformed." (Rahmstorf 2010, 95)

Even if it should be acknowledged that regional variations could be observed, the changes in the 3rd millennium BC are very clear. The reason that such developments can be seen in such a widespread area may also have a geological reason. The so-called 'Eurasian metallogenic belt' that extends between the Alps and Pamirs has all the metal sources (copper, tin, silver, gold) required for making these kinds of development possible (Wengrow 2011, 139). Such similarities do not imply the existence of an over-arching 'world-system', rather it is possible to discern a set of overlapping 'social fields' (Kohl 2008, 2011). One example of this can be seen in the shared characteristics of the secondary states of the Bactria-Margiana Archaeological Complex (BMAC) and Indus Valley that emerged in the second half of the 3rd millennium BC (Kohl 2007, 214-225). This is clearly a very different world from the Mediterranean context of the Aegean. Reference should also be made to the expansion of the so-called Circumpontic Metallurgical Province (CMP) in the 3rd millennium BC that included at least some part of the northern Aegean (Chernykh 1991, figs. 57-59, pp. 154-155; Nakou 1997). From this period onward the Aegean became part of a broader Bronze Age social field that expanded considerably in the Late Bronze Age, both in the eastern Mediterranean (Broodbank 2013, 373-383) and beyond it (Chernykh 2011, 67-68).

Returning to the specific developments on mainland Greece, developments can be seen in the number of sites and architectural elaboration in them, especially with the fortifications and the larger rectangular corridor houses of the EH IIB period (Pullen 2008, 30-32). For the present analysis the first thing to note is that recently spool-shaped objects from a variety of sites from EH I onwards have been interpreted to have formed part of a weighing system (Rahmstorf 2003, 294-295). This system has furthermore been connected with the need to weigh small amounts of metals (Rahmstorf 2003, 297). The author also links this with the sealing practices that emerged in EH, but this tool may have emerged rather distinctly from *pintadera* textile stamps (Younger 1995a, 331-333). Seals have been found at a wide variety of sites in the EH II period, but their use can be best understood for EH IIB site of Lerna. In the corridor house at this site evidence for use of as much as seventy different seals has been found, indicating the presence of a basic administrative system (Pullen 2008, 34-35). Therefore, in a very basic sense we can see here the systems of weighing and administration that would be elaborated in the LH III palaces. Even if the collapse at the end of EH IIB rules out a direct historical connection, in their basic sense the elements of economic relations and long-distance exchange can be recognised here. Sense the elements of economic relations and long-distance exchange can be recognised here.

The next set of the three elements of a warrior culture, class distinctions in burial, and artistic representation intersect in a spectacular way in the MH III – LH I Shaft Graves at Mycenae, even if these developments can be seen in other parts of the mainland as well. Furthermore, in some ways it was also prefigured by developments at the site of Kolonna on Aegina island in the Saronic Gulf. ¹⁵⁴ Nevertheless, the Shaft Graves are particularly instructive as an exemplary case of the development of a specifically Mycenaean pattern in warfare, class and inequality, and art. The last aspect of art will be more fully discussed in the two following chapters. It is important to note here that the stelae and portable art objects are the first exemplars of the distinct Mycenaean style in combination with Cretan influences (Blakolmer 2010a), which would later be elaborated on the walls of the palaces. Similarly, the discussion of the element of military organisation in the previous section already outlined the trajectory from the initial development of a warrior culture, as it can be seen in the Shaft Graves to the fortifications and armies of the Mycenaean palaces. It is the element of class and inequality that will be investigated in more detail here, through the evidence from burials.

Antecedents for social distinctions in burials can be seen in EH II Nidri at the island of Levkas in the Ionian Sea (Kilian-Dirlmeier 2005), and also at the site of Kolonna mentioned earlier. Yet the Shaft Graves are distinct in marking the start of a distinctly Mycenaean pattern in burial on the mainland. Recent restudy of the original documentation and scientific analysis of the bone remains of Grave Circle A (Nafplioti 2009; Papazoglou et al. 2009, 2010) have led to a new analysis of the development of social stratification at Mycenae (Dickinson et al. 2012). It is very useful for the discussion here to give a short overview of this analysis, based on Dickinson et al. (2012, 21-26):

¹⁵² In the Near East seals seem to have had their origin in non-administrative uses as well (Duistermaat 2012), even if these are distinct from the *pintadera* tradition of south-eastern Europe.

¹⁵³ More uncertain is the role of specialised knowledge, as there are some limited indications for a rudimentary grasp of a writing system on a sealing from Early Cycladic II Kea (Younger 2010, 330). It is also true that weighing systems and administration were basic to specialised knowledge in the Bronze Age Aegean. Yet there are too many unknowns about the mainland in the EH period, in particular with regard to religious ideas, and the evidence is too limited to recognise here the rudiments of the element of specialised knowledge of the later Mycenaean palaces.

¹⁵⁴ At this site what was termed a 'Large Building Complex' was constructed at the start of the Middle Bronze Age together with fortification works, and a shaft grave as well as pottery and other indications for trade with the outside world were also found here (Gauss & Smetana 2010).

¹⁵⁵ As a reminder the Mycenae Shaft Graves consist of two circles. These are circles A and B that were named in order of discovery, but with circle B preceding circle A in a chronological sense. Each of these circles consists of a number of shaft burials, each of which contains multiple inhumations. Although the rethink of the social implications of the Shaft Graves was stimulated by the new analysis of Grave Circle A, it also incorporates new studies of the material of Grave Circle B (Bouwman et al. 2008; Bouwman et al. 2009).

- 1. Considerable heterogeneity can be observed in both grave circles, including between burials and in the spatial orientation of specific inhumations (insofar as these can be determined). Strontium isotope analysis suggests that some of the individuals buried here may have migrated from outside the area around Mycenae. Women seem also to have been more prominently present than previously thought, based on the reanalysis of the spatial layout of the grave goods, even if they remain a minority.
- 2. Based on the previous point, the grave circles are interpreted as the burial locations of a faction, much as defined by Wright (2004a, 70-73). This faction would be composed of multiple families entering into (marital) alliances, which based on the strontium isotope analysis likely extended to areas outside the Argive plain. As such this social structure is incompatible with that of contemporary Near Eastern kingship, and more attention should be given to notions of 'collective leadership'.
- 3. It is also possible to reconstruct in broad outlines the dynamics of this faction, from the initial grouping of graves in Circle B to the later increase in high-value grave goods (mostly styled as Cretan craft-work) and the articulation of themes of warfare and hunting. With the advent of Grave Circle A greater distinctions within the faction also become visible.

This reconstruction is very insightful and has important ramifications for the understanding of later Mycenaean early civilisation. However, a qualification is made here with regard to the use of the term 'faction', as it stresses charismatic leadership and places less emphasis on the structuring role of kinship (Wright 2004a, 71). It is rather in the intersection of kinship and emerging elites that phenomena such as exchange networks of high-value objects and their conspicuous display in funerary contexts (Voutsaki 2010a, 93-97) should be understood. It was Kirchhoff (1955) who made the important point that certain kinship units, which he termed 'conical clans', could be vehicles for the formation of classes and inequality in state societies. The role of such clans can be seen in a variety of cases, including in the emergence of larger centres and polities in Europe from the Early Iron Age onwards (Bintliff, in press). Particularly enlightening is an analysis of Roman clanship, which proved durable in the face of state formation and could reassert itself in a destabilising way (Terrenato 2010, 243). This reinforces the point that even with the transition from a kinship-ordered society to a state, the properties of the former could still constrain the specific form that this state could take (cf. Voutsaki 2010a, 104-105).

Of course the developments of the distinctions in burial, alongside a new style of artistic expression and a warrior culture, cannot be understood separately from the elements of the agricultural means of production and feasting. Furthermore, the articulation of distinctions in the funerary record itself depended upon the development of the 'modular household' during the final stages of the Neolithic. The early development of the Mycenaean polities clearly shows how these different elements worked together in the processes of urbanisation and state formation (Wright 2008, 244-250). The weighing and sealing systems crucial for administration and long-distance exchange also returned, now supplemented by the Linear B writing system. As noted at the start of this section, the aim here is not to provide a new reconstruction of Mycenaean early civilisation but rather to delineate its place in the *longue durée* of Aegean prehistory. Nevertheless, some insights can be gained into the

¹⁵⁶ Notably the very rich burial M of a female in Grave III of Circle A, which suggested an elevated position perhaps with ritual connotations, seems on the basis of the strontium isotope analysis to have come from outside the surroundings of Mycenae (Dickinson et al. 2012, 14).

¹⁵⁷ Reference can be made here also to the model developed by Kristiansen (1999, 394-399), who looked at the relation between kinship and socio-political systems in 2nd millennium BC temperate Europe. The warrior culture that developed in the Shaft Grave era is distinct from this pattern, however, on account of the rich female burials that can now be recognised. The sharp dichotomy between 'agrarian' and 'warrior' societies (Kristiansen 1999, fig. 217, p. 398) cannot be seen in the Aegean prehistoric record.

structural properties of the palatial states through this, both for their internal organisation and for external relations. To start with the former, one interesting model that explored the part/whole relation of conical clans to the state was developed by Morris (1986) for the region of Messenia. The distinctive point made by her was that the palatial state as it eventually coalesced around Pylos depended upon a complex interplay of mechanisms like the distribution of prestige goods and feasting to maintain relations between paramount and locally-based elites (Morris 1986, 183-185).

This means that alongside the bureaucratic-administrative apparatus of the state a parallel structure of social power existed, which would be ultimately rooted in the patron-client relations of conical clans. This can be increasingly recognised in the analysis of personal names in Linear B, evidence of feasting activities, and of course the burial evidence, as discussed in the previous section. It is also interesting to consider the role of the relations between emerging locally-based elites, and eventually a paramount one, in the formation of the settlement pattern of Messenia (Morris 1986, 64-71). Such socio-structural factors may well have played an important role in the particular patterns that can be seen in the development of Mycenaean settlement on the mainland. Rather than an emerging network of small city-states or *Dorfstaaten*, trajectories of settlement expansion here followed a strong core-periphery pattern that could be closely connected to state expansion, as discussed in the previous section. Population growth as a secular phenomenon would then have been channelled to some degree through the expansion of conical clans, generating a particular settlement trajectory in which urbanism would eventually emerge as well. This can obviously only be a tentative model as much work remains to be done on Mycenaean settlement patterns, but the role of conical clans and the emergent hierarchical relations within them is a factor to consider.

It should also be stressed that the Mycenaean states were very much systems in development, as can be seen for Messenia (Morris 1986, 190-191). As such there would have been some potential for the dissolution of the structure of social power in the palatial system back into the different locallybased elites. Particular note in this regard can also be made of the dependence, and hence vulnerability, on the large numbers of oxen managed directly by the palatial administration or benefiting from its economics of scale. As discussed in the previous section these oxen were very important both for the creation of cereal surpluses and in the 'sacred economy' of feasting and the cycle of public festivals. Without them the palatial system as it existed would scarcely be able to function as it did. 159 The patterns of cattle-use after the collapse of the palaces were quite different (McInerney 2010, 68-73), showing that it was either not possible or not desirable to continue the Bronze Age pattern at a smaller scale. Another 'hidden vulnerability' can be seen in the external relations of the Mycenaean Aegean. As discussed for the element of long-distance exchange in the previous section, patterns in the exchange of metals in the late 13th century BC seem to change in such a way that it undermined palatial control over this key resource. This development can be situated as part of the broader trend of the break-up and reordering of the existing, palace-focused eastern Mediterranean exchange networks in this period (Broodbank 2013, 460-472).

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¹⁵⁸ Crete followed a distinct trajectory to the formation of urbanism, as can be seen in the coalescing of a town around the palace of Phaistos in the Mesara ((Watrous & Hadzi-Vallianou 2004, 253-256). It would be interesting to consider whether the different patterns of settlement trajectories on Crete could be related to different social structures, which would need to take into account new work on kinship patterns (Driessen 2012, in press; Legarra-Herrero 2012; Relaki 2012). The impact of social structures on settlement trajectories can also be seen later in the Archaic-Classical period for the different patterns of development in regions with different forms of organisation (Bintliff 1997, 30).

¹⁵⁹ Modelling of agricultural systems in Bronze Age northern Mesopotamia, although a different area also dependent upon rain-fed cereal staples, have shown the impact disruptions of the availability of teams of oxen for ploughing could have (Wilkinson et al. 2007, 63-66). Dropping below a critical threshold this would involve the loss of more than 50% of the population, or, if they shifted to hoe-based cultivation, the disappearance of the means to generate significant surpluses of cereals. As such, such this particular scenario seems to be one of the key dangers for the political economies of the Bronze Age early civilisations dependent upon cereal surpluses.

If we return then to the nexus of weighing, administration, and metallurgy, discussed earlier in this section, it is clear that it was precisely this nexus that disappeared in this form after the end of the Bronze Age. Wengrow (2011, 136-137) had argued for two types of 'internal transactional systems' for metallurgy in the Bronze Age for the area between the Aegean and the Indus. The first would involve the 'sacrificial' deposition of large quantities of metals, the second their 'archival' circulation in administrative systems. For the Mycenaean case a shift from 'sacrificial' (if mostly in burial contexts, less so in hoards) to 'archival' contexts of metallurgy can be seen, even if not fully completed. It was the convertibility of metals in long-distance exchange networks that allowed for the spread of similar kinds of systems over a large geographical area (Wengrow 2011, 141-142). In the 1st millennium BC this changed, based on the introduction of large-scale iron-working and later also coinage. The wider availability of iron ores in particular broke up the older networks focused on the comparatively rarer sources of copper and tin (Kohl 2007, 252-253). In the resulting reorientation of long-distance exchange, the old nexus of weighing, administration, and metallurgy disappeared. What eventually replaced it was a different pattern of exchange relations and state formation in the Mediterranean (Broodbank 2013, 506-584).

How then is the relative short-lived (about 200 years) *conjoncture* of the Mycenaean palaces to be understood? As should be clear from the discussion in this section, it is one that had deep roots in the *longue durée* of Aegean prehistory. This can be seen not only for the elements of agriculture and feasting, but also in the weighing and sealing systems that formed the basis for administration in the later palaces. Furthermore, as shown in the previous section all ten elements of early civilisations were present in some form of elaboration in the Mycenaean case. It is also possible to recognise the nexus of urbanism, the state, and civilisation for the LH III Greek mainland, despite the smaller scale of urban foci compared to Crete. This goes against the proposal that the Mycenaean palatial centres were akin to 'hillforts' situated at strategic locations of long-distance exchange routes (Sherratt 2001a). Instead the Mycenaean palatial *conjoncture* can be seen as a specific combination of elements that were already present in a basic form, reflecting an internal growth trajectory that was further facilitated through gaining dominance over Crete. If the palaces had not collapsed and had the macro-regional exchange contexts and metal-working not radically changed, there is also no reason to assume that Mycenaean early civilisation could not have developed further.

CHAPTER FOUR: GENERAL CHARACTERISTICS OF MYCENAEAN ART

4.1: Introduction

4.1.1: Chapter overview

In this chapter, three of the four strands of interpreting the art of early civilisations, as outlined in section 2.4.4, will be investigated for the Mycenaean case. In succession these are:

- 1. The material forms of Mycenaean art, with a basic subdivision between containers and instruments, involving both monumental and non-monumental objects. For the containers a further subdivision is made between three-dimensional art objects and art bound to two-dimensional surfaces, though sometimes with relief, on architectural and portable containers.
- 2. The craft and materiality of Mycenaean art. Here the analysis is split between craft-work in its basic organisational settings, as they can be traced through *chaîne opératoire* approaches, and conceptions of material ontology. Both aspects are closely interrelated, and the element of long-distance exchange in the wider eastern Mediterranean plays an important role in their interpretation.
- 3. Iconography is the third investigative angle on Mycenaean art to be discussed. First of all the conventions of Mycenaean iconography are treated, not in terms of technical basics, but at the third level of cultural meaning as denoted by Panofsky. Particular emphasis will be given to depictions of anthropomorphic beings and their implication for understanding personhood and social roles, as well to the rendering of the spatio-temporal environment. The second aspect to be discussed is that of narrative, not only in terms of the structural analysis of pictorial scenes but also in their relation to oral poetic performance.

These three interpretive strands will come together in different ways for the fourth one that looks at contexts of art in section 5.2, as well as at a more general level of interpretation in section 5.3. As such the discussion of each of the three aspects of Mycenaean art covered here will remain more self-contained. Therefore the chapter has no synthesis section at the end. The reason they are put together in this chapter is in fact precisely because they provide a supporting role for the discussion of both the contexts and agency of Mycenaean art, as noted in the overview of chapters in section 1.3. One element that is common to all three, however, concerns the available sources on which any interpretation of Mycenaean art depends. These will be discussed immediately below in section 4.1.2, allowing for the reader to gain an initial critical insight into the possibilities and limits of the available evidence before turning to the specific interpretations offered here.

4.1.2: Sources for the interpretation of Mycenaean art

The basic source for Mycenaean art naturally consists of the archaeological record, but the discussion of the specific material forms of Mycenaean art will have to wait until section 4.2. The concern with the material record here deals with the two meta-issues of the reliability of what may be termed reconstructive work and, not unrelated to this, scientific studies of the material properties of the diverse art forms. As was already referred to in section 3.4.1, the critical analysis of modernism has also led to considerations about the relation between the discipline and its broader cultural contexts. Again this is more pertinent for Minoan archaeology, but its consequences cannot be ignored for the Mycenaean branch of Aegean Bronze Age archaeology either, as for material forms like wall-painting there exists considerable continuity between the two cases. Gere (2009, 111-123) has contended that there was a nexus between reconstructive work and modernist ideas

that lay behind the reconstructions by Evans and his project artists of wall-paintings such as the so-called 'Captain of the Blacks', the court ladies, the 'Priest-king', and bull-leaping figures. Especially in the case of the 'Priest-king', the reconstruction has been of such a problematic character that the viability of the enterprise has been called into question by some scholars (Sherratt 2001b, 19-20).

Yet it is of vital importance here to distinguish between modernist ideas as such and the specific procedures followed to reconstruct a wall-painting such as that of the 'Priest-king'. We may in fact liken what Evans did as a 'reverse-modernity' that is counterposed to Walter Benjamin's ([1936] 1968) concept of the mechanical reproducibility of modern artistic media and their concurrent loss of aura. By taking the wall-painting fragments, produced through the mechanical processes traceable by taphonomy, the reconstructions of Evans can be argued to have recreated a new aura, one that indeed might have as much to do with modernism as with that of its original cultural context. As such the critiques of Gere and Sherratt are well-taken, but they should not obscure the more basic functioning of another of Benjamin's concept: the ability of the 'mimetic faculty' to discern differences and similarities in the world. As we saw in sections 2.4 and 2.5, this was reinforced by the discussion of the work of Wittgenstein and the notion that it is possible to not be limited by the frameworks of one's own discourse, but rather to allow different ways of seeing to be incorporated in interpretation. Of course, for this to work it is first of all necessary to have reliable procedures for reconstruction at a basic level, as well as to have other sources that provide insights into the original cultural context.

Pioneering work in this regard was carried out for the Minoan wall-paintings by Mark Cameron, who developed more robust criteria for the restoration of both individual elements and larger pictorial spaces from the different fragments (Cameron 1976). He used this to propose a number of new reconstructions of the Knossos scenes in his dissertation, identifying what he saw as errors in 50 out of 70 reconstructions of Bronze Age wall-paintings (Evely 1999, 199). His work included a new reconstruction of the 'Priest-king' case (Cameron 1975, plate 18), and his analysis of the meaning of these fragments differed considerably from the interpretation offered by Evans (Cameron 1975, 143). Other reconstructions and interpretations have been proposed since then (Niemeier 1988; Hitchcock 2000; Shaw 2004), demonstrating a healthy scholarly debate both at the technical level of fitting the fragments together and at the conceptual level of modifying cultural categories to interpret the evidence. With regard to the former aspect, Cameron also made contributions with regard to the application of a number of scientific techniques to the study of the wall-painting fragments (Evely 1999, 142). It should be noted that Evans had already encouraged Noel Heaton to carry out technical studies of this material in the 1900s (R.A. Jones 2005, 199-200), a fact not often mentioned by those who critique him on cultural issues.

Since the work of Heaton and Cameron scientific techniques have developed in such a way that they are now becoming indispensable, not only to study the wall-painting fragments but many other material forms of Mycenaean art as well. A good example of this is the restudy of the wall-painting fragments from the Pylos palace. Here not only new fragments and interpretations have been recognised, such as an archer (Brecoulaki et al. 2008), but also new insights have been gained into

¹⁶⁰ It can be argued that modernistic art is more complex than is allowed for by many critics. If we look at some accounts of their own era (e.g. Gere 2007), it is possible to note in a Wittgensteinian vein that the form of progress has remained, in the sense of postmodernism being seen as a logical and necessary sequential stage to modernism. The paradox, then, is that in its formal progressiveness this strand of thought goes to great lengths to disavow the substantive progress of the (radical) Enlightenment. While far from denying the usefulness of reception studies, the more self-reflective work of (Renfrew 2003a) is preferred here to more postmodernist approaches.

This can also be seen for the analysis of gender categories as they relate to the skin colour of the human figures depicted in Minoan and Mycenaean art, where the interpretations of Evans have seen much debate (Chapin 2012, 297-298), as will be further discussed in section 4.4.2 below.

the technical properties of the material (Brecoulaki et al. 2012). The project team has proposed that through this it will become possible to develop a more elaborate micro-chronology of the paintings and those who painted them from this site (Brecoulaki et al. 2008, 387). Perhaps even more revolutionary is the use of various scientific techniques to trace the technological connections between different sites for a variety of materials, including wall-painting fragments (Brysbaert 2008) and vitreous materials (Shortland 2012), as will be discussed in more detail in section 4.3.2. The impact of the various scientific techniques on the study of this field has reached such a level of sophistication that new interpretive frameworks are being developed to account for the observed patterns (e.g. Brysbaert 2008, 15-44). Therefore, it would be unfair to state that the discipline still lived under the shadow of modernism, given that the material is treated with sophistication in both iconographic and material reconstructions.

Turning to other sources, we can start with writing. So far no Linear B signs have been discovered on any form of Mycenaean monumental art, despite earlier Minoan experimentation with Linear A signs that have been found on a few isolated wall-painting fragments (Cameron 1965). There are of course the Linear B signs on the Inscribed Stirrup Jars with an administrative function, as well as a very limited number of personal names on other ceramic vessels (Van Alfen 1996/1997, 265), but neither is related to any kind of visual image on these vessels. Despite this lack of integration between text and image, however, the Linear B evidence can help in other ways to make sense of Mycenaean art. One way is through the common occurrences of figures and things in art and written sources, as will be explored for a number of themes in section 5.2. More important for the present analysis are the descriptions of art objects in the Ta-series of Linear B tablets from Pylos. Together with the observation of interrelationships between art and ways of rendering ideograms in Linear B (Palaima 1992b, 71-73), these point to intersections between the conception of visual phenomena without directly implying a stylistic relation.

One potent, but at the same time highly complex, source for the interpretation of Mycenaean art are parallels with the contemporary early civilisations of the eastern Mediterranean and in some cases even with other societies beyond this. As was noted a number of times in the discussions in chapter three, the contacts between cultures in the eastern Mediterranean was intensive and can be understood as part of a *koine*. This *koine* also involved the exchange of metals and many other precious materials, and possibly immaterial phenomena such as epic poetry as well (Bachvarova 2009, 24-25). Building upon the pioneering work by Helene Kantor (1947), a number of studies carried out recently have sought, with varying degrees of ambition, to embed the art of the Aegean Bronze Age in its eastern Mediterranean *koine* context. A key feature of Kantor's work was to note the seeming intermixing of iconographic features of different styles, such as on an ivory pyxis lid from Minet el Beida in Syria, which she described as possibly a 'hybrid carving' made by a craftsperson of unsure origin (Kantor 1947, 89). From this observation two new lines of study were developed, one of which focused on the interaction between the different cultures and their iconographies and the other on iconographic features that were shared within an overarching international style.

The former line of argumentation has tended to look at similarities between iconographic features to

¹⁶² There is also a sealing from Knossos depicting a dog and inscribed with the personal name *ku-wa-ta*, which seems to have administrative connotations (Younger 2010, 336), and no aesthetic connection is obvious.

¹⁶³ There are those (e.g. Kristiansen & Larsson 2005), that propose to include Europe in this sphere as well. But while it is clear that certain materials like amber made its way down from Scandinavia to the Aegean, as well as other materials and artefacts (Hughes-Brock 2005), the idea that these contacts imply close connections in iconography and the conceptions associated with them is quite controversial, see for critiques the papers in Whittaker (2008a).

¹⁶⁴ It is very important in this regard to sharply delimit notions such as hybridity by the evidence, lest the objects get entangled in dubious identifications of 'cultural fingerprints', as critiqued by Pappa (2013, 33-35).

argue for degrees of identity and sharing of motifs (Crowley 1989; Morris 1992). At an even more ambitious level, a recent study has proposed to use such similarities as a way for reading the art of both the Minoan and Mycenaean early civilisations (Marinatos 2010, 9). However, using such individual similarities to conflate what remain different iconographic systems carries with it very high interpretive risks, and the methods used by Marinatos are not able to mitigate this (Weingarten 2012). A telling example from the work of Marinatos is her use of the association between chariots and kingship in Egyptian and Levantine art to propose that the figures on chariots in images from Knossos and the Shaft Graves at Mycenae were kings (Marinatos 2010, 24-25). Yet chariots are found on a wide variety of artistic media, especially in vase-painting (C. Morris 2006), and continue to be a popular motif in the post-Bronze Age period (Wedde 2006). There is little in the Mycenaean record that associates it directly with the specific feature of kingship, rather than with the broader elite culture to which it unquestionably belonged (Schon 2007, 142-144). More critical iconographic studies show the subtle ways in which ideas and iconography change when crossing cultural boundaries, as in the study of the transformation of the Egyptian goddess Tawaret into the so-called 'Minoan genius' (Weingarten 1991). Nevertheless, there was also a circumscribed number of works of art that seems to have truly belonged to the *koine* as a whole:

"The marginalization of iconographic and minute stylistic analysis stemming from negative judgments of these pieces has caused subtle yet significant distinctions among the works to be overlooked, which in turn has led to less-than-consistent classifications. When we examine closely those pieces traditionally categorized as part of the Late Bronze Age international style, only a small subset displays completely hybrid imagery that can be classified as truly international (that is, not belonging to any one region). For these works, visual hybridity is an overriding formal feature, one that cannot be ignored and that is central for understanding them." (Feldman 2006, 5)

To complicate matters, it should be noted that the notion of an 'international style' also incorporates material aspects, in particular the favoured use of certain materials such as ivory and lapis lazuli (Feldman 2006, 115-127). Yet in other cases it is clear that material traditions from one region are 'exported' to other regions, as in the case of Aegean painted plaster found at different sites in Egypt, the Levant, Syria and perhaps Hittite Anatolia as well (Brysbaert 2008, 97-106). In order to deal with this complexity, it is necessary to tease out the specifics of each regional dataset and relate it to that of others. An exemplary example of such an approach can be seen in the study of textual and pictorial references to chariots in the Late Bronze Age eastern Mediterranean, which provided a macro-regional view of the, often quite different, regional cases (Feldman & Sauvage 2010). Noting the different kinds of elites associated with the chariot representations, the authors advocate a nuanced view that reduces images neither to regional or macro-regional contexts, but investigates specific interaction spheres (Feldman & Sauvage 2010, 68-70). This point is well taken, and here we will use the notion of the 'template' as a methodologically useful abstraction rather than as overarching cultural unit, in order to outline the similarities and differences between different regional artistic datasets in the eastern Mediterranean *koine*.

Turning to the connection between the art of the Aegean Bronze Age and that of the succeeding Protogeometric and Geometric periods, as well as the art of the civilisation that developed in the Archaic-Classical period, even more caution needs to be applied. For where for the Bronze Age interaction in the eastern Mediterranean direct links can be traced in the material and textual records, continuities with later periods of Greek history depend upon the more problematic notion

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¹⁶⁵ A very good example of such a specific interaction sphere can be seen in the importation of Mycenaean *krater* vessels in Late Bronze Age Cyprus. This is especially interesting as the find contexts are such that the cultural biographies of these art objects are fairly well-understood (Steel 2013, 209-216).

of 'survivals'. Not only did craft and artistic traditions change radically from those of the Mycenaean palaces to those of the Protogeometric and Geometric periods, the wide-ranging changes in the Archaic period had important ramifications for art as well. This is particularly true for the introduction of the alphabet and the changes in the relation between words and images this induced, as well as for the different forms of agency within the new *polis* states. Yet, as we saw in chapter three, there are some continuities in terms of the names of deities and with regard to the reflection of some Bronze Age elements in epic poetry. The question is to what degree these fragmented indices of commonalities can be used to allow for the use of knowledge about the later periods to reflect back upon the Mycenaean situation.

It is suggested here that most of these connections are not robust enough to infer parallels on a similar level as those from the contemporary eastern Mediterranean, except in cases where more information is available as in that of *kyanos* discussed in section 4.3.3 below. This is especially so, as the ability for scientific studies to show connections at the material level is lacking entirely. Hence the ability to formulate and test more robust 'templates' between the Bronze Age and later periods is mostly lacking. But it may nevertheless be possible to make inferences at a more general level, in particular with regard to the posited continuity in oral tradition but also to some degree in the iconography of certain kinds of images, as we shall see in section 4.4 below. This brings up the question of the relationship between words and images in a more general sense, with implications for the understanding of narrative in Mycenaean art. Furthermore, in the Archaic period this relation changes radically due to the introduction of the alphabet and the new forms of agency of the *polis* states. This allows for a better understanding of in what way, and to some extent also for what reasons, the iconographic systems of the Mycenaean and Archaic-Classical worlds differed.

4.2: The material forms of Mycenaean art

4.2.1: Introduction

In this section the material forms of Mycenaean art will be treated in detail. This serves the dual purpose of being able to explore these forms with more precision, in particular the connections between them, this provides a basis for the discussions of other aspects of Mycenaean art in the succeeding sections. As noted earlier, this overview will be split out in the three different categories of three-dimensional containers, art bound to two-dimensional surfaces on monumental and non-monumental containers, and instruments. Table 4.1 below provides an overview of the different forms for each category. Of course it is important to stress that the surviving record does not neatly reflect the material world of Mycenaean early civilisation. Not only has the passage of time led to the decay and destruction of materials, though with varying degrees of intensity, but other materials are more prone to have been re-used. Hence both materials susceptible to decay such as textiles are missing and also materials conducive to reuse, in particular when they are highly valued as in the case of metals. These problems can be countered to a very limited degree through information derived from iconographic depictions of art objects. Unfortunately, this does not allow for a good understanding of the contexts in which they would have been made, used and deposited. Such imbalances in the archaeological record need to be constantly kept in mind.

¹⁶⁶ Survivals differ from the structures of the *longue durée* in their higher degree of specificity. That is, in survivals the continued presence of culture traits in a more or less unchanged form and content is assumed, whereas the recurrence of long-term elements allows for generic features to take very different specific forms in particular periods. The notion of survivals derived from 19th century anthropology (Carneiro 2003, 24-25), and was developed further by Frazer. His ideas were addressed in section 2.4.2, and the critique offered there extends to the general notion of survivals. For Aegean prehistory this implies that the names of deities and titles common to the Mycenaean texts and later periods cannot be assumed to refer to unchanging cultural elements, as noted poignantly in Crielaard (2006, 271-272).

Material form	Material technique(s)
Three-dimensional containers	
statues/statuettes	various, including chryselephantine, clay
figurines	various, including clay
thrones, furniture	various, including inlays
hearths	painted plaster
Two-dimensional containers	
wall-painting	painted plaster
exterior façades	painted plaster, stone sculpture
mural decoration (stone)	stone sculpture, glass inlay
stelae	painted plaster, stone sculpture
larnakes	painted plaster, vase-painting
wall-hangings, ikria	textile, leather
vessels	ceramic, stone, metal, vitreous
seals, sealings	stone, vitreous
armour	boar's tusk, metal
garments	textile
jewellery	various, including ivory, metal and vitreous
Instruments	
ship's hulls	wood, unknown decorative technique
weaponry	metal, vitreous
musical instruments	various, including ivory
seals	stone, vitreous

Table 4.1: Categories of the material forms of Mycenaean art.

4.2.2: Three-dimensional containers in Mycenaean art

One striking feature of the monumental art of the Aegean Bronze Age is that, based on the available evidence, it seems to have been characterized by an emphasis on surfaces rather than three-dimensional forms such as statues. This can be seen in the focus on wall-painting but also on stone sculpture, though both also were in relief form. With a few exceptions, the evidence for statues seems highly limited and circumstantial, whether they were made from durable or more perishable materials such as wood (Blakolmer 2010b, 45-50). A hypothesis has been formulated to account for

this absence, going back to Matz, which holds that there might not have been a need for a central cult image in ritual as deities would have appeared in epiphanies (Marinatos 2010, 78-79). A note of caution has to be added on the basis of a comparison with the Hittite situation, however, where the archaeological record of statues and statuettes is as scanty and ambiguous as that of the Aegean. Based on a text from the reign of Tudhaliya IV, who reigned in the late 13th century BC, which dealt with the restoration of temples and shrines in his realm, we know that statuettes were ubiquitous and played significant roles in cult activities (Collins 2005, 15-18).¹⁶⁷

One clear indication for the possibility of cult statues in the Aegean Bronze Age came from the discovery in Crete of a chryselephantine statue known as the Palaikastro *kouros*. This statue was reconstructed from fragments found in different areas of a destruction layer dated to the LM I period (Sackett & MacGillivray 2000a, 21). It is rather small (circa 50 cm in length), but very elaborately carved, and part of a larger corpus of chryselephantine statues and statuettes that has a chronological span from the early phases of the Bronze Age up to its latest phase (Lapatin 2001, 22-37). Chryselephantine statues in the Archaic-Classical period in the Aegean almost exclusively took the form of deities, and were able to act as the loci of epiphanies (Lapatin 2001, 4-6). The excavators propose that the Palaikastro *kouros* acted as the personification of a deity called Diktaian Zeus, who was related to the Egyptian god Osiris and associated with the constellation of Orion (MacGillivray & Sackett 2000b, 169). This interpretation is based on the architectural context in which the object was found, its intentional fragmentation, as well as parallels with contemporary Egypt and later periods of Cretan history, yet it has a certain speculative element to it. Furthermore, it is not entirely clear whether it can easily be extended to other chryselephantine statues and statuettes from the Aegean Bronze Age record (Lapatin 2001, 36-37).

Larger figures were also made from clay, either in solid form or as terracotta made on the wheel. ¹⁶⁸ They are known from cult contexts at Asine, Mycenae and Tiryns (Renfrew 1985, 407-411), as well as Midea in the Argolid (Demakopoulou & Divari-Valakou 2001), Ayios Konstantinos on Methana (Konsolaki-Yannopoulou 2004, 63-64), Ayia Irini on Keos (Gorogianni 2011), and Phylakopi on Melos (French 1985, 276-280). There are also the 'Goddess with the Upraised Hands' figures found widely in similar contexts on Crete in LM IIIB-C (Renfrew 1985, 405-407). Some figures approached a life-size scale and were exclusively found in ritual contexts (Tzonou-Herbst 2010, 217). However, in almost all cases they were found in fairly large numbers, which makes it hard to maintain that any of them acted as a singular focus for cult, as in the Archaic-Classical Aegean (Blakolmer 2010b, 45-50). More exceptional is a painted plaster head from Mycenae, a very rare combination of clay modelling and painted plaster (Rehak 2005, 271-272), see figure 6. This head (with a height of 18.6 cm) was likely part of a larger statue, as indicated by an irregular break at the neck. Based on a number of iconographic *comparanda* Rehak argued that it is highly probable that the head belonged to a deity (Rehak 2005, 275).

Turning from actual remains of statues and statuettes to depictions of them, an even more intriguing pattern emerges. One of the scenes from the LM IIIA Ayia Triada sarcophagus depicts an armless figure at the receiving end of a procession (see figure 7), and a parallel for this figure can possibly be discerned on a painted plaster fragment from the megaron vestibule in Pylos (McCallum 1987, plate XXXVIII). In the case of the Ayia Triada figure a variety of ideas have been put forward, most prominently that it represents a deceased person but a cult statue is another option (Blakolmer

¹⁶⁷ Indeed, Collins notes in this regard that: "Were it not for the cult inventories, statuettes such as these – even when found in archaeological contexts suggesting cultic activity – might well have gone unrecognized as possible cult images." (Collins 2005, 17).

¹⁶⁸ As can be seen for the Temple Complex at Mycenae, a variety of different kinds of figures occurred together, alongside more idiosyncratic forms such as an anthropomorphic vase (Moore & Taylour 1999, 46-50).

2010b, 45-50). Two wall-painting scenes from Mycenae possibly depict statuettes, one indicating an ivory statue offered during a procession (*Aegean Painting*, 192). The other painting was found in a very fragmented state, but seems to depict a small figure that can either be seen as a statuette or as a facsimile, perhaps an *eidolon*, of a real person offered to a deity (*Aegean Painting*, 191). Another example from Tiryns shows a statuette in a scene with eight women carrying offerings (*Aegean Painting*, fig. 33b, p. 120). The evidence from vase-painting yields even more enigmatic clues, such as the group of three figures on a krater found in Cyprus (Rystedt 2001). Thus, while small statuettes were certainly represented in ritual scenes, the existence of larger cult statues is not readily apparent from iconographic sources.

Although there is no obvious reference to cult statues in the Linear B sources, it has been observed that the term *te-o-po-ri-ja* mentioned in two tablets from Knossos could refer to *theophoria*, a possible festival name (*Documents*, 585). This has been interpreted by some as a procession ritual in which cult images would be carried (Hiller 1984, 140). Alternatively, it may be that in this particular ritual human priestesses were carried around rather than statues (Blakolmer 2010b, 45-50). In that case the epiphany experience would lie not in a central sacred artefact, but rather was provoked through the priestess' impersonification of a deity and/or supernatural forces. Another proposal entails that the term *po-re-na* on Linear B tablets from Pylos and Thebes refers to larger terracotta figurines that would have functioned as 'images of the gods' (Gallou 2005, 108-110). These could have been carried in processions similar to those inferred for the *te-o-po-ri-ja* from Knossos. The Linear B sources, however, are much too limited to definitively confirm the hypothesis of statues and statuettes being used in religious ritual, but are not inconsistent with the material and iconographic sources.

At a lesser scale there are the figurines, which are much better known in terms of the amount of material, chronology and typologies of forms (Tzonou-Herbst 2010, 210-211, fig. 16.1, p. 212). The figurines of Late Bronze Age Crete show no standard set of shapes for both human and animal figurines, and have been found in a wide variety of ritual settings, houses, and general trash deposits (Tzonou-Herbst 2010, 216). The figurines on the mainland start from LH IIB or LH IIIA1, and are mass-produced according to a canonical set of shapes which can be seen especially in the *Phi*, *Tau*, and *Psi* female figurines (French 2008, 60). The mainland figurines cover a variety of forms, however, including many animals, enthroned figures, riders, charioteers, and *kourotrophoi* (women holding children), found in the same ritual, domestic and refuse contexts as on Crete (Tzonou-Herbst 2010, 216-217). It is indeed difficult to argue for a unitary function if some figurines are found in highly ritual contexts and others as temper in mud bricks. To get a better grip on the material there is a need to correlate the material even more closely with its context, including contexts outside the Aegean where such figurines have also been found (French 2008, 61-62).

Also important to consider are the aniconic forms that may represent deities or supernatural forces, chief among which are the *baetyls*, columns, and 'thrones'. In contrast to Minoan Crete there are few known *baetyls* from the Mycenaean period. It is likely that the more regularly formed column had an important symbolic meaning, as can be seen in its prominent use in the 'Lion Gate' stone sculpture at Mycenae (see figure 8). Although this particular artefact is a façade and is discussed among the surface containers in the next section, it does give an indication of how columns in general were regarded. The position of the column on an altar and flanked by two creatures has been compared to images on other artistic media to suggest that it was a master/mistress of animals

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¹⁶⁹ Of two possible examples, one is not even from the mainland but comes from a shrine at Phylakopi on Melos (Renfrew 1985, 430-431). The other case consists of two 'menhirs' from a tomb at Dendra in the Argolid that may actually be a cenotaph (Gallou 2005, 115-116). These examples are much too uncertain to allow further interpretations.

pose, normally occupied by deities or heroes (Bloedow 1996, 1163-1166). Columns are also known from more utilitarian settings, most prominently to support the roof in an arrangement of four around the hearth in the megaron area of the palaces (Wright 1994, 58-59). The hearth itself may also have played a complementary role in this, as will be discussed in section 4.3.3 below.

The master/mistress of the animals pose of the column in the 'Lion Gate' scene can also be seen for the throne category. The best example of this is the gypsum seat from Knossos (see figures 9-10), which is flanked by two wingless griffins (*Aegean Painting*, plate 47-48), which in a recent restudy using scientific techniques have been revealed to have sported wings after all (Shank 2007, fig. 19.5, p. 164). One similar case is from Pylos. Here no throne has survived but a combination of a base and possible libation channel, as well as one pair of flanking lion/wingless griffin, indicate that one may have been present originally (Rehak 1995, 101, 109). No clear parallels can be seen in the other palaces, largely due to the state of the remains. Much more information is available from iconography and Linear B on thrones and furniture in general. From the iconography there seems to be a preference for seated female figures on thrones, since images on glyptic and other media predominantly show women as sitting on such objects (Rehak 1995, 109-112; Younger 1995b, 192). Another aspect is the occurrence of throne models in a number of tombs, which have been used to argue for the aniconic presence of (chthonic) deities here (Gallou 2005, 55-56). Apart from the thrones there existed a range of furniture such as stools, campstools, and footstools, some decorated (Younger 1995b, 189, 192). Linear B indicates that inlays were used in furniture (*Documents*, 334).

4.2.3: Two-dimensional containers in Mycenaean art

The bulk of the material remains of Mycenaean monumental art can be found in the category of surface containers, including also funerary monuments. The different material techniques of this category were painted plaster, stone sculpture, and textile tapestry, the characteristics of which will be discussed in turn in this section. Especially important are the remains of painted plaster that are mostly used for wall-paintings, and which have been found in a variety of architectural structures. Evidence of Bronze Age painted plaster in the Aegean has been found at 69 different sites, of which 39 are on Crete, 10 on the Cyclades and other Aegean islands, and 20 on the Greek mainland (Blakolmer 2000, fig. 2, p. 394, fig. 3, p. 395 & fig. 4, p. 404). They have a chronological range from the Final Neolithic to the very end of the Bronze Age in LH IIIC, though the main body of the material can be assigned to the periods of the Minoan and Mycenaean palace-states. In addition, significant Aegean-style mural art has been found at different sites in Anatolia, Syria, the Levant and Egypt. To properly understand the specifics of Mycenaean painted plaster it is necessary to consider it as part of this larger tradition of artistry and technique, as reconstructed through technical studies of the material.

Technical studies of Bronze Age painted plaster have been carried out since the earliest part of the 20th century (R.A. Jones 2005, 199-200). As little is known directly from archaeological or textual sources about painted plaster as a craft, there has been an emphasis on experimentation and scientific analysis to reconstruct the painting techniques. An important part in this was played by replication studies by Mark Cameron and colleagues in the 1970s (Evely 1999, 141-153). More recent work has advanced on this through using multiple approaches and types of scientific techniques, as outlined in a recent overview of the state of research on painted plaster by Brysbaert

¹⁷⁰ Among the fragments from Tell el-Dab'a Aegean-style painted plaster fragments of emblematic griffins were found, possibly accompanied by lions or leopards, which are also known from Tel Kabri and Alalakh (Bietak 2007, 41-42). The interpretation is that these fragments may have flanked a throne just like at Knossos, though the griffins in this reconstruction do have wings (Bietak 2007, fig. 36, p. 40). At present the published evidence is insufficient to determine the matter, especially since the presence of a throne here is only hypothetical.

(2008, 7-11). The origin of the craft is currently dated to the Final Neolithic at Phaistos, which provides the first example of a style of monochrome, red-painted plaster decoration (Blakolmer 2000, 396-7). On analogy with the Anatolian site of Çatal Hüyük and its murals, however, there might be a record of painted plaster on Crete that stretches back further into the Neolithic (Hood 2000, 191). During the Early Minoan period painted plaster was already used in monument-like buildings at Myrtos-Phournou Koryphi, Vasiliki and Knossos, all in the monochrome red-painted style and without distinctions in decoration between room functions (Blakolmer 2000, 396-397).

With the emergence of the first palaces on Crete in the Protopalatial period important technological changes were introduced, including the use of polychrome painting and multiple stylistic schemes (Blakolmer 1997, 97-100). The iconographic repertoire remained limited to decorative motifs, however, and it was only in Neopalatial Knossos that complex figurative scenes emerged on wallpaintings. This development is usually connected to widespread structural changes in society during the transition from the Protopalatial to the Neopalatial period (Gates 2004; German 2005, 90-93). Brysbaert (2008, 161) also emphasises that the shift from abstract to figurative art was dependent on the development of an almost pure lime plaster that allowed for the painting of figurative compositions. Although the Knossos style can be seen in various secondary sites, at the other Cretan palaces of this period the prime focus remains on decorative themes (Gates 2004, 28-29). This has been interpreted by some as an indication that the new painting tradition was under the control of Knossos, and therefore deployed primarily on the site itself and in its immediate territorial hinterland (Bevan 2010, 40-42). However, figurative painting influenced by the Neopalatial Knossos style has been found at various sites in the Cyclades, notably Akrotiri at Thera (Palyvou 2005a), and also at sites in the eastern Mediterranean like Avaris in Egypt (Bietak et al. 2007) and Tel Kabri in the Levant (Cline & Yasur-Landau 2007).

The painted plaster of the Mycenaean period derives from this tradition, not only in terms of its iconography but especially in terms of material technique. One important question in this regard concerns painting techniques. Early work up until the 1980s suggested that some kind of *al fresco* technique was used for Aegean painted plaster rather than alternative techniques that were used in Egypt (*Aegean Painting*, 14-16).¹⁷¹ In Egypt painting was done *al secco* directly on limestone or quick-setting gypsum walls. More recent research, based on the application of new scientific techniques as well as experimental research, has reinforced the notion of painting on lime plaster having originated in the Aegean and spreading from there to different sites in the eastern Mediterranean (Brysbaert 2008, 156-160). This is not merely a matter of different techniques, but in Brysbaert's terms constitutes a difference in technological style that is intimately connected with a broader set of relations between people, techniques and materials, brought together in the *chaîne opératoire* of making painted plaster (Brysbaert 2008, 45-51). This will be further discussed in section 4.3.2 below. The iconographic traditions can be seen as complementary to this. The craft tradition of Aegean Bronze Age painted plaster should therefore to be considered as playing an innovative role, rather than a derivative one, in the interaction within the eastern Mediterranean.

¹⁷¹ As defined by Brysbaert (2008, 17) the different painting techniques are *al fresco* (or *buon fresco*), where pigments in water are applied to a damp lime plaster, and *al secco* (*secco fresco*), where pigments are mixed with a binder and applied to a dry surface that can be made of a variety of materials. A combination technique is *fresco-secco*, which can be either painting part *al fresco* and part *al secco* or refer to painting with pigments mixed with lime water or slaked lime applied to a dry surface. A key problem with detecting *al secco* painting is that it is very hard to detect organic binding material with current techniques, as these are usually not well-preserved (Brysbaert 2008, 119-120). Such techniques are continually improving, however. The restudy project of the Pylos wall-painting fragments has claimed to have found egg as an organic binder on a painted plaster fragment, using a combination of gas/pyrolitic gas chromatography-mass spectrometry (Brecoulaki et al. 2009, 384, 390-393).

A synthesis of early work had demonstrated the technological continuity in painted plaster between the Neopalatial period sites such as Knossos and Akrotiri and the later mainland sites (R.A. Jones 2005, 203-209). 172 Studies like that of Brysbaert that incorporate new scientific techniques and experiments of replicating painting procedures, also make it possible to more accurately understand common and different aspects between periods and regions within this tradition. Of special importance to the discussion here are painting techniques and the recognition and description of colours. From macroscopic observations it seems that there existed a rather striking association between the Late Bronze Age Knossos painted plaster, that of the mainland sites, and of the site of Tell el-Dab'a in Egypt (Brysbaert 2008, table 7.1, p. 150). This was substantiated by other technical analyses, and on chronological grounds this includes Hattusha (Anatolia) and Qatna (Syria) as well (Brysbaert 2008, 155-156). Technical studies have also revealed a rich colour palette that includes black, red yellow, various types of blue, green, grey, maroon, pink, and brown as well as a number of others created through mixing or overpainting (Aegean Painting, fig. 5, p. 15). Through the application of new means of technological analysis it is possible to recognize new colours, like indigo at Thebes and possibly Alalakh (Brysbaert 2008, 139). These also enable further exploration of the details of the different variations of blue pigments (Brysbaert 2008, 134-139).

Differences between the Neopalatial and Mycenaean periods can also be observed in forms of painting. In the former period there existed a miniature style alongside the life-sized paintings which showed large and more elaborate scenes. Examples are the West House frieze at Akrotiri and the 'Grandstand' and 'Sacred Grove and Dance' wall-paintings at Knossos (*Aegean Painting*, 63-75). To give an indication of size, the 'Grandstand' wall-painting as reconstructed by Gilliéron measured 30 centimetres in height and 90 centimetres in length, with the standing female figures being about 6 centimetres tall (*Aegean Painting*, 64, 173). Another painting form of the Neopalatial period were wall-paintings of large human figures on stucco relief at Knossos, a technique that emphasized the anatomy of the figures in a more three-dimensional way (*Aegean Painting*, 52-53). After LM IB painting on stucco relief largely disappeared (Rehak 1997, 59), although a painted stucco layer was applied to the Kokla tomb on the mainland (Gallou 2005, 68). Another shift seen in the Mycenaean period was that the miniature style seems to have developed into a modified form of small-scale painting, within an overall preference for larger-scale scenes (Shaw 1997, 485-486).

Apart from the painted plaster, another important material form of Mycenaean monumental art is stone sculpture. The best example of this is the so-called 'Lion Gate' at the entrance of the citadel at Mycenae (Shaw 1986). A few smaller-scale examples of stone sculpture have been found as well, all from the mainland (Crowley 2008a, 269). Although less predominant, the scale nor the subject matter of stone sculpture does not seem to have been radically different from that of the painted plaster. The most important difference would have been that it could be applied to a greater degree in outside architectural settings, especially for the façades of buildings and tombs. The pictorial evidence from both the Minoan and Mycenaean cases suggests that façades were much more important than can be inferred from the limited material remains (*Aegean Painting*, figs. 34-35, pp. 126-127). Stone sculpture may have been deployed on a larger scale, therefore, even if more substantial data is lacking. It was also used for the Shaft Grave stelae (Younger 1997), but stelae are not known for the era of the Mycenaean palaces proper. Stone could also be decorated through

¹⁷² Occupying a more uncertain position within this tradition are the wall plasters from EH II Lerna and from pre-Palatial Tiryns (R.A. Jones 2005, 223). However, the art of the mainland in the early Mycenaean period shows more a process of adaptation of Cretan and Cycladic motifs than a connection with a larger preceding tradition, except for a broadly geometric tradition (Blakolmer 2010a, 515). This geometric emphasis will be further discussed for the concept of 'bounded naturalism' in section 4.4.2 below.

¹⁷³ The Minoan evidence suggests that ashlar façades were most important (Palyvou 2005b, 189-192), and these had only small symbolic markers on them (Begg 2004). Stone sculpture in the Minoan case was limited to the horns of consecration symbols (Younger & Rehak 2008a, 148).

inlay, as can be seen for the use of blue glass inlays in a stone block decorated with triglyphs and half-rosettes from the palace of Tiryns, originally discovered by Schliemann (Panagiotaki et al. 2005, 15-16), see figure 11.

Indications that larger-scale textiles existed can be inferred from both Egyptian and Aegean paintings. A significant number of ceilings of Egyptian elite tombs were painted with designs that closely parallel those of Minoan and Mycenaean textiles (Barber 1991, 338-351). 174 Such painted ceilings can be found from the 12th through the 21st Dynasties, but were especially numerous in the 18th Dynasty (1543-1292 BC), and can be interpreted as copies from large-scale textiles imported from the Aegean region (Barber 1991, 330-351). Some painted plaster scenes from the Aegean itself, all Minoan or Cycladic, also suggest textile wall hangings (Betancourt 2007a; Shaw & Laxton 2002). The more elaborate *ikria* or ship's cabins depicted at Akrotiri and Mycenae (see figure 12) were likely made of heavy cloth, while the simpler ones could have been made of leather (Shaw 1982, 54-55). 175 That they had a wider distribution can be inferred from the numerous depictions of them on both Minoan and Mycenaean glyptic (Tzamtzis 1989). Another case is that of a Minoan figurine from Pseira (Betancourt 2007a, fig. 30.2, p. 186), which represents a bull wearing a large textile, indicating some kind of ritual function. Overall, it is highly likely that large-scale textiles with decorative motifs, and possibly other kinds of motifs as well, were used in monumental contexts, but it remains unclear in what precise role they were used.

Although the painted plaster, stone sculpture and inlay, and large-scale textiles employed very different techniques, they were deployed in similar kinds of architectural settings and can be treated singularly in terms of overall iconography. This raises the question of the connections between the different crafts, as well as to the non-monumental surface containers with art. Mycenaean non-monumental containers with art include seals and sealings, vessels, jewellery, *larnakes*, garments, and armour, all of which share important iconographic motifs with monumental art. Such connections may well derive from the use of model books, as has been suggested for the Neopalatial period (Betancourt 2007b, 129-130). However, the concern here is not with the iconography in a self-contained way but rather with shared methods of technique and composition, potentially revealing cross-craft connections. This has an important impact for understanding the different kinds of material metaphors that can be attributed to these containers. To understand the relations between these different monumental and non-monumental forms of Mycenaean art, one available strategy is to look at similarities in surfaces and the way in which they have been worked to create art objects. By taking this approach, it becomes possible to delineate four different kinds of interconnections between material forms:

- 1. In similar kinds of pictorial spaces, as they can be seen primarily for various kinds of vessels, textiles and painted plaster.
- 2. With regard to the interior design of pictorial spaces, as seen in seals and sealings, stone sculpture and painted plaster.
- 3. In the direct imitation of surface motifs and design (skeuomorphism), as can be seen for textiles and painted plaster. 176
- 4. The use of inlays of similar materials, in stone sculpture, jewellery, and furniture.

¹⁷⁴ More complex tapestries with figural scenes are also known from the contemporary Near East (J. Smith 2012, 241-242).

¹⁷⁵ Leather was also used for chariot platforms, though with decoration (if any) limited to simple designs, as can be seen in the depiction of two examples on the Ayia Triada sarcophagus (*Aegean Painting*, plate 53), or in depictions of chariots on pictorial pottery (C. Morris 2006, fig. 1, p. 100).

¹⁷⁶ Another variant of skeuomorphism can be seen in the imitation of natural phenomena in wall-painting, a feature that will be only discussed in section 5.2.4 (for it does not involve relations between material forms of art as such).

Of the four kinds of surface connections, the first one of similar kinds of pictorial spaces is the most complex, and also the most problematic. Vessels were made from clay, stone or metal. Mycenaean stone vessels seem to have had little decoration (Bevan 2007, 157-165), in contrast to the Minoan ones such as, most notably, the Harvester Vase (Koehl 2006, pl. 12). This difference may be related to the concurrent disappearance of painted stucco after LM IB, given that scenes such as that of the Harvester Vase have been closely related to stuccoed wall-paintings (Blakolmer 2007b). For the metal vessels, mostly silver and gold, the repoussé technique was used to create complex figurative scenes. This includes a rhyton depicting a siege scene from the Shaft Graves at Mycenae, which recalls both the contemporary (Late Cycladic IA) miniature wall-painting from the West House at Akrotiri on Thera and the small-scale LH IIIB scenes from Hall 64 of the Pylos palace (Blakolmer 2007a). Metal vessels with repoussé decorations have also been found in Mycenaean palatial period contexts, but not in great numbers and the known ones show simple faunal subjects rather than the more complex scenes of the siege rhyton (Crowley 2008a, 274).

The most interesting connection is between pottery vessels, wall-paintings, and textile garments. Already in Crete in the Protopalatial period a borrowing of motifs from pottery and textile designs can be seen in the development of wall-painting (Blakolmer 1999). In the Mycenaean palatial period, however, the painted plaster and vase-painting techniques had developed in such a way that they appear highly distinct in terms of the ways in which different iconographic elements are depicted. The connection can rather be found in composition, or more specifically in the use of friezes in all three cases. A layered pattern of friezes can be observed both in garments such as the Mycenaean kilt (and in the *ikria*) and in pottery, a connection that remained in existence throughout the Early Iron Age (Barber 1991, 370). Furthermore, friezes are common for Mycenaean monumental art as well, as can be seen in the stelae from Mycenae (Barber 1991, fig. 16.9, p. 369). More importantly such friezes can also be seen in wall-paintings, especially those from Pylos which show nautili, snails, bluebirds, floral motifs, spirals and other decorative motifs (Lang 1969, 141-157). As material metaphors, therefore, the painted plaster friezes are closely connected with pottery and textile friezes. The same seems to be true for the connection between repoussé decorations on metal vessels and miniature/small-scale narrative scenes of mural art.

The second connection to be explored revolves around similar kinds of interior pictorial design. The materials forms involved are seals and sealings, stone sculpture and wall-paintings. Although seals and sealings seem to have been less important for administrative purposes in the Mycenaean palaces in comparison to their Minoan counterparts, there still was an expansive range of figurative motifs and scenes depicted on them (Younger 2010, 330-333). It has been argued that the lack of a frame in seal designs necessitates a strong internal composition, with a special focus on symmetrical ones (Younger 1995a, 340-342). This made it difficult to copy the more expansive compositions of monumental art on seal surfaces. However, such symmetrical compositions, especially those of cult scenes from finger rings, were also used for monumental art: both in painted plaster scenes and in stone sculpture. The best example of the latter is the 'Lion Gate' at Mycenae with the two creatures flanking the central pillar, which can be closely connected in iconography and technique with seals from the so-called Mycenae-Vapheio Lion Group (Younger 1995a, 346-347). Another example may be seen in the antithetical lion and griffins in throne settings discussed earlier in section 4.2.2.

The third relation in surface composition concerns the direct imitation of surface motifs and design from one artistic form to another, a process known as skeuomorphism. The best examples of this are between large-scale textiles, garments and painted plaster. Apart from the connection with friezes referred to earlier, painted plaster scenes could also directly imitate what most likely were wall-

¹⁷⁷ We may point to the Tanagra burial coffins or *larnakes*, however, as an example of how vase-painting techniques were deployed into larger pictorial settings (*Aegean Painting*, 154-158), for which other examples may have existed.

hangings, as seen at Akrotiri and Ayia Triada in the Neopalatial period (Shaw & Laxton 2002). Furthermore, some depictions of garments from this period also show figurative designs on them (Barber 1991, fig. 15.6, p. 320). The evidence from the Mycenaean palatial period is much sparser. The garments change to a basic distinction between elaborate ones, now worn mainly by men rather than women, with decorative motifs and a plainer 'native Mycenaean' style (Barber 1991, 322-325). This distinction seems to be supported by the broader analysis of Mycenaean textile economies based on the Linear B tablets (Burke 2010, 103-104). The relation between textiles and painted plaster thus becomes less clear, although there are convergences as well with regard to the border designs of both wall-paintings and garments (Barber 1991, 325-327), which suggests the connections were still significant. Other cases that can be seen are between glass seals and hard-stone seals before the large-scale use of moulds in LH IIIA for glass seals (Hughes-Brock 2011, 100) and the cessation of the production of hard-stone seals.

The fourth and final connection lies in the common use of materials, such as of inlays in different kinds of material forms. As noted earlier in this section for stone sculpture, blue glass was used as an inlay in a frieze of carved stone blocks from Tiryns. Such inlays are common for other kinds of artefacts as well and involve a variety of other materials like gold and ivory, as documented in Linear B for furniture (Bernabé & Luján 2008, 202-205). These kinds of cross-craft links can also be inferred from workshop settings where a variety of different kinds of materials were worked, as has been recently discovered for the site of Tiryns (Brysbaert & Vetters 2010). Another important cross-craft connection can be seen in the relation between the pigments used in painted plaster and the materials from which they derived, especially notable in the case of Egyptian Blue. There are important implications for such common occurrences of inlays in different material forms. The significance of this includes not only the cross-craft links but also conceptions of materiality. These issues will be further explored in section 4.3 below.

4.2.4: Instruments in Mycenaean art

Only a few material forms of Mycenaean art can be seen as instruments, and only one of them approaches a scale that can be plausibly viewed as monumental. This concerns the decorated hulls of ships, which are not known directly from the remains of ships themselves but indirectly from depictions on wall-paintings. One implication of this is that little can be said about the material properties of this art, and that their actual existence is only a plausible assumption. The best examples of depictions of ship's hulls can be seen in the Late Cycladic IA miniature wall-paintings of the West House of Akrotiri (*Aegean Painting*, plates 25-26), see figure 13, but a preliminary publication of the wall-painting fragments from the Mycenaean palace of Pylos suggests their presence here as well (Brecoulaki 2005). As was discussed in the previous section, the *ikria* are also known from both periods. We may then infer a roughly similar way of depicting ships and of conceiving of their 'monumentality' in both cases, which also has parallels in the Egyptian and to some degree in the Mesopotamian artistic records (Foster 2012, 681-683).

It may seem contradictory to include ship's hulls in the category of instruments, as they would seem to act as a container of all that is located within the ship. However, the hull can also be understood to be the means, the instrument, of the ship that enables it to be carried through the water. It is this dual role of the ship as a container of humans and goods and as an instrument to navigate the seas, that allows for the cabins or *ikria* to be assigned to the surface container category and the ship's hull to that of the instruments. A possible parallel for this can be seen in the wheel and platform box combination of chariots. Some examples are known of chariot wheels with simple decoration (e.g. *Aegean Painting*, plate 69), and simple decoration is known for the platform boxes as well, for which the most numerous examples of can be found in the vase-painting corpus (C. Morris 2006,

fig. 1, p. 100). From the Linear B sources we can infer that metals and ivory may also have been used for decoration of chariots (Schon 2007, 134). This is the case for both the wheel and the frame of the vehicle, both of which could be painted as well (Bernabé & Luján 2008, 209).

Returning to the ship hulls, the different landscape themes depicted on the individual hulls from the Akrotiri wall-paintings can be read as representing a total view of nature in the overall composition of the fleet (Marinatos 2000, 911-912). The reconstructed compositions on the hulls bear a striking resemblance to those on the roughly contemporary Shaft Grave daggers from Mycenae. Nanno Marinatos has argued that "what the daggers and the ships have in common is the fact that they are instruments of aggression" (Marinatos 2000, 911, emphasis in the original). This is a compelling argument, although domination will be used here instead of aggression. 178 Swords with decoration were already in use in Minoan Crete, but new types were developed in the Mycenaean period (Georganas 2010, 306). As regards daggers, the black-inlaid types are especially noteworthy for the apparent use of either the 'niello' or the 'black bronze' technique to create figurative compositions, though the specific technique remains controversial (Thomas 2005; Boss & Laffineur 1997). These 'paintings in metal', which derive predominantly from mainland funerary contexts such as the Shaft Grave circles at Mycenae, show a variety of complex iconographic compositions with narrative potential (Thomas 2005, tables 1-3, p. 728). Interestingly, later Mycenaean weaponry from LH II -IIIB, though elaborate, has so far not yielded any evidence of the use of 'niello' or 'black bronze' to create complex pictures, despite indications that the technique continued to be used on cups and possibly other metal vessels.

Turning to other kinds of instruments, simple decoration is known for musical instruments such as the *phorminx* lyre, with several examples having decorative and/or simple figurative motifs (Younger 1998, 21-22). Interestingly, representations of tools with more functional uses are never seen in prominent positions Mycenaean art, which is almost certainly a cultural preference as in Minoan art tools can sometimes be seen, as in the Harvester Vase (Koehl 2006, pl. 12). Yet this would have more to do with the lack of quotidian scenes in Mycenaean art, to be discussed in section 4.4.2 below, than with a 'taboo' on mundane tools as such. The proper context for their representation would simply be lacking. Neither the stylus of the Linear B scribes or the brush of the painter have survived, and this lack of material extends to the other tools used to create the material forms of Mycenaean art. There are two terms from the Linear B tablets, however, that yield a minimum of insight into the conception of artistic instruments. These are *a-ja-me-no*, likely meaning 'inlaid' that occurs in a number of Linear B tablets (*Documents*, 528) and *qe-qi-no-me-no* that occurs just once and likely means 'carved' (*Documents*, 576).¹⁷⁹

One category of instruments that has survived better is that of the seals. These were discussed in section 4.2.3 as three-dimensional containers, but they can also function as instruments by impressing their design on a surface. Already in the Neolithic stamps were used to impress designs on textiles, and possibly for tattoos as well, forming part of the *pintadera* tradition of the Balkans and Near East (Younger 1995a, 331-332). This tradition may have continued, but by the Early

¹⁷⁸ This is particularly true for the ships, since it is not easy to distinguish a Bronze Age war galley as would be possible for the Greco-Roman period. Even so, the different functions of ships should by no means be held to be incompatible and a connection between conflict and ship imagery can be seen from the Middle Bronze Age through Early Iron Age periods (cf. Petrakis 2011, 216). Yet the more generic term of domination seems to best capture the multiple functions ship could have in terms of sustaining power, whether through conflict or exchange. In this regard Mary Helms notion of power deriving from contact with far-off places is also relevant (Helms 1988).

¹⁷⁹ The context and etymology of the term *qe-qi-no-me-no* has been further explored by Heubeck, who concluded that it referred to the specific technique of painting or carving, in this case of stone and ivory furniture (Heubeck 1966, 231). The term also occurs in Homer in the more general sense of describing something as decorated, and has an interesting etymological root that would mean something like 'to make or endow with life' or 'to vivify' (Heubeck 1966, 234-235).

Bronze Age a different kind of use of such objects can be seen as seals within an administrative setting (Weingarten 2010, 320-322; Younger 2010, 330-331). With the introduction of the bow-drill on Crete in the Middle Minoan II period it became possible to carve harder stones, which led to the possibility of much greater precision in the carving of scenes (Younger 1995a, 338). This led to a great variety of iconographic motifs and scenes on seals, as can be inferred from a recent catalogue of different kinds of Minoan and Mycenaean seal iconography (Crowley 2013). In this use of seals, the Aegean Bronze Age was no different from the contemporary Near East and surrounding areas, with seals helping to spread iconography across boundaries (Collon 2000; Wengrow 2014, 65-67).

The use of seals for administrative purposes in the Mycenaean palaces seems to have been different from that of Minoan Crete in two ways. One is that sealing practices in the Mycenaean case were more uniform across different sites (Krzyszkowska 2005, 284). The second is that the use of seals in Mycenaean administration was restricted mostly to recording transactions between centres and their hinterland sites, instead of also including internal palatial transactions as in Neopalatial Crete (Younger 2010, 334-337). In order to grasp this situation better, it is useful to look in more detail at the trajectory of Mycenaean seals, following the outline of Flouda (2010, 61-63):

- 1. The MH III LH I deposition of seals of hard-stone materials (including semi-precious stone) and metal signet rings as high-status burial goods in the Argolid. It should be noted that such seals were found in lesser quantities in other regions as well (Drakaki 2008, 84).
- 2. A wider distribution in LH II-IIIA of hard-stone and metal ring seals in burial contexts, including in more peripheral sites. Crete in LM II-IIIA shows a continuation in materials and style, if not in administrative use, of seals of the Neopalatial period.
- 3. At the end of LH/LM IIIA hard-stone seals cease to be made, but continue to be used in administrative contexts. Soft-stone seals and moulded glass seals are made in greater quantities, but the evidence for their use in administration is very limited.

The administrative uses of seals on the mainland are best known for the LH III period, where they can be placed alongside the Linear B evidence. As noted earlier, the main use of seals in Mycenaean administration was for recording transactions between centres and sites in their hinterlands. For this purpose nodules were used, which are small clay clumps with impressions that do not ordinarily seal containers with goods but can rather be seen as labels. Over a thousand of such nodules have been found at ten different sites (Panagiotopoulos 2010, 299), a tiny minority of which carry brief Linear B inscriptions in addition to the seal impression (Palaima 2000, 262). Of special interest here is how this use of seals as administrative instruments can be related to their artistic properties. An important point in this regard was made by Younger (2000, 349), who distinguished between the properties of a seal as a material form in itself and the iconographic impression created by the act of using a seal. The former aspect of object-hood of seals would be connected with the status of its owner, and in its materiality also reflects ideas on the often magical qualities of seals as will be explored in sections 4.3.3 and 5.3.2. The iconographic element, by contrast, would refer more closely to the function of its user in the administrative contexts, as this would be where such images were made visible in impressions on sealings and nodules.

For the Mycenaean mainland, it seems that the status aspect of seals was developed before their administrative use. This can be seen in an analysis of the LH I-IIA depositions of seals made from precious materials in burials rich with other kinds of prestige goods (Drakaki 2008, 85-94). There are indications that they were not intended for seal-use as such but as prestige goods in themselves (Drakaki 2008, 99-100), perhaps exchanged as gifts and used for conspicuous consumption as proposed for the Shaft Grave burial goods in general (Voutsaki 1999, 109-112). The soft-stone seals are held to indicate an expansion of seals to non-elite groups (Flouda 2010, 63), but the situation of

the glass seals is more unclear. Despite being found mostly in peripheral sites the glass seals seem more similar to their hard-stone counterparts (Dickers 2001, 77-87). The glass seals are not linked with administration and being mould-made and lacking individual qualities, they may rather have designated social groups in a regional setting (Eder 2007b, 91). The hard-stone seals are the only clue to the role of iconography in the administrative process, and were still being used for such purposes after production of them had ceased in LH IIIB. Especially notable in this regard is the emblematic character of iconographic scenes on nodules from Pylos, paralleling LH IIIB wall-paintings from the same site, which seem to be connected to certain offices (Flouda 2010, 73). As such, both the use as as a status object and the use of its iconography in impressions related to administrative tasks can be seen for Mycenaean seals in palatial contexts.

4.2.5: The material forms of Mycenaean art

The connections between the different material forms outlined in the previous sections are by no means obvious. One recent argument may offer at least a partial resolution to this. Wengrow (2014) has developed the idea that the first urban societies of the area between the Aegean and the Indus can be characterised as the 'first age of mechanical reproduction'. By this he refers to the use of certain technical means such as moulds and especially seals, in order to (potentially) create multiple impressions of the same artistic design. There are implications of this for other aspects of the analysis of Mycenaean art, as will be discussed for iconography in section 4.4.2 and contexts of art in section 5.2. Here the concern is with the implications for understanding the relations between different material forms of art. There are two basic elements of this, the first of which concerns the immediate impact of the means of technical reproduction, as noted for seals by Wengrow:

"Such [sealing] practices had a dual effect on the dissemination of images, comparable in some respects to that of the printing press in late medieval and early modern Europe. They provided a method for accelerating the replication of powerful visual formulae, simultaneously restricting their production to a small group of artisans and their elite patrons. This use of mechanical image production to fix ritual values within stable media of transmission, extending their dissemination beyond ephemeral performances into the spaces of everyday transactions, is a distinctive and neglected feature of early state formation in the western Old World." (Wengrow 2014, 81)

The relation between different forms here is that between instrument and container, a basic example of which is the use of a seal to create a sealing. Such direct relations are limited, however, to the seals and to moulds and the art objects created through them. Beyond this it is possible to note a more indirect impact of this kind of mechanical reproduction of images on other material forms. This can be noted for Egyptian art in the relation between two-dimensional art and statuary, as well as in the fitting together of architecture and furniture from different 'modular' parts (Wengrow 2014, 55-59). The question is whether such a pattern can be observed for the Mycenaean case as well. In terms of the use of seals and moulds it is clear that the Aegean had long been a participant in this kind of 'mechanical reproduction'. Two kinds of relations between material forms cautiously suggest broader notions of 'modularity' may have been present as well. The first concerns the relation between similar kinds of pictorial spaces, as observed for vessels, textiles and wall-painting in section 4.2.3, and for the hulls of boats and daggers in section 4.2.4.

These designs may have been copied either directly from one material form to another. As noted in section 4.2.2 an alternative is that model books (which have not survived) may have been used. The

¹⁸⁰ Here we may also note that two of the seals from LH I-IIA high-status burials were made of glass (Drakaki 2008, 95). Furthermore, a glass seal found at Tell Abu Hawam in the southern Levant (dated LH IIIA2 – IIIB) seems to have been made from the same mould as another glass seal from the Argolid (Pini 2005, 782).

other potential indicator of modularity is related to the use of inlays from one material in different material forms like stone sculpture, jewellery, and furniture. Not enough research has been done to conclude that a modular concept can be seen behind all uses of inlays. In the case of furniture, however, the more detailed description of specific forms in the Linear B tablets points to a modular use of different materials (e.g. *Documents*, 341). The on-going work on cross-craft activity discussed in section 4.2.3 will hopefully show in the future to what degree modularity in the use of materials can be observed in other material forms of Mycenaean art as well. The more basic forms of skeuomorphism between textiles and wall-painting and between stone and wood and wall-painting discussed in section 4.2.3 are unrelated to notions of modularity.

Another interrelation between material forms noted in section 4.2.3 was the use of the 'symmetrical' interior design of seals to the material forms of stone sculpture and wall-painting. This often showed antithetical animals flanking an architectural feature, which, as discussed in section 4.2.2, could also involve a relation between two-dimensional wall-paintings and a 'throne' as in the Knossos palace. Hence the similarity seems to indicate primarily a common iconographic theme, based on the antithetical animals, rather than deriving from a common design. The knowledge with regard to statuary is simply too limited to propose a metrological relation between three-dimensional and two-dimensional material forms as noted for Egyptian art. The conclusion to draw from these interrelationships between the different material forms of Mycenaean art is that Wengrow's idea of the 'first age of mechanical reproduction' can be recognised. This is based mostly on the seals and their uses, but also on indications of modularity in different material forms. Based on the still limited analysis, it would be too rash, however, to posit modularity as the overarching principle of Mycenaean art, even if it can be acknowledged to have played a significant role.

4.3: Craft and materiality of Mycenaean art

4.3.1: Introduction

The next aspect of Mycenaean art to be discussed is that of craft and materiality. It builds upon the analysis of material forms in section 4.2, but is less concerned with considering all material forms than with exploring the properties of some of them in more detail. The details that will be investigated here revolve around craft and materiality. As noted in section 2.4.4, craft is closely connected with ideas of materiality as they are understood within a particular worldview such as that of Mycenaean Greece. In analytical terms, however, the analysis of craft-work in itself is sufficiently different from that of conceptions of materiality to make it useful to first consider the two separately. Hence section 4.3.2 will focus on craft-work, focusing in particular on its social dimensions. This involves considering not only the organisation of the craft-workers themselves, but also questions concerning their relations to other sectors of society. One approach that is very useful in this is the so-called *chaîne opératoire* approach, which will be explained in more detail below. The usefulness of this model is that it allows for a systematic grasp of the relations between craft-workers, the materials they use, and the social relations of importance to them.

The focus on section 4.3.2 will lie on those materials that are especially relevant for understanding conceptions of materiality such as painted plaster and vitreous materials, rather than considering all the different kinds of materials used in Mycenaean art. The discussion of conceptions of materiality of Mycenaean art in section 4.3.3 will start with some general considerations of the topic. The central focus on attention here, however, concerns the analysis of the meaning of the linguistic term *ku-wa-no* or *kyanos*. A large number of different sources intersect in this term, including those of Linear B and various materials and artefacts of the Mycenaean archaeological record. Other sources are materials and texts from the contemporary early civilisations of the eastern Mediterranean and

Near East, as well as inferences that can be made based on Homer and other Archaic-Classical Greek sources. The inferences that can be made from the analysis of *ku-wa-no* will be used to discuss conceptions of materiality in Mycenaean art in general, with particular attention to the perception of colours. Finally, in section 4.3.4 the analysis of craft-work and conceptions of materiality will be brought together to consider their interrelation.

4.3.2: Craft-work and Mycenaean art

One important approach for interpreting craft-work increasingly used in archaeology is the so-called *chaîne opératoire* approach. This 'chain sequence' can be defined as the steps through which a raw natural material is transformed into a cultural product, bringing together all the technological and social elements that are involved in these steps (Brysbaert 2008, 22-23). A complex web of relations between craft-workers, various kinds of elites, society at large, and the materials themselves follow from this (Brysbaert 2008, 41-44). The concern here is, however, more focused on the organisation of craft-workers and their relation with the materials that were worked by them. The latter aspect also brings up the question of long-distance exchange and the ways in which this was organised and controlled. Hence the analysis presented here will draw upon the *chaîne opératoire* approach selectively rather than provide a full-scale analysis. As noted in the previous section, the focus here will lie primarily on painted plaster and vitreous materials, owing partly to their importance in the discussion of conceptions of materiality in the next section.

The first material technique to be discussed is that of painted plaster. As indicated in table 4.1 this was used primarily, if not exclusively, for making wall-paintings. The basic (technical) properties of painted plaster and wall-paintings were already treated in section 4.2.2, here this discussion will be extended to craft-work. The first thing to note is that there are no direct references in the Linear B tablets specifically to painted plaster as a material or to the painters of murals. Furthermore, the direct archaeological evidence for their production is very limited, amounting at the most to the remains of pigments in ceramic containers from Late Cycladic IA Akrotiri (Sotiropoulou et al. 2012). As a result the best way to make inferences about the *chaîne opératoire* of painted plaster is by working backwards from the wall-paintings and other material forms for which it was used. This can be done both by looking at the material characteristics of the painted plaster and by identifying individual 'hands' in painting styles. Starting with the material aspect, much work has been done since the initial replication studies (Evely 1999, 141-142) and analysis of pigments (Philippakis et al. 1976) in the 1970s. Not only have new replication studies been carried out (Chryssikopoulou et al. 2000), but the range of analytic techniques to study the remains of painted plaster has also been broadened considerably (Brysbaert 2008, 111).

The better grasp of the technical properties of Aegean Bronze Age painted plaster that results from this allows for more fine-grained insights into the processes behind their production. One basic aspect of this can be seen in the recognition that the making of the pure lime plaster, its application to architecture, and finally painting itself, would have involved a variety of skills that demanded specialisation among craft-workers (Brysbaert 2008, 168-172). Furthermore, given the complexity of the overall task considerable coordination of these different, sometimes incompatible, skills would have been required. Most likely such coordination would have been achieved through the organisation of craft-workers in dedicated workshops. The existence of these can also be inferred from the analysis of stylistic variation in the painting styles of murals. Such studies have been especially well-developed for the Neopalatial wall-paintings from Crete and the Cyclades (Cameron 1975, 306-370; Davis 2000; Televantou 2000). This work can involve the broad recognition of styles of painting, but also the precise recognition of stylistic 'hands' that makes it possible to note

individually idiosyncratic ways of rendering paintings (Davis 2000, 859). ¹⁸¹ The recognition of specific individual 'hands' is much easier in the better-preserved Akrotiri wall-paintings than for other cases, especially compared to the more fragmented Mycenaean wall-painting record. Yet more intensive study of fragments from the Mycenaean palace of Pylos may eventually allow for similar kinds of interpretations of 'hands' of painters, including those based on the specific materials and pigments used by painters (Brecoulaki et al. 2008, 387).

Both the analysis of the technical properties of painted plaster and the recognition of 'hands' in wall-painting can also facilitate an understanding of the cross-craft relations of this material form. With regard to the technical properties special attention should be given to the use of pigments. Good examples of this can be seen in the use of Egyptian Blue as a pigment and its relation to metallurgy and vitreous materials, as well as in the dual use of *murex* purple and indigo for wall-painting and textile dyeing (Brysbaert 2008, 179-180). The connection between Egyptian Blue, vitreous materials and metals will be further explored below. A close analysis of the way images were rendered on three daggers from the Shaft Graves suggests that individual artists may have tried their 'hand' at a diversity of material forms, including metal inlay, ivory, and wall-painting (Thomas 2012, 759-762). As such, in this particular case the cross-craft connections seem to go beyond the broad connections between material forms outlined in section 4.2. In this sense the detailed ongoing work based on the investigation of cross-craft relations at the level of production in workshop contexts (e.g. Vetters & Brysbaert 2010), should provide important qualifications.

Here two very basic aspects of the *chaîne opératoire* of painted plaster can be noted. The first constitutes a vertical line, linking the production of lime plaster to the actual process of painting murals. Secondly, a horizontal line can be noted in the cross-craft relations in pigment use and the rendering of iconography. As a material technique Aegean painted plaster was used consistently over a long period of time, suggesting the primacy of the vertical line from plaster production to wall-painting over the horizontal one of cross-craft connections. Its distinctiveness as an Aegeanderived material technique can also be seen in its use in wall-paintings in different sites across the eastern Mediterranean (Brysbaert 2008, 189-195). Such a long-lived technological style likely depended upon a master-apprentice relation in order to perpetuate itself (Boulotis 2000, 851; Brysbaert 2008, 32-33). As noted earlier, the team of craft-workers required for using painted plaster for making wall-paintings would have been fairly large. The stylistic relations between paintings at different sites, including the ones outside the Aegean, also indicate that the craftworkers could travel considerably (Boulotis 2000). The kind of patronage relations this would have involved cannot be inferred directly from the material evidence, even if it strongly indicates that they would have been present. Such questions can be better grasped by looking at the contexts in which wall-paintings have been found, an issue that will be addressed in section 5.2.

Moving from painted plaster to the material techniques involved in the production and use of vitreous materials, the first question that needs to be answered is what exactly the term 'vitreous' refers to here. Sherratt (2008, 209-210) has pointed out the ambiguities of this term as used in interpretations of the archaeological record of the Bronze Age eastern Mediterranean and Near East. For those not fully schooled in the precise technical aspects of such materials, which certainly includes the present author, it can be very difficult to ascertain the varying usages of the term vitreous in the literature. Some prefer to distinguish glass from other materials described as vitreous such as faience, even if accepting some similarities at the level of craft-work (Duckworth 2011, 214-215). Here the definition of Shortland (2012, 29) will be followed, who includes all human-

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¹⁸¹ A much larger debate in this regard concerns the appropriateness of recognising 'hands' and the theoretical focus this implies with regard to individual artistry (Cherry 1992; Morris 1993), see in this regard also Ginzburg (1984) for the broader background of such ideas.

created materials that contain large amounts of glass. These include for the Late Bronze Age glass itself, faience, ceramic with glaze, frit, and a number of pigments. It should be stressed that these materials are by no means identical. In the period of the Mycenaean palaces there was a preference, although faience was also used, for light to dark blue materials that were either glass or Egyptian Blue frit (Panagiotaki 2008, 53).

The *chaîne opératoires* of vitreous materials are very complex given the minerals, pyrotechnology and shaping procedures involved. Again, the aim here is not to provide a full account of this, but rather to focus on the craft-workers and their interaction with the material. One very broad division in the *chaîne opératoire* of glass specifically was between making it and working it, which involved very different kinds of craft-work knowledge and instruments (Shortland 2012, 135). The complexity of making glass can be readily inferred from the number of technical steps discussed in the textual sources (Shortland 2012, fig. 6.11, p. 125). So far only a few glass-making sites have been discovered, with the best evidence coming from Egypt (Shortland 2012, 87-97). However, there is also good evidence for a glass-making tradition in Syrian and Mesopotamia (Moorey 1999a, 189-198; Oppenheim 1970, 69-86). The distinction between glass-making and glass-working is of great significance for the Aegean. So far no clear evidence has been recovered for indigenous glass-making in this area. Although it has been proposed that there are a few chemical clues from finished glass objects that glass-making may have taken place here (Nikita & Henderson 2006), these are not conclusive in demonstrating that it was made within the Aegean (Shortland 2012, 164-165).

Glass was traded throughout the eastern Mediterranean in the form of ingots, as can be seen in the about 175 ingots of dark blue and turquoise glass found in the Uluburun shipwreck dated to the late 14th century BC (Mee 2008, 364; Shortland 2012, 146-147). The analysis of Mycenaean glass beads has revealed that the glass used to shape them was made in Egypt and Mesopotamia (Walton et al. 2009). Hence it was likely imported through high-level exchange between states. As noted in section 3.4.2, the use of copper ingots was closely connected to elite control. Texts and iconography from Near Eastern sources further confirm the close association between elites and the control and exchange of glass (Shortland 2012, 141-152). Of course, this does not preclude the possibility that glass was exchanged in other ways as well, but these cannot be recognised. While there is so far no definitive evidence that glass was made in the Aegean it was certainly worked into the distinct shapes there, as can be grasped not only from these shapes themselves but also from moulds discovered at a number of different sites (Shortland 2012, 164-166). An outstanding example of glass-working can be seen in the evidence for a glass workshop at Tiryns (Panagiotaki et al. 2005).

There have also been suggestions that the *ku-wa-no-wo-ko*, or *ku-wa-no* workers mentioned in the Mycenae tablets were glass-workers, a term that will be discussed further in section 4.3.3 below. Yet there is no definitive proof that connects these craft-workers to glass. Other indications add more complexity. For example, it has been proposed that glass finds from Pylos were originally made in both Egypt and Mesopotamia and worked at another site in the Aegean, pointing to an exchange of glass objects within the Aegean itself (Polikreti et al. 2011). Since no direct link can yet be established between finds of glass and the place in which they were worked, however, it is not possible to establish specific exchange patterns. The finds of moulds used for glass-work suggests some degree of concentration at palatial sites such as Knossos and Mycenae, but they are found widely if in much lower numbers at non-palatial sites as well (Hughes-Brock 2008, 136). As with the wall-paintings, it is also important to consider the contexts in which objects made from vitreous materials were found when addressing the issue of the relation of craft-workers to the (palatial) elites and broader society. This issue will be dealt with in section 5.2.

A number of different indications point to a relation between glass and metallurgy (Jackson & Wager 2011, 118-119). These clues include the use of the same ingot shape for glass as for copper (as can be seen in the Uluburun shipwreck), the transformative character of both glass-making and metal-making, the use of moulding to work glass and metal, and finally the use of metal for colouring glasses. Clearly this presents a complex set of questions, but it is possible to use the *chaîne opératoire* approach to disentangle some of these complexities. What is clear is that despite parallels between metallurgy and making and working glass, the specific processes have to be understood in their own terms since they involved different materials and end-products. Furthermore, as we shall see in the next section vitreous materials were more closely associated with semiprecious stones than with metals. Keeping this in mind, some interesting cross-craft links in the *chaîne opératoire* of glass can be observed. One concerns the pyrotechnology of glass-making and the production of bronze alloys, which can be seen side-by-side on an almost 'industrial scale' at the Late Bronze Age Egyptian site of Qantir (Shortland 2012, 94-96). This may be one of the reasons behind the use of the ingot shape for glass.

Pyrotechnology in itself is not a very strong indicator that the materials were conceived of in a similar way, however. Much more interesting is the use of metals to colour glasses, which was extensive (Shortland 2012, 103-119). The best examples are the use of copper and cobalt to produce blues, ¹⁸² but there are other cases as well like the use of manganese to make purple and black glasses. As noted earlier there was a preference for blue glasses in the Mycenaean world, both the dark-blue ones coloured through cobalt and the lighter blue variant coloured using copper. One technical aspect behind the preference for these blue glasses may have been that they, unlike glasses of different colours, did not lose their distinct colour when heated at high temperatures for working (Jackson & Wager 2011, 117). As will be discussed in the next section there were many other reasons that informed this preference. What is important here is that metals were used at one stage in the *chaîne opératoire* of glass-making, and that just as with pyrotechnology it is located in that section of the process in which raw materials are transformed into a material that can be worked.

Moulds for working glass and for working metals were distinct, so there is no intersection in the *chaîne opératoire* sense here. This underlines the point that while metallurgy and glass can show parallels, they remain at distinct tracks and meet only at certain points. This can also be seen in the different way glass and more broadly vitreous materials were used in distinct material forms of Mycenaean art. One of these was the association of small dark blue glass objects with gold, with the latter either covering the glass or the two being used together in a necklace of beads (Nightingale 2008, 81). Another connection is even broader, involving glass-working, metallurgy, and painted plaster. The copper used to colour glass was also used for making one of the blue pigments of Aegean painted plaster, up till the latest phase of the Mycenaean palaces (Brysbaert 2008, 134-139). This specific pigment is made from the ground powder of a frit known as Egyptian Blue, and as such can be conceived of as part of Shortland's generic category of 'vitreous' materials discussed earlier. It could also be used, only seen occasionally in the Aegean, to make objects like the Egyptian monkey figurines from Mycenae and Tiryns (Cline 1991).

As a result a multiplicity of uses of copper can be seen at various stages of the distinctive *chaînes* opératoires of bronze alloys, glass, and painted plaster (in the use of Egyptian Blue pigment). This interaction between what are here presented as neat analytical categories would have been much more complex in the actual circumstances of workshops. This can be clearly grasped from the

¹⁸² Copper was also used to produce red-coloured glass in Late Bronze Age Egypt (Shortland 2012, 118-119).

¹⁸³ Once again it should be stressed that as a frit Egyptian Blue should not be mistaken for glass, even if there is a clear risk of doing so (Moorey 1999a, 186). Some scientific analyses indicate that, unlike glass, Egyptian Blue frit was actually made within the Aegean area itself (Tite et al. 2005, 11).

recent study of the working and re-working of copper/bronze alloys, glass and Egyptian Blue frit in a workshop context at Tiryns (Brysbaert & Vetters 2013, 185-186). The possible meanings of these material interconnections, as well as the one between blue glass and gold, will be discussed in the next section. Here it is important to stress the interaction between the vertical lines of the *chaînes opératoires* of painted plaster and vitreous materials and the horizontal intersection between them for the production of colours, in which copper metallurgy also played an important role. It remains hard to determine precisely the social relations impacting these *chaînes opératoires*. Even so, it can still be argued based on the technological demands of the materials (including the need to support a larger number of people to make wall-paintings) and their exchange contexts (the glass ingots), that it has to be understood primarily within the framework of the palaces. This generic thesis will be further explored for the contexts of Mycenaean art in section 5.2.

4.3.3: Conceptions of materiality in Mycenaean art

Turning now to conceptions of materiality in Mycenaean art, it is important to first sketch the broad outlines before addressing the specific interpretation of *ku-wa-no*. As noted in section 3.4.2 for specialised knowledge, the specifics of Mycenaean ontology and cosmology remain elusive due to the lack of unambiguous sources on this matter. However, a generic connection between craft, materiality and worldview has often been noted based on the specifics of archaeological finds. A good example is that of the 'failed' glass productions in the Cult Centre at Mycenae that may have been offerings (Hughes-Brock 2008, 136). These can be compared to the contemporary metallurgical moulds, crucibles and slags found in cultic contexts in the Cyclades, which have been interpreted as votives (Schallin 1997, 17-19). It has also been suggested that some of the larger three-dimensional figures may have been associated specifically with workshop areas, especially those where metallurgy was practiced (Vetters 2011, 39-42). Furthermore, it is clear that different kinds of craft activity took place in a variety of excavated sanctuaries and buildings with religious functions (Lupack 2008, 131-160). It should be stressed that this activity was not on a scale that warrants the use of the term 'temple economy', as also noted by Lupack (2011, 210), and as should be clear from section 3.4.2 craft-work was carried out by non-sanctuary personnel as well.

These different strands of evidence point to a situation in which religious ideas may have been associated with certain kinds of craft-work both in sanctuary contexts and in workshops outside of them. The distinction between these two kinds of contexts may appear somewhat diffuse, as Mycenaean ritual objects and architectural features such as hearths are more widely distributed than just in exclusively religious contexts (Vetters 2011, 38-39). As such there would be no need for ritual related to be craft-work to be limited to sanctuaries and religious buildings. Much more research is required to be able to determine more precisely the relation between craft-work and ritual, however, especially because there are also no clear insights on whether this would imply a connection between conceptions of materiality and craft on the one hand and religious ideas on the other. It cannot be excluded that this was the case given that parallels exist in contemporary Bronze Age societies such as Egypt, as will be discussed further below, but the Mycenaean evidence at present is insufficient except to note the possibility that this was the case.

One specific material form for which interpretations of its materiality have been offered is the use of painted plaster for creating wall-paintings. As with the relation between cult and craft-work such interpretations are more generic and deal with aspects, rather than presenting a coherent framework of the material ontology of painted plaster. One interesting property of the *al fresco* painting technique used in at least part of the wall-paintings is that the colours only emerge out of the grey, dull plaster wall over a period of weeks or months, so that the act of painting may have been conceived as a magical transformation (Brysbaert 2008, 164, 183-184). Much has also been made

of concentrated 'dumps' of discarded plaster at Pylos, which suggests that the periodic renewal of the painted plaster may have required a special deposition of such symbolically-charged materials (Bennet 2004, 100; Steel 2013, 119-120). Other plaster dumps are also known from Ayia Triada, Mycenae and Tiryns, and there are indications from Gla that the renewal of the painted plaster was based on a continuity in iconography in specific painted areas (Petrakis 2011, 218). Possibly these cycles of renovation of plaster were themselves connected to a ritual calendar, like the one outlined by Younger (2009), a possibility that has been noted earlier (Wright 2006a, 56; Brysbaert 2008, 184). While not implausible, these authors also acknowledge that such a proposition is extremely difficult to prove in a definite way.

Another thing that remains unresolved in this is whether this symbolic value is due to the qualities of the plaster itself or to the colours painted on them, or a combination of the two. Based on technical similarities in building techniques it has been argued that the Hittite evidence might be useful to explore architectural connections with the Mycenaean world (Thaler 2007, 297-301). One Hittite text called 'Ritual for the erection of a new palace' (KUB 29.1) is of particular importance with regard to this question, as it has been pointed out as a possible analogy for grasping Mycenaean painted plaster (Thaler 2007, 307-308). The second line of the text refers to the act of plastering the finished palace, which should be done with 'long years' (or goodness) on the inside and with 'frightfulness' (or lordliness) on the outside (Beckman 2010, 72). This points to a symbolic, and quite possibly 'magical', force of the plaster. Only a few fragments of painted plaster have been found at the Hittite capital of Hattusha (Özyar 2006, 131-132). A number of scholars have linked these fragments with the Aegean painted plaster, though the highly fragmented state of the material makes this quite difficult (Brysbaert 2008, 102). If through future technical studies it could be proven that the Mycenaean and Hittite painted plaster would have shared the same material technique, this would make the connection at the level of material ontology more robust. ¹⁸⁴

These examples of conceptions of materiality in Mycenaean art so far are certainly not insignificant, but they do lack a strong coherence that allows for in-depth insights into material ontology. This is because, as noted in section 3.4.2 for specialised knowledge, the available sources are so limited and fragmented that it is hard to move beyond generic statements. It is proposed here, however, that the case of the Linear B term ku-wa-no offers an almost unique opportunity to gain greater insights into the materiality of Mycenaean art and the material ontology of Mycenaean early civilisation. This is because the term ku-wa-no can bring together a great variety of sources into a coherent framework. To facilitate the complex analysis implied by sources involving different kinds of arguments, a sequence of four consecutive steps will be followed to make this argument:

- 1. A discussion of the references to *ku-wa-no* in the Linear B sources, the information on the etymology of the terms, and a consideration of the relation to the early historical Greek use of the term *kyanos*. Particular attention for the last aspect will be given to the conceptualisation of colours implied by the use of *kyanos* in these textual sources.
- 2. An analysis of the different materials in the Mycenaean archaeological record that can potentially be connected to *ku-wa-no*, in particular lapis lazuli, vitreous materials, and the so-called 'black bronze'. For each of these materials the broader aspects of colour-use will be investigated as well.
- 3. An exploration of the place of the materials related to *ku-wa-no* in the Mycenaean record within the Late Bronze Age eastern Mediterranean exchange sphere of materials and art objects. Part of this analysis builds upon the one provided in section 4.3.3. Particular attention will also be given to conceptions of the materiality of art objects and material

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¹⁸⁴ Reference here can also be made to a recent study that has found a close resemblance between stone sculpting techniques of Hittite and Mycenaean architecture (Blackwell 2014).

- ontology in general in Egypt and Mesopotamia.
- 4. The three previously separately discussed aspects of linguistic usage and meaning, materials and colour use, and eastern Mediterranean connections will be combined in a consideration of the meaning of *ku-wa-no* in Mycenaean art.

The linguistic analysis is based upon the information from the Linear B tablets, in which two kinds of references can be found relating to *ku-wa-no*. The first kind can be found on two tablets from Pylos. Tablet Ta714 lists a chair inlaid with *ku-wa-no* and also with an inlaid motif of a *ku-wa-no* griffin (although the term *po-ni-ke* might alternatively refer to a palm-tree), as well as a footstool inlaid with the same *ku-wa-no* (*Documents*, 344). Other materials used as inlays (including for motifs) for this chair and footstool are gold and silver. ¹⁸⁵ As we shall see later, it may be significant that the griffins on the chair described in Ta714 are made of *kyanos* and gold. The other tablet is Ta642, which contains a reference of a stone table that was inlaid with *ku-wa-no-qe*, as well as gold, silver, and a substance translated as 'aquamarines', which likely was an epithet for an unknown material (*Documents*, 339-340). It is hard to derive from these tablets exactly what kind of material is referred to, and this does not become clearer for the other group of references related to *ku-wa-no* on tablets Oi701-704 from Mycenae (Chadwick 1963, 58-59). These tablets mention *ku-wa-no-wo-ko*, or *ku-wa-no* workers, which were associated with a deity known as the 'mistress of the grain' and found in the Cult Center, with possibly a glass workshop nearby as indicated by moulds for glass relief beads found close to it (Nightingale 2008, 79-80).

From the Linear B references it does not become entirely clear what kind of material is referred to (if it is indeed a single material), and it seems as though multiple options can fit with the meagre linguistic evidence. It can be useful therefore to consider the etymology of the term rendered later as $\kappa\nu\acute{a}\nu\varsigma\varsigma$ or kyanos, which refers to a certain material from which the adjective $\kappa\nu\acute{a}\nu\varepsilon\varsigma\varsigma$ was derived (Irwin 1974, 79). In later Greco-Roman texts, kyanos referred to different materials such as a dark-blue enamel, lapis lazuli, or a blue copper carbonate (Liddell & Scott 1940). According to the 4th century BC book On Stones by the Greek philosopher Theophrastus, kyanos could refer both to natural and artificial materials. The word may also possibly be related etymologically to Hittite kuwanna, which refers both to copper and an 'ornamental mineral' material that was used for decoration and for beads (Puhvel 1997, 308-311). Copper carbonates such as azurite may have occupied an intermediate position between the two. In any case, kuwanna did not refer either to a colour or to lapis lazuli in the Hittite world (Puhvel 1997, 310). Although these connections give a little more texture, they do not offer more detailed insights into the broader semantic associations of kyanos as part of a broader material ontology.

Next we can turn to the references to *kyanos* in early historical Greek poetry. There is sufficient justification for doing so, not only because the words *ku-wa-no* and *kyanos* are etymologically connected, but also because the material aspect of *kyanos* described in Homer and other sources is

¹⁸⁵ Other materials used for inlays in the Pylos furniture are sea shells, aquamarines, ivory, and ebony (e.g. *Documents*, 335, 339, 341). An unknown material called *ne-pa2-sa* was also used as an inlay on metal vessels listed in one of the Knossos tablets (*Documents*, 330).

¹⁸⁶ The relevant passage is worth quoting in full:

[&]quot;Just as there is a natural and an artificial red ochre, so there is a native kyanos and a manufactured kind, such as the one in Egypt There are three kinds of kyanos: the Egyptian, the Scythian, and the Cyprian. The Egyptian is the best for making pure pigments, the Scythian for those that are more dilute. The Egyptian variety is manufactured, and those who write the history of the kings of Egypt state which king it was who first made fused kyanos in imitation of the natural kind; and they add that kyanos was sent as tribute from Phoenicia and as gifts from other quarters, and some of it was natural and some had been produced by fire. Those who grind colouring materials say that kyanos itself makes four colours; the first is formed of the finest particles and is very pale, and the second consists of the largest ones and is very dark. These are prepared artificially, and so is white lead." (On Stones, 55)

closer to the Bronze Age archaeological record than to that of Archaic Greece. This point will be addressed in detail after the discussion of the Mycenaean archaeological record. The references to *kyanos* in the Homeric epics compiled by Irwin provide further insights (Irwin 1974, 84-96). These include what were likely inlays of *kyanos* in the breastplate, shield, and shield strap of Agamemnon (*Iliad* XI, 26-30, 36-41, 43), feet or a border of the material in a table of Nestor (*Iliad* XI, 741), and what appears to be a trench of *kyanos* surrounding a vineyard on the Shield of Achilles (*Iliad* XVIII, 657-658). Finally, there is a reference to a circling frieze with the characteristics of *kyanos* (usually translated as lapis lazuli) in the description of the palace of Alcinous (*Odyssey* VII, 101), already enthusiastically seized upon by Schliemann to account for the frieze inlaid with blue glass from the palace of Tiryns (Schliemann 1886, 287-290).

Although archaeologists by and large have become more cautious than Schliemann, it can be observed that some of these Homeric references are not inconsistent with the Mycenaean material remains and the Linear B evidence. Yet *kyanos* also occurs in very different ways in Homer and other authors that problematise a straightforward correlation between the materials and the way they were conceptualised. As indicated by the list compiled by Irwin referred to above, *kyanos* could be used in Homer in such phenomena as the battle-line of warriors (which is compared to a cloud coming in from the sea), 'magical' clouds either protecting/shrouding or bringing death, sometimes explicitly created by deities. Other cases include a dark veil of the sea-nymph Thetis, the hair, beards and eyebrows of deities and of human heroes, the prows or totalities of ships, and earth in combination with sand. The picture grows even more complicated when the Homeric hymns, Hesiod and the lyric poets are considered (Irwin 1974, 96-103). In Hesiod there are epithets of eyes deriving for *kyanos*, which is also used to describe elements of the Shield of Heracles, certain robes, the wings of a grasshopper, and humans from a faraway region that may have been Ethiopia.

The range of phenomena listed here is so broad that it has been doubted that they can all refer to blue, and Irwin (1974, 93-94) has proposed that *kyanos* should instead be seen as a noun-epithet for dark phenomena, alternating with *melas* in the Homeric meter, as can be seen for ship descriptions. From these references in early historical Greek poetry, it follows quite clearly that the identification of *kyanos* as referring primarily to the colour blue or dark-blue is not likely given the range of different examples, some of which are improbable if taken as literal indicators of hues. However, Irwin's (1974, 84) hypothesis of its use as indicating something dark seems to be too limited as it does not fully think through the material connection, which remains subsumed under the poetic meaning. Yet there is another way of analysing the conception of colours in the poetry sources that offer more insights into this matter. Other colours in early historical Greek poetry display the same kind of bewilderingly different references that seem both unrelated to each other and to the colour they are supposedly associated with. Clarke (2004) has analysed one of these terms, $\chi \lambda \omega \rho \delta \varsigma$ (referring to green/yellow) by treating it as a semantic prototype: not as a noun denoting a patch of space with a hue, but rather as a kind of 'kinetic phenomenon' that shapes perception of the world.

He notes that in early Greek historical poetry, $\chi\lambda\omega\rho\delta\varsigma$ refers to phenomena as diverse as vegetation, honey, cheeses, the part of the rainbow opposite to purple, sand by the sea-shore, the faces of terrified humans, the flesh underneath a nail that has been cut, drops of red wine or blood, tears, flowers of rose trees, and human limbs. Although some of these phenomena are related to yellow, others are clearly not, and it is hard to conceive of a noun-epithet that could possibly cover them all in terms of a determinate patch of a hue. Rather, Clarke (2004, 134) proposes to define the semantic prototype of $\chi\lambda\omega\rho\delta\varsigma$ as "the green fecund vitality of moist growing things". This can be best seen in the greenish ooze that flows from a growing shoot in springtime. Other phenomena follow from this, such as the flesh underneath the nail that has been cut and is still moist, though some are closer to the core semantic prototype than others. He discusses a number of different terms, and also

suggests that as historical Greek civilization developed a new kind of conception of colours emerged (more in line with modern ones) that limited the scope of the semantic prototypes (Clarke 2004, 136-138). In effect, they became more 'fixed', a process that can perhaps be seen as a parallel to the changes in the relation between texts and images to be discussed in section 4.4.3 below.

Clarke's method is attractive in that it can incorporate the range of different phenomena referred to from the same semantic prototype, as well as the material characteristics that are closely associated with it. For *kyanos*, we saw that the references were even more wide ranging, such as those of *kyanos* clouds in early historical Greek poetry which also seem to suggest a role as a protective or shrouding surface, as may be inferred for the veil, the line of warriors and the shields and breastplates. The situation is made more complex when one considers the reference to the eyes, hair, eyebrows and beards of deities and human heroes. On this basis the core semantic prototype of *kyanos* may be defined in a basic and minimal way as a 'vital, vigorous and lustrous darkish surface' (whether solid, gaseous or organic or any other kind of material). The clouds, veils and metal inlays closely adhere to this semantic prototype, as do the hair of deities and human heroes. The prows of ships can also be understood in this way, if already less strongly. Other references are more obscure, such as the wings of a grasshopper or humans from a faraway region, which seem to stray further from the core semantic prototype.

Of course, the semantic usage of *kyanos* in Homer and early Greek historical poetry does not prove that Mycenaean *ku-wa-no* was grasped in the same way, despite the clear etymological connection. To grasp the possible similarities and differences between the two it is necessary to grasp the Mycenaean case in more detail, starting with the possible materials to which *ku-wa-no* could refer and the colour-uses associated with them. As noted earlier the information of the Linear B tablets is very limited in this regard, although we saw that on the chair described in tablet Ta714 *ku-wa-no* griffins accompanied griffins made of gold as inlays. This does not allow for an obvious connection to a particular material, so three different categories will be investigated: lapis lazuli, glass and vitreous materials, and 'black bronze'. The first material to be discussed here in detail is lapis lazuli. As outlined by Bennet (2008, 160), lapis lazuli has been found in the form of imported cylinder seals, jewellery and inlays, with evidence that it was worked in the Aegean itself alongside vitreous materials that were closely associated with it. The most famous category of lapis lazuli finds are the engraved cylinder seals from the Mycenaean palace at Thebes that were imported from different parts of the Near East (Porada 1981/82).¹⁸⁷

Out of the collection of 42 seals found at Thebes 32 were made of lapis lazuli, and derived from a variety of regions that include Anatolia, Cyprus, Syria, and especially Mesopotamia (Kopanias 2008, table 1, pp. 42-43). Some of the Mesopotamian seals dated back to the 3rd millennium BC. A number of the lapis lazuli seals have a gold foil, which can also be seen in some of the 10 seals made from this material that have been found on other sites of the Late Bronze Age Greek mainland (Kopanias 2008, 55). Another case of the association between lapis lazuli and gold can be seen in the hilt of a dagger from the Shaft Graves at Mycenae (Harrell 2009, fig. 11, p. 98). Technical analysis of painted plaster fragments from Gla shows that lapis lazuli was also used as a pigment component in a form of purple (Brysbaert 2006, 2008, 154-155). On the other hand, its possible use as a blue pigment on the Ayia Triada sarcophagus cannot be corroborated because of the lack of analytical studies (Brysbaert 2006, 256). The material evidence thus shows that lapis lazuli was both used and appreciated in the Mycenaean palatial period. Yet even if the uses that were made of it seem not incompatible with the Linear B references to *ku-wa-no*, the material seems to be too rare to require the existence of specially dedicated workers.

¹⁸⁷ A much earlier lapis lazuli scarab from Egypt was found in one of the Shaft Graves at Mycenae (Martin 2006). Lapis lazuli has also been found in very limited quantities on Minoan Crete (Hughes-Brock 2011, 99).

Instead it is possible to point here to the association of *ku-wa-no* with vitreous materials, which were already discussed at some length in the previous section. There we saw that both glass and Egyptian Blue were used, the latter mainly as a pigment in wall-paintings. The uses of the blue glass were more varied. These included a large number of beads (and gaming pieces of the same size) in a variety of shapes (Nightingale 2008, 64-72), the meaning of which will be discussed below. Inlays were used for jewellery, architecture, and likely furniture as well (Jackson & Wager 2011, 116). The architectural case comes from Tiryns, where as noted earlier glass was found in a stone block forming a frieze with half-rosette motifs (Panagiotaki et al. 2005, fig. 1, p. 16). It seems that glass could also have been hung on walls (Jackson & Wager 2011, 116). Another important use of glass in the Mycenaean palatial period was for seals. Initially glass seals were worked in a way that was analogous to the hard stone seals, but from LH IIIA onwards they were 'mass-produced' through the use of moulds (Hughes-Brock 2011, 100-101). Finally, glass was incidentally used as a part of weaponry such as daggers and swords, as well as in helmets (Nightingale 2005).

The quantity of the evidence for glass-working and the range of glass objects found makes dedicated workers a distinct possibility (cf. Nightingale 2008, 79-80), more so than for the limited amount of lapis lazuli found in only a few special contexts. As with lapis lazuli there are also indications that vitreous materials were associated with gold. This can be seen for the use of gold foil for three (imported) faience seals found in Thebes in the same context as the lapis lazuli cylinder seals (Kopanias 2008, table 1, pp. 42-43), as well for many of the dark-blue glass beads (Nightingale 2008). This brings up the question of colour-use, and extending from this the more difficult issue of the conception of colours. Here a number of select topics will be addressed that involve the first question of colour-use. This also involves the use of colours in wall-painting, for which the evidence of the Late Cycladic IA paintings from Akrotiri will also be discussed. Although located in the Cyclades and preceding the period of the Mycenaean palaces, this site is important for the discussion because of the very good preservation of the wall-paintings. Work done here has also been able to relate the material properties of the pigments used in these murals to the iconographic themes that are depicted (Sotiropoulou et al. 2012). So As such it is very important to the argument presented here and cannot be left out of the discussion.

The first issue that needs to be addressed is the relation between colours as they relate to materials and as they are used in wall-paintings and other forms of art. For the depiction of jewellery in wall-paintings the following identifications have been proposed: a) yellow or gold-painted jewellery as gold, b) red-painted stone as carnelian, c) red-painted metal as sylvanite (a gold alloy), d) blue or blue-grey stone as lapis lazuli, amethyst, or blue glass, and e) blue metal as silver (Younger 1992, 257). This already highlights the need to relate colours such as blue to their specific iconographic rendering (as stone or metal), but the situation becomes even more complex when broadening the discussion to iconographic elements that are further removed from the mineral world. The intricate uses of colour can be immediately grasped when considering the depiction of griffins in Aegean Bronze Age wall-painting. If we accept the position that the *ku-wa-ni-jo-qe* inlay of *po-ni-ki-pi* figures on the chair of tablet Ta714 represents griffins made of *kyanos* (*Documents*, 344), ¹⁹⁰ then the question is whether such griffins can also be recognised in wall-painting. The answer to this seems to be a qualified 'yes' as at least four cases can be recognised.

¹⁸⁸ Of course gold foil was used quite extensively in Mycenaean jewellery (Laffineur 2010, 448) and cannot be seen as limited in its association to just lapis lazuli and vitreous materials.

¹⁸⁹ The large-scale application of the X-ray fluorescence technique to identify pigments in the Pylos wall-paintings will provide an extremely useful counterpart to this analysis from a Mycenaean palace. This work is on-going, however, and has so far not been published in detail.

 $^{^{190}}$ This is certainly not impossible as both gold and blue glass inlays of griffins are known from the Mycenaean archaeological record (Zouzoula 2007a, #268, #269, #270, p. 67).

The first concerns a griffin of which the wings are partly blue (see figure 14) in a hunting pose on the East Wall of the miniature wall-paintings of the West House of Akrotiri (Doumas 1992, fig. 21, p. 65). This scene does not involve any human hunters, and shows an ubiquitous use of blue for many other iconographic elements of this scene such as the river, vegetation, the hunting feline, and the wings of the bird that soon will become a prey (see figure 15). From the same site comes a larger-scale painting in building Xeste-3 showing a griffin with partly blue wings (see figure 16) behind a goddess (Doumas 1992, fig. 128, p. 165). Both griffins also carry spiral designs on their wings. In this they resemble a griffin in an Aegean-style wall-painting from the site of Tel el-Dab'a in Egypt, which also shows a combination of a partly blue wing with a spiral (Morgan 2010, fig. 1, p. 305). The overall composition of this scene is not completely clear yet, but it does seem to have involved human hunters (Morgan 2006). A later example comes from the LM II sarcophagus from the site of Ayia Triada on Crete, where one of the sides shows a griffin with blue wings pulling a chariot (Long 1974, 29-33), even if unfortunately the exact pigment is not known as noted earlier.

However, these are just four cases out of a wide variety of griffins depicted in Aegean Bronze Age wall-paintings, and many others have wings in other colours, have no wings, or it is insufficiently established what colour the wings would have had. 192 Many of the portable art objects such as seals and vase-painting cannot show blue in the way wall-paintings can, but at least for the objects made from vitreous materials a relation between griffins and the colour blue can also be noted. The best example of this can be seen in fragments of a faience vessel with blue griffins and yellow lions (Zouzoula 2007a, #271, p. 68). Another possible case is that of the blade hilt inlaid with lapis lazuli from the Shaft Graves at Mycenae, the figures of which can be plausibly interpreted as griffins (Harrell 2009, 98). These are just two cases, however, and griffins were rendered in other materials as well, notably in ivory (Morgan 2010, 304). Given that not all griffins are rendered in the same colour, this makes the relation between colour and meaning in this case much more complex. In a forthcoming article Mark Peters (in press) has discussed how the griffins depicted on the Pylos palace walls tend to vary in colour, which seems to be connected with the specific contexts in which they are depicted. This is useful to explore for the griffins just discussed. In table 4.2 the main characteristics and contexts of the four depictions of griffin wings with blue elements are given to allow for an exploration of these colour-uses.

Scene	Context	Overall colour-use
Akrotiri West House	hunting scene, no humans	ubiquitous use EB
Akrotiri Xeste-3	association seated goddess	various uses of blue
Tell el-Dab'a	hunting scene, composition yet to be established	unknown
Ayia Triada sarcophagus	pulling chariot with goddesses	various uses of blue

Table 4.2: Depictions of griffins with blue wings in Aegean-style wall-paintings.

¹⁹¹ The decorative motifs of griffins have more complexity than can be done justice for here, see for an overview of these motifs across time D'Albiac (1995).

¹⁹² The colour of many of the extant examples from Mycenaean wall-paintings remains unclear. From Mycenae there is the possibility that a small winged griffin was present in the Cult Centre (Morgan 2005, fig. 10.5, p. 167), but the reconstruction of the figure remains unclear. A more certain case from the Ivory Houses at the same site has wings but the remains are without colour (Cameron & Mayer in Tournavitou 1995, 283). The remains from Pylos appear to show no blue, but the publication of the restudy of the fragments is still forthcoming. Finally, blue was used on a griffin's wing at Thebes (Fappas, personal communication), but this also awaits publication.

These four cases at least show some common elements. With regard to the contexts of griffins these consist of an association with a female deity and also with hunting. Both associations can be seen in a broader set of Aegean Bronze Age images, including from the Mycenaean mainland (Morgan 2005, 168). The wings of griffins were also a significant iconographic element (cf. D'Albiac 1995), left out for certain scenes and emphasised in others. Yet it remains unclear what the role of blue on these wings was in iconographic terms. All of the three scenes of which the composition is known show a significant use of blue in other iconographic elements. This can best be seen in the hunting scene from the West House in Akrotiri, where as noted earlier an abundant use of blue was made. Recent scientific analysis of the blue pigments used in this scene show that Egyptian Blue was used for the animals, vegetation, and river in this scene (Vlachopoulos & Sotiropoulou 2012, 253). This seems to be contrary to the notion that the use of blue on the wings of the griffin was in any way special or exclusive. The use of Egyptian Blue at this site was also applied together in complex ways with another blue pigment based on riebeckite to create more refined renderings of colour, rather than showcasing Egyptian Blue as a material linked with wealth, or any kind of symbolic meaning (Vlachopoulos & Sotiropoulou 2012, 259-261).

The same pattern can be seen for the use of blue in monkeys in Cretan and Cycladic wall-paintings (Greenlaw 2011, 47-48). 193 These monkeys are somewhat exceptional, most notably the ones from Room 4 of building Xeste-3 at Akrotiri. Not only do these blue monkeys have anthropomorphic traits, but they also handle musical instruments and swords (Greenlaw 2011, 60; Rehak 1999a). As with the griffins, these creatures seem exceptional but the combination of riebeckite and Egyptian Blue to render monkeys in the Akrotiri wall-paintings (Vlachopoulos & Sotiropoulou 2012, 254-255) is not intrinsically different from other iconographic elements. As a result it can be said that the vitreous aspect of Egyptian Blue and the symbolic connotations this might have had are not readily apparent in Aegean Bronze Age art. The only exceptions are depictions of blue beads that were most likely made of blue glass can be seen in various artistic depictions, again with the Akrotiri wall-paintings providing some of the best evidence (Younger 1992, 263, 265, 274), see figure 17.194 Hence the pigment could be used to show the same kind of material from which it was made, but it is not the case that it was applied in a way that suggest a highly symbolically-charged meaning. Instead, the uses of Egyptian Blue in wall-painting seem more related to the complex chromatic aesthetics of that medium. It is possible, indeed very likely, that this carried distinct symbolic meaning as well, but this should not be reduced to the properties of the materials used.

Although they are even less clear, some of the other uses of blue related to vitreous materials need to be discussed briefly. The first is that of beads and other small objects made from vitreous materials, including their use in different forms of jewellery. First of all the shapes of the beads themselves, mostly involving a variety of vegetative and animal motifs (see figure 18), have been linked with 'magical' meanings (Hughes-Brock 2008, 130-131; Nightingale 2008, 80-81). However, both authors acknowledge that motifs such as rosettes, ivy leaves, and argonauts can be seen in various other art forms as well, and here the notion of magic is less suggestive. Finally, yet another feature from the site of Akrotiri is the use of blue on the heads of various human figures, such as for the 'boxing boys' from Building Delta (Doumas 1992, fig. 81, pp. 114-115). This indicates not hair, however, but rather shaven heads (Davis 1986). It seems an undue stretch to connect this with the Homeric description of the hair of heroes and deities as *kyanos* based on the available evidence. 195

¹⁹³ So far there no depictions of monkeys have been found for any of the known Mycenaean wall-paintings, and the theme seems somewhat unlike Mycenaean art. The only clear evidence for depictions of monkeys from the period of the Mycenaean palaces proper can be seen in two imported Egyptian Blue frit figurines with cartouches of the Pharaoh Amenhotep II (1427-1400 BC) that were found in what were most likely LH IIIB2 contexts at the palatial sites of Mycenae and Tiryns (Cline 1991, 33, 34; 2013, figs. 3-4, p. 28).

¹⁹⁴ See Whittaker (2012) for a recent discussion of the relation between colour and jewellery in Mycenaean art.

¹⁹⁵ More promising are the blue glass inlays that closely resemble hair curls that would have been used on helmets

An alternative interpretation of *kyanos* that has been proposed was 'niello' (Irwin 1974, 81-84), a specific mix of copper, silver and lead sulphides that produced a black inlay for metal objects. It is possible that this material was used for the black inlays in the Shaft Grave daggers, and more generally in vessels up till the LH IIIB period (Xenaki-Sakellariou & Chatziliou 1989). It can also be inferred indirectly from objects like the bearded heads from a now-lost silver cup from Pylos, which were found to contain high percentages of copper (Boss & Laffineur 1997, 191). A variety of such black inlays are known from the Bronze Age, both in the Aegean and in Egypt and the Levant. However, it has not been proven conclusively through technological analyses that they are either made from 'niello' or from a technique known as 'black bronze' (Thomas 2005, 719-720). However, the analysis of a cup from Enkomi with Aegean connections and contemporary to LH II-IIIA shows that such black inlays are more likely to have been made of 'black bronze' (Giumlia-Mair 2012). Later analysis of one of the Shaft Grave daggers seems to confirm this (Giumlia-Mair 2013). ¹⁹⁶ As such, it is proposed that the *ku-wa-no* workers were dedicated to this material, much as the *ku-ru-so-wo-ko* were dedicated to working gold (Giumlia-Mair 2012, 114).

The question to be considered now concerns the relation of each of these three kinds of materials both to each other and to the linguistic term *ku-wa-no* or *kyanos*. Based on the discussion of the forms and uses of the materials it is proposed here that both lapis lazuli and vitreous materials can refer to *ku-wa-no*, while the 'niello' or 'black bronze' technique is a less likely candidate because of its exclusive application to metal vessels.¹⁹⁷ The only reason to favour vitreous materials is because the higher volume of production makes the existence of dedicated workers more plausible. The two materials need not have been seen as mutually exclusive, however. One interpretation is that lapis lazuli and vitreous materials can be associated together for the Linear B references to *ku-wa-no*. Bennet (2008, 160) has proposed that the term might be a dual reference to both, with the colour being the common element. One example of such a dual reference given by him was *êlektron*, which refers both to amber and to an alloy of gold and silver (Liddell & Scott 1940). The dual reference has some merit to it, notably for the indications for skeuomorphism between early glass seals and hard-stone seals discussed in section 4.2.3 and for the association of both glass and lapis lazuli to gold discussed earlier in this section.

Yet the focus on blue as a colour is complex, given the discussion on the interpretation of *kyanos* as a colour term discussed earlier. An alternative to blue as such can be found in Sherratt's (2008, 214) perceptive remarks on the almost alchemical processes through which certain materials could be molten and then cast into solid metal and glass objects that seem alike to natural originals such as lapis lazuli. This brings up the possibility that the use of the colouring agents of copper and cobalt may have played some role in the conceptions of (similarities between) materials. As noted in the previous section, materials such as painted plaster, glass, and metallurgy could be related to each other in this way. Potentially this would allow for considering 'black bronze' inlays here too. However, at this level of analysing craft-work more complexities arise. For example, it has been proposed that a distinction can be made between the darker blue glass coloured through cobalt associated with lapis lazuli and the less darker blue glass coloured through copper associated with

(Nightingale 2005, 20-21; Shortland 2012, 162). This evidence does not seem to be sufficient, however, to make the connection with the poetic descriptions of *kyanos* hair.

¹⁹⁶ The analysis of Thomas (2011) that is more favourable to the niello hypothesis is based not on close visual inspection nor on laboratory analysis. Furthermore, it could not take into account the analysis of the Enkomi cup and the later investigation of the Shaft Grave dagger.

¹⁹⁷ There is a hypothetical possibility that the material would have functioned as a decorative material in its own right, and was used as an inlay in the ivory chair (*Documents*, 340). Unlike for both lapis lazuli and vitreous materials, however, there is no archaeological evidence whatsoever for this somewhat unlikely proposition.

turquoise (Hughes-Brock 2011, 100).¹⁹⁸ If this proposition is accepted then it would create a distinction with further ramifications. Cobalt-coloured blue glass and lapis lazuli would form one category, while another would be made up of blue glass coloured by copper, Egyptian Blue, and possibly 'black bronze' as well.

Yet any attempt to establish an exclusive connection of one of these categories to the linguistic term ku-wa-no seems to get mired in contradictions. 199 Furthermore, in terms of aesthetic usage it is possible to see a complex mixture of different minerals to achieve aesthetic effects, as can be seen in the case of riebeckite and Egyptian Blue in the wall-paintings from Akrotiri discussed earlier. The colour-use observed for Egyptian Blue was also not tied very closely to its mineral properties, in the sense of a heavy symbolic content in its usage in certain iconographic elements. Rather its qualities seems to have been used to serve the aesthetic characteristics of wall-painting as a medium. The result is that there is an unclear relation between two levels of craft and materiality: a) that of the production of materials, and b) that of the use and appreciation of materials in art objects of different kinds. This parallels the Homeric use of kyanos, in that a dualism can be seen in its use as a term for a material and a bewilderingly variation in the contexts it was used in. Yet the connection of the use of lapis lazuli and vitreous materials as known from the Mycenaean archaeological record and Homeric descriptions of material usages may be plausible, the broader aesthetics of colour-use remains elusive. There is very little in the rendering colours in Mycenaean wall-paintings or other art forms that could directly be connected to Homeric descriptions of kyanos. Even broadening the analysis to the much better-known wall-paintings of Akrotiri failed to reveal direct connections.

To gain further insights into this relation good use can be made of another form of evidence provided through the use of scientific techniques, namely the relations between the Mycenaean Aegean on the one hand and Egypt and Mesopotamia on the other. Given the presence of lapis lazuli and glass from these sources in the Aegean, it can be instructive to look at the conceptions of materiality of them in these cases. We already saw that the lapis lazuli cylinder seals were imported from Mesopotamia, and of course ultimately derived from their place of origin in present-day Afghanistan (Von Rosen 1988, 11-13). The material was held in very high esteem in the Bronze Age Near East (Moorey 1999b, 180), as can be inferred from the great lengths to which elites went to get the material. This esteem can be traced back to the 4th millennium BC, when a 'lapis road' of remarkably similar appreciation and uses of the material can be observed from the Indus Valley to the eastern Mediterranean (Wengrow 2010, 32-38). An extensive network of centres for processing and trading lapis lazuli, alongside other materials such as chlorite, has been traced both for the Persian Gulf and Central Asia (Aubet 2013, 182-192). As noted in sections 3.4.2 and 3.4.3, it was in such long-distance exchange networks that complex weighing systems were developed.

¹⁹⁸ A further complication added here is that copper was used in Bronze Age Egypt to make red-coloured glasses as well (Shortland 2012, 118-119). This points to the need to consider the differences between the use of materials in production processes and the material end results of these processes.

¹⁹⁹ On the one hand, the etymological connection to Hittite *kuwanna* seems to favour copper, on the other the later Greco-Roman association between *kyanos* and lapis lazuli seems very clear. It may even be that, as in the quotation of Theophrastus given earlier, there existed different versions of *kyanos* in the Bronze Age as well.

²⁰⁰ One assumption in this is that there is some connection between working a material and the conceptual framework of materiality in which it is used. That these are closely connected can be seen in the case of the introduction of steamship technology in 19th century China (Wang 2010). Here it was not just enough to make the different parts and fit them together, but the theoretical idea of mechanical motion (which clashed with pre-existing Chinese conceptions of motion) had to be introduced as well. Hence (successfully) working a material demands mastering a conceptual framework, although this does not necessarily imply a wholesale transformation of worldviews.

²⁰¹ So much so that some scholars have argued that together with gold it replaced silver as a standard of value in the Late Bronze Age (Von Rosen 1990, 45). Such ideas remain hard to prove in detail and in context. Yet it is clear that the rulers of Mesopotamia in this period were very concerned with gaining access to lapis lazuli, seemingly even to the point that it could impact geopolitical calculations (Olijdam 1997; Oppenheim 1970, 11-12). Normally the material would be stored in temples 'for the service of the gods' unless extracted by tribute or raids (Moorey 1999a, 92).

Although the fluctuations in the degree of usage of lapis lazuli may be partly due to the impact of taphonomy, it is likely that different conditions for exchange could have an impact as well (Moorey 1999b, 181-182; Von Rosen 1990, 21-48). During the so-called Kassite period (1570-1155 BC) in Mesopotamia, however, the use of lapis lazuli seems to have increased, now alongside its ersatz of blue glass (Moorey 1999a, 90). In sources from the Late Bronze Age Near East there is in fact a very consistent association between lapis lazuli and blue glass. This is captured in the use of colour terms in Egypt and Mesopotamia that pair naturally-occurring lapis lazuli to artificial (glass) lapis lazuli (Shortland 2012, 140-141). It is now paramount to look in more detail at these two areas separately. The textual evidence from Mesopotamia suggests a difference in terminology between 'lapis from the mountain' for naturally-occurring lapis lazuli, and 'lapis from the kiln' for dark-blue blue glass (Oppenheim 1970, 10-11). As noted earlier in section 4.3.2 the direct evidence for glassmaking in Mesopotamia is very limited. A number of texts, most later ones from the first half 1st millennium BC, 202 shed some light on the technical and magical aspects of glass-making (Oppenheim 1970, 22-23). Particularly interesting in this regard are also the descriptions of the step of adding colourants in the glass-making process.

Here there are somewhat enigmatic references to 'slow copper', 'fast copper', and also 'fast bronze' as colouring agents (Oppenheim 1970, 76-77). The 'fast copper' may well have been blue frit, possibly Egyptian Blue (Moorey 1999a, 212; Oppenheim 1970, 77). However, this intersection with metallurgy was only at the level of glass-making. The finished blue glasses were closely linked with lapis lazuli, as can be seen for other combinations of coloured glasses and semiprecious stones as well (Oppenheim 1970, 14-15). Mesopotamian texts also give more insights into how stones were conceived of, in which the structuring role of textual lists briefly discussed in section 3.4.2 played an important role. Initially lists including stones seem to have grouped function and substance together, either in inventories or in literary musings on the inherent, essential characteristic of stones (Postgate 1997, 213-214). Later stones are recognised based on shared substances only, forming a separate category that combined natural qualities such as colour and hardness with magical characteristics (Postgate 1997, 218). Lapis lazuli played a key role in this ontological framework (e.g. Postgate 1997, 215, 217), which also had a cosmological-astrological dimension. Furthermore, the material also occurs in a number of important epics such as the *Lugale* and the *Gilgamesh* (Benzel 2013, 64-68).

Turning from conceptions of materiality to the uses of materials, the Uruk period (3500 – 3100 BC) shows the first consistent use of lapis lazuli beads and cylinder seals, even if beads made of it were found in earlier contexts (Moorey 1999a, 88-89; Von Rosen 1990, 21-24). As noted earlier there were fluctuations in the supply of the material, but it was used consistently and sometimes spectacularly as in the Royal Cemetery at Ur (about 2500 BC). The range of objects made from lapis lazuli was very broad also in the Kassite period, being used for jewellery, for small objects like tablets and amulets, in statuary, and in architectural settings such as foundation deposits and mural decoration (Von Rosen 1990, 45-48). Although blue glass did not have a similar long-term history in Mesopotamia before the second half of the 2nd millennium BC, it was used in a variety of forms in the Kassite period.²⁰⁴ These included beads, small objects such as plaques and amulets, cylinder seals, inlays for the decoration of furniture and walls, mosaics, and occasionally complete vessels as well (Moorey 1999a, 196-198; Oppenheim 1970, 16).

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²⁰² However, these texts were copied for collection into the library of a neo-Assyrian king and there are good indications that they reflect the situation in the later part of the 2^{nd} millennium BC as well (Oppenheim 1970, 81-82).

²⁰³ One clear difference between this ordering and modern ones is that in Mesopotamia shell was grouped with the stones, while metals seem to have been sharply distinguished from them (Postgate 1997, 213-214).

The trajectory of Egyptian Blue seems to follow a somewhat different trajectory from glass in being developed earlier, but it certainly was present in Late Bronze Age Mesopotamia (Moorey 1999a, 187-189).

As such both lapis lazuli and blue glass are well-represented in the archaeological record of Late Bronze Age Mesopotamia, and to some degree share the same material forms. We saw that these two materials were conceived of as being closely related, but the best evidence for the ways in which their materiality was perceived can be seen for lapis lazuli. The best way to grasp this is to look at the visual aspect of this material as part of colour perception. From the textual evidence it is clear that this is quite complex, with different hues being associated with lapis lazuli (Oppenheim 1970, 10). The most consistent usage that can be derived from the textual sources indicates a focus not so much on blue as a hue, but rather on a darkish, lustrous surface (Winter 2010, 293-295). As a result it should not be expected that every blue surface refers to lapis lazuli. This can be seen in the wall-paintings from different periods and sites, which show both an overall focus on rendering colours in a naturalistic way with an occasional symbolic use of blue on certain iconographic elements (Pizzimenti 2012, 309; Zanon 2012, 226).

One clear way in which the symbolism of lapis lazuli can be observed in the artistic record is in the facial hair (beards, eyebrows) and eyes of humans, deities, and animals. This symbolism of lapis lazuli as related to facial hair can be seen in the textual sources and may have had a (male) gender aspect as well (Winter 2010, 295-296). It can also be recognised very well in the archaeological record, not least for the 'bull lyres' of the Royal Cemetery at Ur that feature lapis lazuli for the beard, head hair and eyes of the bulls (Woolley 1934, plates 107, 109-110), see figure 19. Other examples for this are known for statues and statuettes of humans, deities, and animals such as goats (Moorey 1999a, 89; Von Rosen 1990, 41, 47; Wengrow 2010, 34; Winter 2010, 297). There is even a textual reference to the use of 'glass lapis lazuli' as inlay in a statue of a sheep intended for a Kassite era palace (Oppenheim 1970, 13). Such uses of colour can be understood as part of a broader aesthetics of colour. In this the relation between lapis lazuli and gold has also to be taken into account, which is visible already in beads of the Uruk period (Von Rosen 1990, 23).

According to Mesopotamian texts certain coloured surfaces actually radiated an aura of *melammu*: a 'vital force or energy field' that emanated from rulers and deities, and can be particularly be associated with a material such as gold (Winter 2012, 159-161). This particular focus on brightness, shine and their relation to the divine can be traced back to the mid-3th millennium BC, when a new colour pattern emerged in Mesopotamia that was focused on metals in the light colours red and white and on lapis lazuli for blue (Zanon 2012, 227-228). Interestingly, unworked lapis lazuli did not possess the lustrous qualities of its polished version and this may be one of the reasons why it was both related and distinguished from metals (Benzel 2013, 59-62). That is, their internal (and working) properties of lapis lazuli are unrelated to metals, but their surface characteristics when polished are perceived to resemble them. These internal features cannot be ignored, however, as they form the basis not only for the classificatory scheme of stones discussed earlier but also for the magical properties of lapis lazuli in protecting against evil and disease (Winter 2010, 300-301).

Yet the relation in colour-surface characteristics between lapis lazuli and metals is interesting for another reason, namely its relation to value. In the textual sources of Bronze Age Mesopotamia the first cases of *ekphrasis* (the literary or oral description of art works) can be recognised. The most famous of these is the axe of Gilgamesh in the epic named after him, but there are other examples

necklaces that possessed magical meanings (Reiner 1995, 128-129).

²⁰⁵ This relation can be seen even better in the Royal Cemetery at Ur, for example in the collection of grave goods from the tomb of Pu-Abi (Benzel 2013, 140, 146, 151, 155, 157, 162, 169). The association between lapis lazuli and gold is quite natural, given the gold-like pyrite specks that often can be discerned in the veins of this stone.

²⁰⁶ A focus on shine and lustre can also be seen in the use of (blue) coloured glazed bricks, which are better known for the first half of the 1st millennium BC but may have been present in the Kassite period as well (Moorey 1999a, 312).

²⁰⁷ This can also be seen for the use of beads made of semiprecious stones and metal, and also shell, together in

such as the isomorphism between the description of the heroic body of Enkidu and the stela of the Akkadian ruler Naram-Sin (Winter 2010, 437-438). Winter has also explored the notions of 'seeing' in the Mesopotamian texts, finding that viewing was cathected, in that the act of viewing was strongly emotional and connected to a distinct way of valuing artefacts. This can be seen in two different cases of an *ekphrasis* of a piece of furniture (a bed) made of precious materials and intended for temples. These were explicitly referred to as being 'suited for viewing', leading Winter to comment on the connection between viewing and valuing:

"In neither of these texts is the audience who will do the looking specified. Rather, it is the fact of being see-worthy that is emphasized, as if this in itself were a sufficient statement of the work's impact and value." (Winter 2010, 442)

This connection is even more explicit for a later Assyrian statue:

"Here too, issues of facture (its workmanship) and representation (its extraordinary appearance) are articulated, and both are linked to viewing. But perhaps even more important: if through a combination of workmanship and visual attributes value is achieved, it is also the case that **through seeing, value is perceived**." (Winter 2010, 442, emphasis in the original)

The use and appreciation of lapis lazuli and to a lesser extent blue glass can be followed very well in the Mesopotamian case, from the initial conception of their materiality and craft-work to the visual aspect of value-determination. Much work remains to be done on this, but some general patterns are becoming clearer. The implications of these for the Aegean will be discussed shortly. First it is necessary to look at the Egyptian evidence as well, if more briefly than for Mesopotamia, since some of the blue glass and (very rarely) lapis lazuli found in the Mycenaean archaeological record was imported from Egypt. As noted earlier there was a close connection between lapis lazuli and blue glass in New Kingdom Egypt (1530-1070 BC) as well. Yet the terminology is somewhat different than in the Mesopotamian case. It involves a qualification to the basic term for lapis lazuli hsbd that denotes it as 'true' and distinguishes it from dark-blue glass, something that can also be seen for turquoise and the more lighter blue glass (Shortland 2012, 140-141). While this seems fairly straightforward, more complexity is added by religious associations such as with specific deities. As such lapis lazuli and turquoise can be seen as complementary to each other in more complex religious ideas (Aufrère 1991, 511), rather than being clearly distinguished as the basic terminology for minerals would suggest.

This complexity is important to keep in mind when evaluating colour use. The choice of colours and the specific minerals associated with them was clearly important in Egyptian statuary, linking the microcosm of its body to the broader cosmos (Morgan 2011). Lapis lazuli was also used for decoration and has a clear time-depth, as can be seen for its use as inlay for the eyes and eyebrows in two small statuettes dated to 3200 BC (Wengrow 2010, 32-33). After glass-making was introduced, blue glass was also used as inlay for eyes alongside other materials such as gold (Duckworth 2012, 318-319). Colours also formed an important element in the decoration of the interior spaces of Egyptian temples (Baines 2001), and carried with them magical meanings (Pinch 2001). It is more difficult, however, to understand how colour symbolism was related to the themes that were depicted. Overall a 'naturalistic' use of colours can be seen in wall-painting, albeit a naturalism influenced by clear conventions that includes specific skin colours for deities and for men and women (Baines 2007, 246). The use of colours in painting far outstrips the limited set of colour terms found in the texts, particularly for the New Kingdom (Baines 2007, 249-250).

In fact, the term for lapis lazuli *hsbd* is not a proper colour term in the Egyptian texts, and there is no term for blue even if it is used extensively (Baines 2007, 252-253). This has caused debate over the applicability of schemes for the development of colour terms (Baines 2007, 259-261). One suggestion is that colour terms in Bronze Age Egypt were not intrinsically separated from materials, and could be used both in more abstract ways and as referring to concrete materials (Warburton 2004, 129). According to Warburton (2012) this is closely connected to value systems, an issue that will be addressed in the next section. More insight in the value of both lapis lazuli and blue glass can be inferred from a wall-painting at the Temple of Karnak showing the spoils of military campaigns by Thutmosis III (1479-1425 BC). Here the different materials were arranged in registers that placed the materials valued most highest at the top level and descending from there to the lower-value materials (Shortland 2012, fig. 7.2, p. 142). Dark-blue glass is shown at the level of semiprecious stones (including lapis lazuli) indicating that is was valued in a roughly similar way, and the high value of glass can also be appreciated from other Egyptian depictions of it in different tomb paintings (Shortland 2012, 143-145).

The time has now come to draw together the different interpretive strands in order to generate some general conclusions on the meaning of *ku-wa-no* and its wider implications. The first thing to note is that the association between lapis lazuli and blue glass for the Mycenaean case is much strengthened by the Near Eastern evidence. Not only is the internal Aegean connection between the two materials a strong one, it is closely paralleled by the conceptual relation between the two in the Egyptian and Mesopotamian cases. The fact that much of the lapis lazuli and blue glass found in the Mycenaean world derives from these two regions makes it more plausible to infer that materials were not only used in the same way, but also that the conception of their materiality was broadly similar. Furthermore, the etymological connection between Mycenaean *ku-wa-no* and later Greek linguistic uses of *kyanos* shows that a dual usage of this term is a distinct possibility. Such overall coherence between the Mycenaean case and the Near Eastern one of course does not imply similarities at a more detailed level, and for this reason good contextual evidence is always required to make specific inferences about meaning.

The Mesopotamian case was also instructive on the distinction between the use of metal-based colouring agents ('fast copper') in the process of making glass, and the classificatory framework that placed glass alongside stones rather than with metals. This provides some context for the Mycenaean pattern of two distinct levels of material usage in production and aesthetic appreciation. This does not mean that the elaborate Mesopotamian system of classifying the natural world can be inferred for the Aegean, however, since the Linear B references are too limited to allow for this. Yet another way in which the Near Eastern sources help to make sense of the Mycenaean evidence is for understanding the relation between naturalistic use of colours and the appreciation of their symbolic connotations. The ambiguity of this relation could be noted especially well for the use of blue in the Akrotiri wall-paintings, where possible symbolic uses of this colour go hand in hand with an overall naturalism. Similar kinds of ambiguity can be seen in Egyptian and Mesopotamian colour uses in wall-painting, which show an overall naturalism quite distinct from the metaphoric uses of colours in texts. Even so, the textual references to lapis lazuli can be seen in striking ways in certain kinds of art objects in the two areas, especially in statuary art.

The most spectacular examples of this can be observed in the Royal Cemetery of Ur with the use of lapis lazuli in beards and other kinds of facial hair, but Egyptian examples were noted for this as

²⁰⁸ The references of *ku-wa-no* in the Linear B tablets would point conform to stage 1 of Postgate's (1997, 213) scheme, in that function (as decorative motif and inlay) and substance are listed together. The linear B tablets did not carry texts as elaborate as their cuneiform counterparts, yet as noted in section 3.3 Mycenaean writing may have used perishable materials as well. Because of this it is possible to say that the Mycenaean case had reached stage 1 of the Postgate scheme, but impossible to ascertain that it had potentially reached further.

well. It is remarkable how close these two cases are to the descriptions of the facial hair of human heroes and deities as *kyanos* in Homer. A close similarity can also be seen between the Mesopotamian view of (polished) lapis lazuli as possessing a dark, lustrous colour surface, and the notion of *kyanos* as a 'vital, vigorous, and lustrous darkish surface' inferred here for its use in Homer and other poetic sources. No parallels have so far been discovered that relates *ku-wa-no* and the materials associated with it to the facial hair of any creature, although some indications could be seen in the blue glass hair curls used as inlays in helmets. This is insufficient evidence to serve as proof that the similarity between Near Eastern and Homeric conceptions of, respectively, lapis lazuli and *kyanos* derived from the Mycenaean palatial period. Rather than from the Late Bronze Age exchange of materials in the eastern Mediterranean, this Homeric connection could also derive from later influences from the Near East. Such later Iron Age connections have been proposed for the description of the palace of Alcinous in book VII (101) of the *Odyssey* derives from neo-Assyrian palatial architecture (Cook 2004).²⁰⁹

One important reason to suppose that the Homeric usage of *kyanos* goes back to the Mycenaean palatial period is because of the etymological connection with *ku-wa-no*. Unless one could construe an argument in which exactly the same linguistic term was borrowed twice, ²¹⁰ in a basic sense the use of *kyanos* in Homer derives from its preservation in poetic *Kunstsprache*. There is little in the Early Iron Age archaeological record that indicates even a limited use, let alone working, of lapis lazuli or (blue) glass (Dickinson 2006, 118-119). Furthermore, later words that refer to glass belong to a different word family than *kyanos* (Nightingale 2008, 80). This means that the descriptions of artefacts with *kyanos* in Homer either derive from the Mycenaean era or from a distant region. Another reason to suppose the former, apart from the etymological connection, are the similarities between the Mycenaean uses of lapis lazuli and blue glass and those in contemporary Egypt and Mesopotamia. Even if Mycenaean craft-workers moulded blue glass in distinct shapes, an overall focus on beads and inlays in a variety of artefacts and architectural settings can be seen. The combination of a more seemingly naturalistic use of colours and indications of symbolic meanings can also be seen in the Aegean and Near East alike. As a result, the following common 'template' may be formulated to situate Mycenaean *ku-wa-no* in its broader *koine* context:

- 1. The close association between lapis lazuli and blue glass, both in terms of their uses and in their conceptualisation in specific linguistic terms.
- 2. A similar range of uses as materials of adornment in jewellery, weaponry, architecture, and other kinds of artefacts. This implies a relation between the visual aspect of the materials and their aesthetic valuation.
- 3. Colour use is dualistic, with both a general 'naturalism' and more symbolic colour uses. This is in line with the textual references that describe colour as possessing complex metaphoric meanings rather than as a determinate hue. Much remains to be explored for both Aegean and Near Eastern uses of colour in the Bronze Age, however.²¹¹

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²⁰⁹ Of particular relevance here is that lapis lazuli was used for the adornment of these neo-Assyrian palaces (Cook 2004, 58, 62). The glass industry of the neo-Assyrian empire was also one of the few cases where continuity can be seen with the Bronze Age for glass-making and uses of glass, even if this now also involved a new set of technological innovations and colour preferences (Moorey 1999a, 201-202).

²¹⁰ It is highly unlikely that *kyanos* should be seen as referring to exotic objects only, as it is very much interwoven in a broad set of metaphoric uses as well as deployed in Homeric similes.

²¹¹ For example, there are other linguistic terms that point to metaphoric uses of colours in Mycenaean art. Another term that is mentioned both in Homer and the Linear B tablets is $o\tilde{t}vo\psi$. This term is usually taken to be wine-coloured or wine-dark, as in the well-known references to the sea (e.g. Odyssey V, 147) and to oxen (e.g. Odyssey XIII, 35). It happens that two bulls are described with the same colour terms in the Linear B texts from Knossos, and other kinds of epithets are known for bulls as well, which indicates a similar conception as well (Blakolmer 2004, 63). Furthermore, the colour of the sea in the newly reconstructed naval scene from Pylos may be described as wine-dark as well, at least according to the preliminary report of the reconstruction team (Brecoulaki 2007).

Based on this template it can be argued that the basic conception of colour in later Homeric *kyanos* very likely derives from Mycenaean *ku-wa-no*. This does not mean, however, that changes and additions to the template could not occur, as may well have been the case for the relation of the description of the palace of Alcinous to neo-Assyrian architecture discussed earlier. Such a layered pattern of specific older and newer kinds of artefacts is in fact typical for the material culture that is described in the Homeric epics (Sherratt 1990). This also means that the scenario sketched here does not depend in any way on the debate regarding the period that most closely corresponds to the notion of a Homeric society (e.g. Crielaard 1997). Finally, the Near Eastern evidence has also pointed to the relation between materiality, especially in its visual aspect, and value. In the case of Mesopotamia this involved the relation between viewing and valuing, and in Egypt the place of lapis lazuli and blue glass in the overall hierarchy of materials. There are no clear Mycenaean parallels for this, but the uses of lapis lazuli and blue glass in jewellery, weaponry, architecture, and other kinds of artefacts point to a broad concern with an aesthetics that depends on the visual qualities of these materials. This can be understood within the process of the *chaîne opératoire*, hence it is time to turn to the overall synthesis of the craft and materiality of Mycenaean art.

4.3.4: Craft and materiality of Mycenaean art

The synthesis of craft and materiality of Mycenaean art here proceeds from the observation in the previous section of a distinction between the production of materials, and their use and appreciation in art objects. As the analysis in section 4.3.2 showed, however, the exchange, working, and reworking of materials has to be added as an intermediary step. The analysis here will will work backwards from the aesthetic appreciation of art objects to the convertibility of materials in working and exchange contexts, and finally to the initial production processes that created workable materials. To start with the appreciation of materials and art objects in aesthetic 'use contexts', the analysis of *ku-wa-no* showed the relation between value and what may be termed a colour 'aura'. Unfortunately, while for the Near East it is sometimes possible to estimate the relative values of materials in relation to each other, this is not possible in the Mycenaean case. Yet the uses lapis lazuli and blue glass point to their high value, an aspect that will also be explored for contexts of art in section 5.2. The analysis of the linguistic meaning of *ku-wa-no* showed that parallels could be drawn with the conceptions and uses of colours in Egypt and Mesopotamia. This produced the insight that the visual aspect of value has to be understood as part of a rich set of metaphors related to materiality, even if this set so far has not been reconstructed to a sufficient degree. 212

The possibility of aesthetic valuation of course depends upon the preceding step of converting basic materials into finished products. This would involve both working and re-working materials, but also their exchange. In each of these processes convertibility appears as a key term. To be sure it can be seen in different degrees in the working of materials, less so for semiprecious stones like lapis lazuli and more so for the use of moulds to shape (blue) glass objects. The properties of materials greatly influence the ability to work them into different shapes, with human-made metal alloys and vitreous materials possessing a high degree of convertibility and the ability to be produced in greater numbers through the use of moulds. Another example of convertibility can be seen in the horizontal linkages of *chaînes opératoires* between different kinds of materials, as noted in section 4.3.2. Finally, there was the process of long-distance exchange through which materials like lapis lazuli and blue glass had to be procured, the latter even being exchanged in ingot form.

²¹² The complexity and variation in colour use in Mycenaean jewellery and depictions thereof in wall-painting, together with elaborate textiles, can be seen as representations of ideal beauty (Whittaker 2012, 194). This points to the importance of colour-use in relation to value. Work on colour-use at the site of Asine (Gillis 2012) will allow for further insights into this for a smaller, non-palatial centre.

Here weighing played a very important role in establishing the measures required for reliable transactions. In this way equivalencies could be determined, allowing for materials to be exchanged over long distances and between the boundaries of specific cultures and states, even if, as noted in section 3.4, elites would have controlled such exchanges.

The convertibility of materials in exchange and working contexts of course depended on their initial production. For lapis lazuli this would merely have involved quarrying, but for glass and metal a process of transforming materials through pyrotechnology was required. This focuses attention on the importance of the vertical lines of *chaînes opératoires* of these materials, something also noted in section 4.3.2 for painted plaster. One very interesting and important aspect of such processes of transformation is that they could involve changes in colour as well, whether in the colours of painted plaster gradually becoming more vivid on walls or in the process of adding colouring agents to glass. The relation between colour and the transformative potential of materials can be traced back to the origins of metallurgy in western Eurasia. Initially naturally-occurring copper was worked for uses such as beads, pendants, and pigments as early as the 11th millennium BC in the Near East (Roberts et al. 2009, 1013). Such early uses of copper formed the basis for the later elaboration of colour aesthetics with the development of true metallurgy. This can be seen very well for the 'aesthetics of brilliance and colour' based on metallurgy of the climax Chalcolithic of the Balkans, which developed out of a pre-existing Neolithic aesthetic of colour (Chapman 2007; Gaydarska & Chapman 2008). Of particular note here is that the later aesthetics of colour also involved the semiprecious stone of carnelian (Chapman 2007, 69).

The aesthetics of colour in the 2nd millennium BC Near East and Aegean can be seen as an outgrowth of these initial developments. It would be incorrect, however, to reduce all colour-use in the Late Bronze Age to a metallurgical template. 213 Instead the crucial point lies in the impact of the introduction of *chaînes opératoires* of a transformative character for metallurgy, and also for glassmaking and painted plaster, on the middle level between the production of materials and their aesthetic appreciation. The ability to transform crucial materials at a large scale through the means of pyrotechnology added the new feature of convertibility at the level of working and exchanging materials. This involved not only new ways of producing artefacts through the use of moulds, but also cross-craft linkages at a far larger scale. Furthermore, as noted in section 3.4.3 the spread of more advanced metallurgical techniques in the middle of the third millennium BC went together with the development of new types of aesthetic uses of metals, semiprecious stones, and pigments. This also was accompanied by a new nexus of weighing, sealing, and writing for administration and exchange. In this way the impact of transformation in production on the greater convertibility in working and exchanging materials can be seen as one of the causal factors behind the beginning of a 'commodity nexus' in western Eurasia, as argued for by Renfrew (1986a). This idea will be investigated in more detail in the synthetic section 5.3.

²¹³ There are clear indications that metallurgy did have an important impact on Aegean Bronze Age aesthetic conceptions of colour. This can be seen especially well for the use of tin to create colour effects on ceramic containers, as part of a broader aesthetic usage of this material (Gillis 2004). Peters (2008) has also explored the use of colours in Minoan wall-paintings and other art forms in relation to the mineralogical properties of pigments. One of his findings was that a distinction could be noted between naturally-occurring colours and those produced through transformation (as noted here in section 4.3.3 for glass as well, a topic not looked at by Peters). This would have implications for colour-uses, such as the avoidance of green because of its association with the corrosion of copper:

[&]quot;Here I suggest that the difference can be found in the distinction between colors of transformation and inherent, natural colors. The metaphorical association of transforming an object through the application of a product replicating the effects of copper corrosion is viewed as undesirable, while the exploitation of a substance that is naturally coloured does not hold such connotations; the colour has not been transformed through human intervention and is not associated with the copper-producing minerals." (Peters 2008, 203)

4.4: The iconography of Mycenaean art

4.4.1: Introduction

In the following sections the iconography of Mycenaean art will be considered. As noted in section 2.4.4 on the approach to art used in this thesis, comparative studies of iconography are most useful at the third level of Panofsky's three levels: that of synthesis. The other two levels (of identification at a basic level and of convention) will be addressed here only to support the analysis at the third level. Hence what is presented here is not so much a reconstruction of Mycenaean iconography from the ground up, but rather an outline of important general parameters. In section 4.4.2 two of these will be discussed, starting with naturalism and the rendering of the spatio-temporal environment in art.²¹⁴ Another very important general element is the way in which anthropomorphic figures were rendered, which also has implications for the understanding of Mycenaean personhood. Although this does not provide an exhaustive overview of all the iconographic elements in Mycenaean art, it is enough to function as a platform for the discussion on narrative in section 4.4.3. The analysis there considers how these anthropomorphic figures were related to each other and to other iconographic elements, within the outlines provided by the way the spatiotemporal environment was organised in representational art. Particular attention in this section will also be given to the structural properties of pictorial narratives, as well as to the relation between pictorial narrative and oral performance.

Before turning to the specifics of iconographic studies of Mycenaean art, we can observe that as a case with limited texts this presents us with an interesting set of interpretive problems. A brief overview of the problems inherent in this will be given here to bring this problem in sharper focus. One influential scholar, writing before the decipherment of Linear B, noted that to reconstruct the religion of the Minoan and Mycenaean cultures was like working with a 'picture book' without the textual references, for which the text had to be supplied by modern scholars (Nilsson 1950, 7). For him this meant that this body of pictorial information had to be understood primarily on its own terms rather that giving undue weight to analogies with outside cases, and he also distinguished this analysis from his tracing of survivals into later Greek religion (Nilsson 1950, 9-10). It is clear that many of the particular reconstructions offered by Nilsson are no longer current, given the decipherment of Linear B and the discovery of a large number of new features of the archaeological record. Yet his observation of a 'picture book without texts' retains its general validity for iconographic studies of Mycenaean art.

Iconographic studies of Mycenaean art are coeval with the broader discipline, but the development of an explicit framework for analysis remains to some degree problematic. Strangely, the art of the Aegean Bronze Age is not usually studied with the same methods as those applied to Greco-Roman art. This is somewhat remarkable given the fact that many archaeologists specialising in this period reside in Classics departments. Likely this distinction derives from the very different kinds of art of the two periods, as well as the extensive philological tradition available from the study of Greco-Roman texts.²¹⁵ This should not be seen as to imply that iconographic studies of Aegean Bronze Age

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²¹⁴ The use of the term naturalism has been questioned for Aegean prehistory recently, owing to its association with Western worldviews in the post-Renaissance period (Shapland 2009, 110-112). However, this discussion is tied to the place of naturalism in the specific theoretical framework of Descola (2013). While these ideas are of considerable use, as will be shown in section 5.3.2, more problems are created than solved by using such high-level ideas to try to change the vocabulary of middle-level theories. Because of the lack on agreement on what the appropriate high-level ideas are in archaeology, this would create an annoying obstacle to communication. Here 'naturalism' is held to be the culturally-informed iconographic rendering of the physical world as perceived through human stereoscopic vision.

²¹⁵ A diversity from approaches can be seen, both with regard to specific periods and regions such as Archaic-Classical Greece (Whitley 2001) and Rome (Zanker 2010), and with regard to thematic topics such as narrative (Giuliani 2013)

art are lacking in rigour as such. A good example of the application of an explicit and sophisticated framework for the study of the 'picture book' was supplied in a series of studies by Crowley. 216 She investigated how the 'initial image' of the sea in the art of the Aegean Bronze Age was rendered into an 'elaborated image' through the use of various visual techniques and conventions (Crowley 1991, 223-224). This then enabled her to formulate a more elaborate conceptual apparatus for the iconographic analysis of this art (Crowley 1992, 24), with a core nexus of icon (what is represented), elements (the different parts of the icon) and syntax (the relationships between the elements that form the icon). These icons are part of themes (broad subject areas), and the prototypical is the most characteristic representation of the icon for a given theme.

A broadly similar strategy was developed by Michael Wedde, who recognised the interrelationships between components, pictorial architecture and the image at large, as well as clusters of images, and a so-called master-type or original image (Wedde 1992, 182). This enabled him to analyse the pictorial architecture of different kinds of pictorial architecture on glyptic, such as epiphany, adoration, and processional scenes (Wedde 1992, 2004), as well as ship imagery on a variety of media (Wedde 2000). It should be noted, however, that the larger surfaces and greater variability of elements make it harder to formally identify clusters of images and master-types in monumental art than on glyptic. Therefore, the broad thematic groups defined for wall-paintings are much looser and more apparently subjective than those used in glyptic, though these are also admittedly etic categories even if they are derived from rigorous formal methods (Wedde 2004, 155-157). Furthermore, such classifications do not generate meaning of themselves, even in a generic sense, even as they can be seen to form a necessary prerequisite for analysis.

It is argued here that iconographic studies of Aegean Bronze Age art have been very successful in the classification of specific themes and scenes, as well as their relation to broader aspects of society, as in the art of war at Mycenaean Pylos (Bennet & Davis 1999). Yet the broader contours of Mycenaean art as a semiotic system remain to some extent under-analysed. It is suggested here that by looking at some of the studies of later Greek art, in particular from the Late Geometric and Archaic periods, allows for ways to remedy that situation. Although the argument that will be presented here will not challenge the specific work that has been done, it will try to bring the specific cases within a framework that is based on iconographic studies by Classical scholars. It should be stressed that the intention is not to impose an interpretive straitjacket from the outside on the material, but rather to tease out significant connections between them. Of particular interest is the work by Stansbury-O'Donnell on pictorial narrative (Stansbury-O'Donnell 1999, 2006, 2011), which will be discussed in section 4.4.3 on narrative.

4.4.2: Iconographic conventions in Mycenaean art

Both the overall composition and the rendering of different kinds of elements of Mycenaean art can be understood through the prism of the question of naturalism. For reasons of brevity and interpretive focus our main concern will be with the rendering of space and landscape and with the human form (including its relation to personhood). Naturalism is a particularly vexed issue for Mycenaean art given that it is often unfavourably compared to its Minoan predecessor with regard to this, especially with regard to the rendering of nature scenes and landscapes (e.g. Aegean painting, 141). One of the areas where this can be seen very clearly is in vase-painting, where an 'architectonic design' derived from Middle Helladic mainland art can be seen. This stressed a more formal and symmetrical composition that was based on the shape of a vessel. During the Late

and broader interpretations of art (Stansbury-O'Donnell 2011).

²¹⁶ One of the best elaborations of this specific method can be seen in the systematic ordering of a very large amount of images from glyptic in Crowley (2013).

Helladic period this design became intertwined with the Minoan 'unity design', which featured a composition that stretched freely across the surface of the vessel (Betancourt 2007b, 134-136), see figure 20. A good example of these changes is provided by the rendering of specific motifs such as the octopus, which moved, almost as if in a series of stages, from an informal, naturalistic arrangement to a symmetrical and abstract rendering of the creature (Betancourt 2007b, fig. 8.3, p. 158). Even so, a comparison of Attic Geometric and Mycenaean painted vases showed that there was more unity and less framing in the pictorial designs of the latter (Rystedt 2006, 242).²¹⁷

A similar shift had been observed by Cameron (1975, 259-266) in his work on the Cretan wall-paintings. He noted a shift from a more free-flowing 'encircling' composition, in which objects bounded pictorial nuclei in a pattern that suggested a natural landscape with elements overflowing into each other, to a stricter and more monumental setting that emphasised vertical and horizontal boundaries. The latter form of composition became predominant in the material he dated to LM II – IIIA1, even though such a compositional rendering could also be seen, at least partly, in some of the earlier wall-paintings (Cameron 1975, 263-266). These changes that can be seen both in vase-painting and in wall-painting had a number of ramifications for the way landscapes and the interaction between individual elements were depicted, but it should be emphasised that in terms of naturalism their impact was primarily at the 'architectonic' level. It is true that the changes in composition in vase-painting led to a less free-flowing rendering of octopuses, as well as in the repetitive wall-painting friezes of bluebirds, snails and nautili from Pylos (Lang 1969, 140-145), see figures 21-22. Yet there are naturalistic renderings of dolphins on a wall-painting at Gla (Iakovidis 2001, plate IX), see figure 23. Also, octopuses, dolphins, and fish were depicted on floor-paintings from Pylos and Tiryns (Hirsch 1977, plates 7, 9, 12 & 13), see figures 24-25.

The decorative motifs do not seem to change in any fundamental way from Minoan to Mycenaean art. Iconographic studies of them are underdeveloped, especially with regard to intrinsic meanings. They consist of two different groups, one of more abstract symbols like the spiral, rosette and half-rosette, and the other of quite naturalistic imitations of architectural features such as dadoes and beams. For the former category it is not entirely clear what they represent, and interpretations range from simple decorative themes to complex astronomical and religious signs in the case of the rosette and half-rosette (Marinatos 2010, 131-139). It is not necessary to accept the latter hypothesis to suspect that such motifs may be more than mere decoration. This is also true for the spiral, which has been interpreted as a symbol of power (Hiller 2005), which, though it may be true, does not resolve the question of what they represent (which is a perquisite for considering their naturalism). In any case, these motifs are here considered as 'stylised nature', with likely (if yet unknowable) conceptual meanings, rather than mere 'aesthetic primitives'. In the case of the spirals this is also supported by their association with papyrus in some depictions, and a case can be made that they represented something that was conceptual.²¹⁸ A desire for naturalistic appearance can also be seen

²¹⁷ Rystedt also notes the emphasis on symmetry and antithesis in the Attic Geometric pots, which she connects with a narrative dimension that would be lacking in the Mycenaean painted vases, which, despite their pictorial complexity, would have played a more symbolic role (Rystedt 2006, 244-245).

²¹⁸ It has been argued that the complex decorative designs in the art of the Aegean Bronze Age indicate rather advanced knowledge of geometry, and that the way in which these designs were employed shows that there was no separation between geometry and natural forms (Crowley 1997, 89). Muskett (2007, 23) has made a distinction between low-level aesthetic primitives such as geometric designs, patches of colours, and stylized natural forms, and high-level ones such as different parts of the human body. Interestingly, further analysis of the geometrical designs at Akrotiri has shown that not only can a linear or Archimedean spiral be discerned here, it is also likely that the geometrical knowledge evidenced by such designs was transferred to the rendering of the anthropomorphic figures through the use of stencils (Fragoulis et al. 2005, 332-336). Further research is needed, especially for the greater abstraction in Mycenaean art, but if true this discovery would indicate that low and high-level aesthetic primitives were physically, and very likely also conceptually, linked in Aegean art. Unfortunately the semantic interpretation of the references in the Linear B tablets to running spirals or *to-qi-de* on vessels and furniture (*Documents*, 587) is not very helpful beyond identifying them as such.

for the flame patterns on the painted plaster that surrounded the hearths of the central megara at Pylos and Mycenae (Wright 1994, 57).

As such, it seems that the great change lies not in a shift from naturalism to a more abstract style that has to be understood in essentialist terms, but rather in a transition of design. In this new kind of design there was much less emphasis in creating a form of naturalism congruent with its architectural surroundings, as can be seen at Akrotiri (Palyvou 2000), than with creating 'bounded' spaces in paintings on vases, walls and floors. Within these spaces the different individual components would still be rendered in a largely naturalistic way, but only very rarely could they be brought together to form a larger unitary landscape as seen in the Minoan wall-paintings. This brings us to the more specific question of the rendering of the spatio-temporal environment in Mycenaean art, a topic that can be investigated in some detail with regard to the composition of landscapes. Chapin (1995, 15-21) had provided a broad yet incisive analysis of the rendering of landscape in monumental and non-monumental Aegean Bronze Age art, taking from the outset the need to view perspective and landscape, as far as possible, from within its cultural context. Given the absence of documented indigenous viewer responses, the only tactic to achieve this is to consider the broader parameters of ways of rendering space in the known compositions.

Even though the overall nature scenes were lost, features of the natural environment as individual components were still rendered in a naturalistic way. Floral motifs are very rare, and mostly known from fragments (*Aegean Painting*, 202). Yet, where enough material is present to study landscape motifs in more detail, such as the paintings of multi-coloured rocks and olive trees from Pylos, it seems that they were as naturalistic as their Minoan predecessors (Chapin 2006, 129-130). Even if complete landscapes are lacking, fragments of rock-work and various kinds of vegetation, including that found on the sea floor, are suggestive of the rendering of broader landscapes and seascapes. This can also be seen for the wavy lines that are used in a variety of ways as at Pylos (Lang 1969, 21-24), but some of the renderings and contexts of this iconographic motif suggests a more generic connection with hillside landscapes (Chapin 1995, 160-162). Yet another case is that of the rock on which the lyre-holding 'bard' in a wall-painting in the central megaron of the Pylos palace sits (*Aegean Painting*, plate XVIII), see figure 26. Even if these different motifs appear as schematic due to their lack of a broader context, there is no reason to doubt that they were employed for naturalistic purposes, and Minoan art has yielded similar examples as well (Schiering 1992).

Hence it is is still possible to discuss the rendering of landscapes in Mycenaean art, even if modified from the exceptional care that went into them in Minoan Neopalatial and in Cycladic art. Chapin (1995, 276) has suggested that considerable continuity existed in large-scale spatial representations, with Mycenaean artists using the same basic conventions that were used in Minoan art before the Neopalatial period. In order to be more precise in this, it is useful to list here the five main features of the most elaborate renderings of landscapes in the Neopalatial period:

- 1. The use of 'overlapping' and 'vertical' perspectives (Chapin 1995, 70-71), with the former referring to the positioning of one motif as partly obscured by another in order to suggest it was located behind it. The 'vertical perspective' refers to the placement of figures higher up in the picture in such a way as to suggest a greater distance to the viewer.
- 2. By using the 'overlapping' and 'vertical' perspectives together, a more elaborate sloping terrain can be created of hillsides and mountainous regions. This is known as the 'hillside perspective' and can be seen best in the so-called Sanctuary Rhyton of Kato Zakros in Crete dated to LM I (Chapin 1995, 83-88).
- 3. Through the use of elements characteristics of hillsides, its presence can be suggested without being rendered in full detail. This is termed the 'referential perspective', and can use

- floating elements, rocky elements, or a combination thereof (Chapin 1995, 163-165).
- 4. The use of a 'vertical plane perspective' is that it can show landscapes in a two-dimensional way, with the highest elements in the image being highest in the depicted landscape as well. Certain 'concentric' compositions that had earlier been very hard to interpret can be understood through the 'vertical plane perspective' to represent features such as the shallow caves that are characteristic of limestone mountains (Chapin 1995, 205-209).²¹⁹

The focus on hillsides in renderings of landscapes is hardly surprising given the topography of the southern Aegean, where hills and mountains are practically never out of sight. The overall concern with vertical landmasses does not mean, however, that other features of the spatial environment were ignored, as can be seen for the seascapes and townscapes in the LC IA miniature wallpaintings of the West House at Akrotiri (Doumas 1992, fig. 39, pp. 71-74). All of these features can be clearly seen in the art of the LC IA Cyclades and Neopalatial Crete, but almost all of them can also be recognised in the more fragmented record of Mycenaean art. Even if no complete 'hillside perspective' scenes like that of the Zakros Siege Rhyton can be seen in the Mycenaean corpus, there is good evidence for the use of the 'overlapping' and 'vertical' perspectives, together with 'referential perspective' for hillsides, and also the 'vertical plane perspective' (Chapin 1995, 265-273). The 'vertical plane' example of the bluebird frieze wall-painting from Pylos (Lang 1969, plate R bottom left) is especially notable for its elaboration (Chapin 1995, 197-198). Wall-painting fragments of architectural features from multiple Mycenaean sites (Aegean Painting, fig. 35, p. 127) also show the importance of such settings, even if no complete townscape or palace can be recognised. The newly reconstructed naval scene from Pylos (Brecoulaki 2005) furthermore points to the continued use of larger-scale seascapes.²²⁰

Having ascertained that the Mycenaean renderings of the spatial environment conform to the general tendencies of Aegean Bronze Age art in this regard, more observations can be made about the ways in which the spatio-temporal environment was conceptualised in this art. With regard to the very common use of 'vertical perspective', Chapin has argued persuasively that this should not be interpreted as indicating a singular viewpoint from which to grasp landscape scenes:

"Such an assumption, however, cannot be made about Aegean art, where each pictorial element is typically drawn from its own center point so that there are as many viewpoints as there are objects in a composition. Furthermore, Aegean landscape art provides no locator elements to inform the observer of a specific location from which to view a landscape. As a result, it cannot be demonstrated that a landscape should be understood as being viewed from above, as in cavalier perspective, bird's eye perspective, and mountain view perspective, or from some possible other point." (Chapin 1995, 278-279)

In a very basic sense the 'overlapping' and 'vertical' perspectives derive (Chapin 1995, 215-220), or are at least very similar to the rendering of space in Near Eastern art styles. These are very generic techniques for depicting spatial environments, however, and the focus on hillsides is a very Aegean-specific development. The 'bounded naturalism' of Mycenaean art can furthermore account for the absence of the more elaborate 'hillside perspective' of the Neopalatial period, alongside the persistence of the 'referential perspective' and other iconographic conventions showing hills. One interesting observation can be made for the temporality of these landscapes, in that a clear focus on

²¹⁹ These scenes appear highly puzzling because they show rockwork, and often vegetation as well, both on the lower and the upper borders of pictorial space, in a concentric way (Chapin 1995, figs. 9-13, pp. 78-80).

²²⁰ Younger (2011, 167-171) has pointed out the relation of the complex overview of the seascapes, townscapes, and hillsides in the miniature wall-painting of the West House at Akrotiri to the kind of mapping that can be seen in lists of place-names. The new reconstruction of the Pylos wall-painting of a complex naval scene is as of yet insufficiently published to ascertain whether a similar effect can be seen here.

seasonality can be observed. This is true not only for vegetation, but especially for the different ritual activities that are depicted.²²¹ Based on the discussion of feasting and cycles of public festivals in section 3.4.2, it is clear that a basic calendar of major ritual events existed in the Mycenaean period. The discussion in section 5.2.2 will show the relation between specific ritual events listed in the Linear B tablets and specific wall-paintings. Other than this there are few indications of temporality in Mycenaean art or in that of the Aegean Bronze Age as a whole, and much less of a relation to complex cosmological ideas.²²² The spatio-temporal environment depicted in Mycenaean art, then, is very much bounded by the hills and seascapes that delimited the valleys within which the major palatial states were located.²²³

Now we turn from the macro-cosmos of landscape to the micro-cosmos of the human(oid) body. For this the emphasis will lie on the material forms that are more closely associated with the palaces such as wall-paintings and seals. The rendering of anthropomorphic beings in these media is quite distinct from that which can be observed in vase-painting, excepting the LH IIIC so-called 'warrior vase' from Mycenae (*Aegean Painting*, plates 85-87). The anthropomorphic figures painted on vases appear more schematic, in some cases rendered almost like sticks. This seems to be due to the painting techniques used, as it can also be observed for the Tanagra *larnakes* (burial coffins) that were decorated in this way (e.g. *Aegean Painting*, plates 92, XXII-XXIII). At present it remains to be determined whether this different rendering of human forms has implications for the conception of the beings that were depicted.²²⁴ The analysis based on the other forms of Mycenaean art will be presented as more or less congruent with Mycenaean worldview. In general the anthropomorphic figures in Mycenaean art includes both humans and deities. The latter can usually only be distinguished by considering details of composition, the context in which it was found and most importantly the position of the figure within the overall composition (Crowley 2008b, 77-78).

One of the most interesting discussions in the interpretation of the art of the Aegean Bronze Age concerns the gender of the anthropomorphic figures depicted in it. One of the reasons for this is that this issue often puts contemporary social attitudes to the test (Morris 2009). The differences between male and female figures are not only in bodily form, and associated dress and attributes, but also in hairstyles and hypothetical colour conventions of a white skin for women and a red one for men. The notion of a dichotomy in skin colour between female and male figures was initially established by Arthur Evans for the Knossos material, but has since created much debate for the art from this site (Alberti 2002; Hitchcock 2000; Shaw 2004). However, it seems that the distinction

²²¹ The cycles of plant life and ritual activity would of course intersect, as can be seen in a powerful way in the Minoan Harvester Vase (Koehl 2006, pl. 12).

²²² Recent work on the site of Knossos has related its art and architecture more closely to complex cosmological ideas (Goodison 2004; MacGillivray 2004). Yet even for this site such ideas need to be substantiated further, and no such proposals have been put forward for Mycenaean art. Furthermore, there are no indications that a more complex calendar than the basic lunar-solar one was in existence for the Bronze Age.

²²³ The rendering of the spatio-temporal environment and viewer perception was very different in the later Greek *polis* of the Archaic-Classical period, as has been explored by Stansbury-O'Donnell (1999, 83-86) for the Lesche paintings by Polygnotos. These paintings have not been preserved but their content is well-known from textual sources. These works of art involved a more personalised, participative kind of viewing experience, and the ring-like character of their composition has been related to the tragedies of Aeschylus (Stansbury-O'Donnell 1999, 178-179). This underlines how very different the worldview of the Greek *polis* was from its Mycenaean palatial precursor, and this would have had an impact on conceptions of personhood and cosmology as well (cf. Seaford 2012).

²²⁴ It has been argued that the (very few) representations of human forms on Middle Bronze Age pots from the island of Aegina and from Tsoungiza on the mainland show an 'aesthetic primitive' distinct from the Cretan and Cycladic ways of rendering the human body (Muskett 2007, 20-24). In particular, she notes the close relation between the pots on which these figures were painted and the context of maritime exchange they formed part of, in contrast to the images on seals that were used in administrative settings (Muskett 2007, 23). Like the more geometric designs discussed for naturalism, this way of rendering human figures on pots would continue after the Bronze Age.

between white for the depiction of females and red for males holds true in general terms,²²⁵ and that in the Mycenaean case even distinctions in costume can be related more closely to the kind of activity carried out than to gender (Chapin 2012, 303). A good example of this are the female participants in the 'boar hunt' wall-painting from Tiryns, who are rendered in white but wear the same kind of tunics as the male participants (Muskett 2008, 91). The use of male and female signs in the Linear B tablets points to a clear gender dichotomy as well, in contrast to the more ambiguously gendered Linear A script (Weilhartner 2012).

Practically no distinctions can be made on the basis of age, as no children or elderly adults can be recognised in Mycenaean art, except for two possibly youths in a LM II wall-painting of a procession from Knossos (*Aegean Painting*, 88). Mycenaean art was different in this from Minoan art, where human figures of a variety of ages were depicted, and for which interesting social distinctions can be recognized on the basis of hairstyle, gender and age (e.g. Chapin 2007). Hence, although depicted in naturalistic forms, the anthropomorphic figures do not seem to reflect the full spectrum of the different human beings that must have existed but rather show a highly idealised version of humanity.²²⁶ This can even be seen in the Linear B rendering of male figures (Weilhartner 2012, 289). Social roles can be recognised, however, as for persons held to be of special importance, based on criteria such as the relative size and clothing of figures as well as attributes carried (Crowley 1995). A good example of different social roles can be seen in the differences between the figures in the small-scale procession scene from the vestibule of the central megaron of the Pylos palace (McCallum 1987, plate VIIIa). Finally, it has been noted that there are few indications that different kinds of ethnicity or notions of 'foreignness' were depicted in Mycenaean art (Blakolmer 2012). This aspect will be further explored for battle-scenes in section 5.2.3.

One set of artistic creatures that seem to run counter to notions of ideal beauty are those that combine anthropomorphic and zoomorphic elements, or even inanimate elements (Crowley 2013, 52). These 'composites' of human and animal forms occur frequently in glyptic (Crowley 2013, 52, 96-99, 231-234), but no examples from monumental art are known. This is not true for the broader category of 'fantasy creatures' that also included griffins and sphinxes. However, the distinction between fantasy and reality may not have been the same in the Mycenaean case as for the modern, Western world, and creatures like griffins and lions are depicted side by side at Pylos (Shank 2007), see figure 27.²²⁷ Another relation between humans and animals can be discerned in the so-called master and mistress of animals, for which an association with hybridity between human and animal forms has been noted for the visual record of Minoan Crete (Simandiraki-Grimshaw 2010). So far no model has been formulated to relate the different connections between zoomorphic and anthropomorphic elements to each other comprehensively. This would also need to take into account the zoological and ecological evidence, as well as the recurrence of such forms across

²²⁵ This dichotomy in the colour of males and females can also be observed for Egypt and other ancient Mediterranean cultures (Eaverly 1999). However, they should not be seen as immutable. The case of the rendering of Akhenaten and his family in art provides a good (if rather unique) example of how colour-use could intersect with religious and perhaps also socio-political issues (Eaverly 2004).

²²⁶ With regard to the idealism in the Knossos wall-paintings Cameron observed that this might initially stem from the kinds of activities that were depicted, but should be grasped as part of a broader worldview:

[&]quot;It would seem natural, therefore, that the youths hailed as the chief participants in the great Minoan public festivals should become the models for the idealized human figure which appeared on palace and house walls. Since the Minoans also believed their deities to be anthropomorphic, these too are represented as ever youthful and perfect. This hypothesis accords with the Minoan view of the world of Nature as a kind of perpetual Spring with gushing streams, blossoming flowers and landscapes filled with pairs of birds and animals vivaciously portrayed." (Cameron 1975, 54) ²²⁷ With regard to the fantasy beings it is certainly possible that certain kinds of material features may have led to a belief in the physicality of such beings. For example, this may have been the case with the imported ostrich eggs that could have been connected with griffins (Younger 2011, 166).

different cultures in western Eurasia (Wengrow 2014). In the absence of such a model it is hard to grasp the 'composites' of human and animal forms as part of Mycenaean conceptions of personhood.

All of this raises the question of the degree of portraiture of the anthropomorphic figures depicted in Aegean Bronze Age art, in particular the Mycenaean ones. Many of the figures in narrative settings are almost entirely lacking in individualising facial features, as can be seen for the figures involved in a (funerary) procession, with horses, driving a chariot, hunting and soldiers in a battle scene (*Aegean Painting*, plates 50-51, 64, 66-67, 74). By contrast, a number of scenes from LM II-IIIA Knossos show more individual features in hairstyles and facial expressions (Foster 1997, plate LV), and this can also be seen for two depictions of women from Tiryns and Pylos (*Aegean Painting*, plates 56, 58). On the basis of a comparison between the depictions of anthropomorphic figures on different media, including glyptic, vessels, painted plaster and sculpture, Foster (1997, 139) concluded that it is possible to recognize individuals in Minoan art. Although the Mycenaean evidence is more circumscribed in terms of the kinds of anthropomorphic figures that are depicted, the same kinds of distinguishing features are present in different art objects, both in two-dimensional and in three-dimensional ones.²²⁸

An alternative to true portraiture can be suggested, however, in that the individualising features are in the facial expressions and/or hairstyles rather than in 'essential' physical characteristics. Therefore, it can be argued that they depict an emotion or temporal condition in a certain context, rather than any specific individual.²²⁹ It might be argued that for Mycenaean anthropomorphic figures their identity did not derive from essential individual characteristics, but rather from the specific context in which they were embedded. This can also be seen in the importance of gestures in Minoan and Mycenaean art, which seem to have derived from a combination of stock figures and natural improvisation that allowed for scenic individuality (Immerwahr 2005, 183; Wedde 1999, 918-919). Further specifics could be added through a variety of attributes, which included a variety of features such as different kinds of textiles, armour and weapons, and jewellery. The evidence of the three-dimensional material forms can corroborate this, since the painted plaster head from Mycenae is congruent with the rendering of heads in two-dimensional art (Rehak 2005, 272). The characteristic gestures and positions of the *phi* and *psi* figurines also recalls the emphasis on the ritual significance of specific gestures in their Minoan counterparts (Morris & Peatfield 2004), presumably part of a broader artistic 'gesture-language'.

Circumstantial support for this interpretation can be derived from Linear B references to the decoration of metal vessels and other artefacts. This can best be seen in the Ta series of tablets from Pylos, for example Ta 722 which lists a number of footstools, one of them inlaid with the figures of 'a man', as well as 'a horse', 'an octopus' and 'a griffin' (*Documents*, 345). It may be that these motifs were intended only as simple decorative motifs, but the lack of any named human figure on these artefacts does point to a lack of recognition of named individuals on at least this material form of art. Based on this model we can then posit that the specifics of the anthropomorphic figures in expression, gestures, attributes and position within the scene is what distinguishes a human from a

Even the seemingly highly personalised masks from the Mycenae Shaft Graves are not argued to have been true portraiture, as they do not conform to the facial reconstructions obtained through physical anthropology (Muskett 2007, 26-29). Furthermore, the relation between the masks and specific burials has been called into question based on a reanalysis of the accounts by Schliemann and Stamatakis, some of which may well have been associated with burials of females (Dickinson et al. 2012, 17).

²²⁹ However, it is still possible to note certain emotional traits, such as the smile of the Mykenaia (Paschalidis 2012, 556). Younger (2011, 174-176) has used the notion of the 'gaze' as explored by Lacan to consider the subtle interplay between emotions and the socio-cultural environment in the LC IA West House miniature wall-paintings at Akrotiri. This idea is especially useful as it avoids the notion of generic individuality in favour of the seeing the constitution of individuality as located within a broader set of forces that help shape personhood.

deity, and also what distinguishes individual humans from each other in these pictorial scenes. The lack of recognition of individualised depictions of humans does not imply, however, that there was no recognition of different individuals in Mycenaean life. It is simply a specific conceptualisation of the more generic concept of personhood.

This specific issue of Mycenaean personhood has been explored by Voutsaki (2010b) for the case of the Shaft Graves at Mycenae, based on the different features of these burials (including the images) and on analogies with concepts of personhood in so-called 'heroic societies'. Her conclusion is highly relevant for our purposes:

"To conclude, mainland society at the onset of the Mycenaean period scarcely conceives of the self outside the matrix of relations that hold together society and the cosmos. Notions of the person in the MH III—LH I mainland were relational, embedded, 'dividual', permeable. It is obvious that this notion of personhood is very different from our perception of the self as a distinct entity, as a demarcated and autonomous individual. However, people could set their own goals and transform their lives precisely because of this interconnectivity. They could do so because each person consisted of a unique combination of intersecting vectors of difference, had different allegiances, had a unique biography engaging with different groups and communities in different stages of his/her life, and hence positioned him-/herself differently regarding cultural traditions and social obligations. Each person contained the potential for change." (Voutsaki 2010b, 91)

While it should not be forgotten that the Shaft Graves were a more unique site because of their transitional and innovative position in the Mycenaean trajectory, it does point to a nucleus in the Mycenaean conception of personhood that was later elaborated on the walls of the palaces and other media. Whereas the wall-paintings would tend to emphasize the matrix of relations within which Mycenaean persons were located, some features of the art of the later burial monuments point to the specific circumstances of the individual. In particular there is the depiction of a winged figure on one of the *larnax* burial coffins from Tanagra that is perhaps suggestive of the *psyche* (soul) but much more likely of an *eidolon* (likeness) of the deceased person, perhaps moving to the Underworld (Immerwahr 1995, 116-117).²³¹ Clearly such specific terms are hard to apply without any textual references, and hence interpretation has to be limited to discussing general parameters. Interesting in this regard is that the long-term trajectory of the depictions of birds in Aegean funerary iconography shows considerable continuities between the Mycenaean and Geometric periods. Here a change occurred in the Archaic period when *eidolon*-like birds morph into a humanheaded bird, or alternatively with an inscription of '*psyche*' and later into the Classical period *psyche* with wings as a 'replicating' depiction of the deceased human (Ross 2004, 72-76).

Such ideas should not be carried too far, given the interpretive limits intrinsic in the Mycenaean record. Furthermore, the meaning of images would have been subject to constant changes. Clarke (1999, 9-13) has used the distinction made by Sourvinou-Inwood between long-term *mentalités* and

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²³⁰ This should be distinguished from 'Homeric society' as a specific historical entity, which is explored in a separate literature (e.g. Crielaard 1997). The debate on 'heroic society' is more focused on generic philosophical questions raised by the agency of the characters described in Homer, a classic example of which can be found in (MacIntyre 1988). As such this discussion is less tied to the question whether Homer applies more to the Bronze or Early Iron Age. Thereby it would allow for a broader discussion on (political) agency before the emergence of the Greek *polis*. As will be discussed below, this can also incorporate the notion of bodily identity as investigated in Clarke (1999). It should not be taken as a timeless construct, but rather be incorporated (if it is applicable at all) into the specifics of the period studied.

²³¹ The concept of the *eidolon* occurs first in Homer, where it refers to a physical image of the dead, never the living,

that can easily be mistaken for the real person, as in Achilles trying to embrace the *eidolon* of Patroclus (Bremmer 1983, 79). In that sense it is of little surprise that what is depicted on the Tanagra *larnax* is an *eidolon*, but based on this particular reference in the *Iliad*, it does not rule out the presence of the *psyche* either (*Iliad* XXIII, 77-79).

their articulations in actual art and poetic performance. The former aspect for him can be found not in doctrine but rather in traditional poetic language or $\dot{\alpha}o\imath\delta\dot{\eta}$. This view has important negative consequences for those who seek to grasp a doctrine from the artistic and poetic evidence that would be valid over the *longue durée*. More fruitful is to consider the changes taking place in the Archaic-Classical world. Ross (2004, 77) points out that whereas different aspects that may be related to modern Western concept of the soul had been considered separately, they now became unified under the more philosophically-influenced unitary concept of *psyche* (cf. Clarke 1999), a move paralleled in the artistic depictions mentioned earlier. It is possible to use this Archaic-Classical development not as a parallel to the Mycenaean case, but rather as a contrast that can illuminate its prehistoric predecessor. With regard to the artistic aspect of this, the best insights from this concern the relation between words and images that will be discussed in the next section.

4.4.3: Images, words and narratives in Mycenaean art

Regarding the relation between words and images in Mycenaean art, it is important to note that there is only scant evidence for any direct connection between the various Aegean Bronze Age scripts and monumental art. The only known cases are those of three incised inscriptions on painted plaster from Ayia Triada and a painted sign from Knossos, all of them in Linear A (Cameron 1965). In itself this is not very surprising as Linear A, unlike Linear B, was applied to a much wider variety of media other than clay documents, including stone offering tables, hair pins and pottery (Weingarten, 2010). Due to the inability to read Linear A and its very limited corpus of texts, it is impossible to establish any kind of hypothesis for the use of these signs in the painted plaster. For the Mycenaean case it is clear that there is no evidence for any kind of direct connection between Linear B and the various forms of monumental art. There are, however, more indirect connections that are helpful for interpretation, as was explored for *ku-wa-no* in section 4.3.3. Such references either are to art objects or decoration, though none of which can be related to monumental art, or to figures that can also be recognised in art.²³²

Of more interest than the relation between Mycenaean images and written words is their relation to spoken words. The spoken word here refers to a hypothetical Mycenaean tradition of oral poetry, the overall parameters of which can be inferred from the later texts of the Archaic-Classical periods, as mentioned in section 3.3. In that section it was argued that the Homeric epics, as well as other texts, could be used as comparative concepts for specific aspects of Mycenaean material culture. There has been no lack of studies seeking to investigate this connection between the later texts and Minoan and Mycenaean images (e.g. Bennet 2004, 2007; Hiller 1990, 2000; Laffineur 2007; Morris 1989, 2000; Vlachopoulos 2007; Watrous 2007). Obviously, it cannot be sufficiently emphasised that the Mycenaean tradition of oral poetry is a hypothetical one for which direct insights into its content are lacking, and hence the connections between 'words potentially spoken' and the images remain highly tenuous. Furthermore, the features of society 'described' in Homer correspond more closely to those of the post-Bronze Age and early historical Aegean, as was discussed in section 3.3. The thrust of the argument here therefore focuses not on the direct connections in meaning between words and images, but instead on the structural analysis of the ways images and words were used and understood within narrative contexts (cf. Stansbury-O'Donnell 1999, 34-35).

This involves discussing the different semantic concepts used in the study of oral poetry, especially those of noun-epithets and similes, and how these can be connected to the images. The concept of *ekphrasis*, the poetic description or elucidation of visual images will be discussed as well. It will be

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²³² A good example for the latter are the *ku-na-ke-ta-i* or *kun-āgetai* ('huntsmen') mentioned in a Pylos tablet and implicitly connected with (hunting) dogs (*Documents*: 132, 299, 557), and who appear on fragments of painted plaster from the same site as leading dogs into a hunt (*Aegean Painting*: 197).

argued that a generic relation can be recognised between these three concepts and Mycenaean art. As such, the investigation of these semantic concepts helps not so much with the identification of specific iconographic themes, but rather with outlining the general parameters of the indigenous ways of inferring meaning from the images. This can be seen most clearly for the noun-epithets, which have played a central role in the argument developed by Milman Parry and others that Homeric poetry was derived from a long-lasting oral tradition (Foley 1997, 147-148). Epithets such as 'lion-hearted Achilles' or 'rosy-red fingered Eos' (Dawn) would have played an important mnemonic role in the hexameter structure of the poem. More recent research has emphasised a broader consideration of such words beyond a simple mnemonic purpose:

"Instead of serving simply as counters in an elaborate board game, they are apprehended as nodes in a network of signification, as keys that unlock what Anglo-Saxon poets called the 'wordhoard' of myth and story, as signs that point the way down the Homeric oimê or song-path. In short, the recurrent phrases and scenes that characterize Homeric epic and numerous other such narratives are credited with more than mere compositional convenience; because their traditional referentiality is fully taken into account, we no longer have to contemplate sacrificing artistic depth to an adequate theory of structure, or vice versa. The 'words' – the epea of Homer, the reči of the South Slavic guslar – do more than make possible a traditional oral performance; they actively enable traditional oral art." (Foley 1997, 167)

The hypothesis that noun-epithets are not solely used as technical poetic devices brings up the possibility that they may be important for understanding images as well. A problem here, however, is that, as discussed in the previous section, Mycenaean iconographic conventions appear rather generic. This makes it very hard to recognise any kind of epithet or attribute, in clear contrast to later Greco-Roman art. On closer investigation this contrast can be argued to have derived partly from other factors than mere changes in iconographic convention. Although the imagery of the early Archaic period is different from the Mycenaean period, it is similarly lacking in specific attributes of deities (Mylonopoulos 2010, 173-174). Only in the 5th century BC do such attributes become more pronounced, eventually leading to the overload of attributes on divine images in the Hellenistic period (Mylonopoulos 2010, 203). One reason for this could be that the proliferation of alphabetic literacy would create more specificity in imagery, with more attributes depicted, sometimes in combination with textual explanations, for just this purpose. A similar case has been made for vase-painting, where images tended to become more 'fixed' with the impact of writing during the Archaic-Classical period (Bennet 2004, 96; Cain 1997, 95-105).

On this basis, one might suppose that noun-epithets are simply lacking in Mycenaean art, and that art and oral performance were completely separated at this level. However, while this is to a certain extent true, it has more to do with the different technical requirements and conventions of painting and sculpture on the one side, and oral poetry on the other. What remains to be explored is the possibility that there might be a connection at the conceptual level, as part of the 'wordhoard' referred to in the quotation above. To explore this connection further two features of poetic composition, similes and *ekphrasis*, will be discussed in so far as they can be related to different features of Aegean Bronze Age art. We begin this particular analysis at the LM IA Cycladic site of Akrotiri, where the miniature wall-paintings in the West House have attracted much attention in their possible relation to early Greek historical poetry. The key interest in these wall-paintings is not so much whether the images in them can be related substantively to specific poetic passages, but rather stress is placed on the compositional similarities between the two. Morris (1989) has emphasised such connections in the way different scenes were integrated in an overarching structure, arguing not merely for common elements but for common techniques:

²³³ In terms of basic syntax the difference between words and images is very clear and remains at all times distinct.

"Stylistic analyses of the Thera frescoes imply similar technical similarities between poetic and pictorial compositions, such as 'the tendency to string the figures out paratactically'. This is particularly vivid in the north frieze, whose episodic clusters of images do not imply strict dictates for narrative in art, but may a poetic account of simultaneous events arranged in a linear sequence in time, translated here into two-dimensional space. The paratactic arrangement of episodes and images required for digressions in story-telling permits the painter simultaneous juxtapositions, where the poet would be dependent on ring composition." (Morris 1989, 530-531)

This concept of 'paratactic narrative' is very useful for interpreting both poetry and images (Cain 1997, 188-189). There is a clear difference, however, between reading or listening to a sequence of words and looking at an image, and this has important implications for the role of similes in poetry and in visual art. Similes abound in early historical Greek poetry, as can be seen in the list compiled by Scott (1974, 190-205) for the *Iliad* and the *Odyssey*. In basic terms the simile simply links two phenomena with each other that are not essentially identical, but which nevertheless share a characteristic, often only in a certain context. A good example of this is the constant association between lions and fighting warriors, such as the extended lion simile used to describe Diomedes furiously fighting the Trojans in the front lines, being 'claw-mad as a wounded lion' and piling Trojan corpse upon corpse (*Iliad* V, 150-158). In compositional terms, this simile both visualises for the audience what is going on, and also forms part of the narrative word sequence.

It is hard to see how similes could have played a similar role in the composition of Aegean Bronze Age art. Both of the roles played by similes in poetic composition seem to be superfluous in art. Visualisation of something using a simile is simply hard to accomplish in a visual image since the similes are rich in detail and nuances in a way that cannot be squared with the generic character of Mycenaean iconography. It may well be that the image of a lion carries with it implications of prowess in war, or that a duellist can be seen as engaged in combat in a lion-like way, but that cannot be inferred from the way that these images are rendered in themselves. More importantly, there are no clear cases of dedicated iconographic motifs to connect different scenes together. It is rather telling that those studies that did focus on recognising similes in Mycenaean art focus either on isolated motifs such as flies (Hiller 2000) or on material forms with less complex pictorial compositions such as glyptic (Grace 2009). Yet, on most of the examples provided in these studies the images are indeed similar to the similes, but not actually deployed in a compositional setting that makes an explicit comparison of one phenomenon with another.

There are two scenes, however, that can be interpreted as similes. These are a scene on a stela from the Mycenae Shaft Graves that shows a lion chasing a deer below a scene of a warrior in a chariot, and also a dagger (see figure 28) from the same site that shows a lion attacking a deer on one side of the blade and five well-armed men in combat with a lion on the other (Morgan 1995, 173-175). These examples from the Shaft Graves might be the exception that proves the rule. Many of the other cases noted do indeed show great similarities with the subject matters of early Greek historical poetry, and may well have shared common prototypes (Laffineur 2007, 82-85). Yet very few of them are actually deployed in a similar compositional way as the similes were used in poetic compositions. That is not to say that the content of these similes is not useful for understanding some features of Mycenaean art. This can be shown for the lion simile, which is also known from art and texts from the contemporary eastern Mediterranean. Lions abound in Mycenaean art, and also in that of the preceding Minoan periods (Shapland 2010), with one of the best-informed experts counting some 920 cases in her database (Thomas 2004, note 1, p. 161).

The question is how to conceive of these images: are they simply representations of lions or might they be similes in themselves? That is, were they understood by the Mycenaean viewer as an

intrinsic comparison to something or someone else? To answer this question, there is a need to turn to the different contexts in which lions were depicted. Thomas (1999, 305-306) has traced the trajectory of lion images in Mycenaean art from the Shaft Graves through LH IIIB, on the basis of their associations with hunters, warriors, ritual activity and as emblems of power, resulting in interesting conclusions. She found that rather than the expected change toward a larger role of the ritual and power emblem role, the predominant representation of lions remained those associated with hunting. This continuity and the formulaic character of the images suggest a stock-theme, which Thomas (1999, note 61, p. 306) argues should be understood as a metaphor that would be shared by, but not dependent on, either visual art or on poetic discourse. Lions, then, would not be similes in themselves but would share a common metaphor with possible similes in the hypothetical tradition of oral poetry. On a few occasions this shared metaphor could also be turned into a similar kind of composition, as in the two examples from the Shaft Graves.

Despite sharing common metaphors to some degree, the similes are of little, if any, use in understanding the composition of the bulk of Mycenaean art. What then could link together the juxtaposed scenes in the paratactic narrative of compositions such as those from Akrotiri? It is argued here that a potential solution can be found in the concept of *ekphrasis*, the poetic 'description' of art objects and the images on them. This poetic device was also known from such Near Eastern epics such as the *ekphrasis* of the axe of Gilgamesh in the Mesopotamian epic that bears his name, as well as other examples (Winter 2010). One of the most famous examples from early Greek historical poetry was Homer's description of the Shield of Achilles (*Iliad* XVIII, 558-709). This shield, made by the god Hephaestus depicts, two cities and activities going on in them (one being at war, the other peaceful), a ploughing scene, a vineyard scene, animals, a dancing floor like that at Knossos, and all surrounded by the river Oceanus. This work of art, the actual existence of which is of little importance here, more or less represents a cosmos made up of different scenes juxtaposed together on the shield and brought together in a coherent picture through the poetic technique of *ekphrasis* as performed by Homer.

The similarity between the juxtaposed scenes in the Shield of Achilles scene and those in the miniature wall-paintings of the West House at Akrotiri have been noted already (Hiller 1990, 231; Morris 1989). What is important for the present analysis however, is not the question whether this indicates that the Homeric meter was derived from Minoan Crete, or whether any of the scenes on the shield can be substantively related to those on the paintings. It is not even important whether we are dealing here with an art object that must necessarily belong to the Bronze Age or from the period in which Homeric poetry was first written down. Neither is there any need to make more than passing reference to the tradition of *ekphrasis* that was started by this, and which has been considered by great art historians and philosophers alike (Becker 1995, 9-22). The concern here is rather with the strong similarities in compositions that consisted of a series of highly generic stockscenes or *topoi* that were juxtaposed to each other in an overall setting, which in the case of the Shield of Achilles was elucidated through *ekphrasis*. The question then, is whether this poetic technique can yield some insights for the pictorial composition.

To understand this it can be useful to turn to the period in which early historical Greek poetry first emerged in textual form, corresponding roughly to the Late Geometric through Archaic periods. The

²³⁴ As for the likelihood of its actual existence in this period, it has been noted that in material terms it was a composite of older practices like inlay, which was not known in the 8th century BC, and contemporary material forms such as the similar layout on Phoenician bowls (Stansbury-O'Donnell 1995, 316-317). As such it represents an amalgam of material techniques from different periods and regions (Stansbury-O'Donnell 1999, note 53, p. 200). This makes it unlikely that the *ekphrasis* was of an actual object. However, neither was the shield a mere fantasy, for it can also thought of as a more ideal artefact, one that could only be shaped by a divine artist like Hephaestus: a kind of craft and material form that human artists could only aspire to (Snodgrass 1998, 42-44).

relation between poetry and art in this period has been investigated in a variety of ways, especially with regard to the emergence of a more clearly narrative visual culture (Whitley 2001, 199-204). Yet the *ekphrasis* of the Shield of Achilles may be relevant more to the starting point of this development than to its eventual outcome. For it is clear that the description of this shield has more in common with the text-less art of the Late Geometric period than with the interaction of text and image that starts in the Archaic period. In fact, a number of similarities can be noted between the *ekphrasis* of the Shield of Achilles and the composition of 8th century BC art (Stansbury-O'Donnell 1995, 320-321). The most obvious of these is the common use of continuous, circling friezes. Another can be seen in the highly generic character of both human figures and scenes as a whole. The latter may be termed stock-scenes or *topoi*. Yet such scenes should not be seen as necessarily lacking in any narrative potential, as in the notion of *Sagenbilder* that are distinct from historical events and daily life captured in *Lebensbilder*.

Stansbury-O'Donnell (1999, 31-35) has argued that the notional distinction of *Lebensbilder* and *Sagenbilder* should not be used to deny the narrative potential of what appear to be highly generic images. Instead the *ekphrasis* of the Shield of Achilles points to how images can be 'enlivened' in a specific 'viewing experience'. This does not imply that every 8th century Greek vase was an object for *ekphrasis* as such, but rather can be taken as indicating the need to take into account the fact that additional meanings could have been inferred more indirectly from images. In order to get some grip on this it can be useful to analyse the basic elements of narratives more closely, in terms of their fundamental structure.²³⁵ Using ideas originally developed by Roland Barthes, Stansbury-O'Donnell (1999, 21) defines four key elements of narrative micro-structures:

- 1. The nucleus, which comprises the essential action of the narrative and the different agents that participate in them. There can be multiple nuclei in a scene. They also need to be openended, in the sense of alternative outcomes being possible.
- 2. Catalysts, these are defined as figures and elements that elaborate on the nucleus but are not essential to it. Hence they could potentially have been left out.
- 3. Informants, which provide labels to identify participants or provide a location and/or time.
- 4. Index, which refers to something outside the essential action encompassed in the nucleus.

Using these elements it is actually possible to recognise narrative elements in selected examples of Late Geometric art (Stansbury-O'Donnell 1999, 44-53). These narrative elements would have allowed for the ability to connect the visual art of this period to broader metaphors and stories. Such connections can also be brought out in narrative extension, which relates sets of images to each other (Stansbury-O'Donnell 1999, 118-124). This can be done either in a sequential way (syntagmatic narrative) or through a shared set of metaphors (paradigmatic narrative), with the index of narrative micro-structure playing an important connecting role in this. Such analytic tools for grasping narratives can be very useful for recognising meaning in 8th century Greek art better, but they can potentially also be used for the art of the Aegean Bronze Age. As discussed earlier in this section, generic stock-scenes or *topoi* can be seen across Cycladic, Minoan, and Mycenaean art, together with the notion of 'paratactic narrative' to connect such scenes. As noted by Younger (2011, 171-174), these *topoi* incorporated both the generic, related to societal order (the 'collective consciousness'), and the *ephemera* of (daily) life that enjoy a degree of autonomy from this.²³⁶ The

²³⁵ It is important to stress here that this focus on narrative structures does not necessarily imply a strong structuralist theoretical position, as it was espoused by Levi-Strauss and others.

²³⁶ The examples given by Younger involve quotidian life, but it is also possible to consider as part of the *ephemera* phenomena like warriors dying in battle and other more extraordinary events. A good example of this can be seen in the warrior falling from an architectural context in a wall-painting from Mycenae (*Aegean Painting*, plate 65). In this way generic meaning and order can be contrasted with incidental events and states, which carry the possibility for subverting the established order of the *topoi*.

analytic techniques for grasping the micro-structures and macro-structures of narratives can be used precisely to investigate such complexities further.

It can be useful to give a more concrete example of how such narrative structures can be recognised in Mycenaean art. Unfortunately, much of the wall-painting record is preserved in such a state of fragmentation that it is almost impossible to carry out such iconographic analysis in most cases. Yet where more fragments are available it is possible to recognise narrative elements, as will be shown here for a procession scene from the palace of Pylos in Messenia. The fragments of this scene were found in the vestibule of the central megaron of the palace, and consists of human figures of c. 30-40 centimeters in height, a large-scale bull's head, and an architectural context (Lang 1969, 38-40). Two reconstructions of this scene have been proposed. One was by Piet de Jong in the project publication (Lang 1969, plate 119 top), and the other by Lucinda McCallum (1987, plate VIIIa) based on her re-study of the wall-painting fragments. The latter reconstruction (see figure 29) will be used here as it is based more closely on a re-study of the fragments, with the caution that the ongoing work on the Pylos wall-paintings may well lead to further revisions in the near future. Both reconstructions agree, however, on the broad outlines of this scene as showing (moving from right to left) a procession of figures in two registers towards an architectural structure in which some kind of ritual activity takes place.

In terms of overall layout the presence of upper and lower framing bands are a good example of the 'bounded naturalism' of Mycenaean art. A fragment of rockwork at the upper border indicates an outdoor setting (McCallum 1987, 118) and conforms to an abridged version of 'referential perspective', possibly suggesting movement through a hillside landscape (Chapin 1995, 269). 237 Turning to the narrative micro-structure of the scene, broadly speaking two nuclei can be discerned. First there is the movement of the figures in procession on the right, followed by the ritual action that takes place in an architectural context. The bull's head that is much larger than the human figures occupies a position between these two nuclei, and it is not clear to which of the two it belongs. 238 This again shows the interpretive limits of the fragmented material. Considering the first nucleus of processional movement, there seems to be little to distinguish within it based on the actions of the figures. There is no distinction between nucleus figures and others acting as catalysts, as the scene is very much one of an unitary movement, if one split up in two registers. However, the different clothing styles and objects carried do act as informants on the (ritual) role and status of the human figures depicted here. The long robes seem to indicate priests, further enhanced by the fact that they are carrying offerings, while the figures clad in just kilts only carry equipment, suggesting different roles (McCallum 1987, 113-114).

The nucleus of the second scene is more sharply defined, being composed of a figure standing in front of an altar located in an architectural setting.²³⁹ Below this are standing three figures: a larger male figure who rests his hand on the shoulders of a smaller male figure standing in front of him, and a female figure standing behind them. These figures can be seen as catalysts that elaborate upon the ritual action depicted in the nucleus above them, even if the fragmented state of the material does not allow for a close understanding of this relation. The costumes of the figures do again point to their social role, in particular the Minoan-style flounced skirt of the female figure. The presence

²³⁷ The presence of vertical wavy lines here may not have been very significant in terms of signalling spatial divisions, and may rather derive from more practical considerations (Chapin 1995, note 100, p. 269).

²³⁸ Its mere presence, however, is significant, in particular because of the provisioning of oxen or bulls for ritual events that are known from the Linear B tablets (McCallum 1987, 117).

²³⁹ There is also an armless figure standing before a column that faces rightward in the direction of the figures in front of the altar and in the procession (McCallum 1987, plate XXXVIII). The armless figure can be compared to that on the Ayia Triada sarcophagus, but was not included in the reconstruction because of the much smaller size of the figure (only 10 centimetres in height) compared to the human figures (McCallum 1987, 84).

of such different clothing styles highlights the more detailed meaning that can be expressed through such informants. The locational informants also point to the architectural and outdoor (possibly hillside) setting of this nucleus. It is not possible on the basis of the present evidence to recognise the use of an index in this scene, nor can such a sign be seen in the procession discussed earlier. Having thus discussed the narrative micro-structure of the two nuclei, the next issue concerns the macro-structure of the scene as a whole.

One way of viewing the vestibule procession scene as a whole is as a sequential or syntagmatic narrative. This would entail viewing the procession as being the precursory activity for the later ritual action in front of the altar. Notably there is no recurrence of the same figures in both nuclei, though the limits of the evidence need to be taken into account here as well. This would seem to indicate the primacy of the actions that were depicted over the protagonists that are shown carrying them out. As stressed by McCallum (1987, 138-139) the vestibule procession scene can also be related to the themes depicted in the wall-paintings of the central megaron itself, see figure 30. The relation with these murals may be considered as a form of paradigmatic narrative extension, and will be treated as such in section 5.2.2. The analysis here has shown that, despite the clear limits of the evidence, it is possible to recognise narrative micro-structures and macro-structures in Mycenaean art. This serves to elucidate patterns rather than imposing a straitjacket on fragments, as can be seen for highlighting the role of informants such as clothing and locational markers. Like the Shield of Achilles in the *Iliad*, the generic *topoi* of Mycenaean art carry more narrative potential than might be assumed on the basis of a comparison with later text-aided Greco-Roman art.

4.4.4: The iconography of Mycenaean art

The procession scene from the vestibule of the central megaron of the Pylos palace brings together all the different aspects of the iconography of Mycenaean art discussed in the previous two sections. This is true not only for its narrative characteristics, but also for the use of 'referential perspective' to suggest an outdoor context, as well as for the use of attributes such as size and clothing to distinguish between figures. The combination of these elements to show a complex scene points to the coherence of Mycenaean iconography, even if it is in many ways derived from Minoan art and less elaborate than the contemporary art of the Near East. This coherence can be understood if the properties of rendering landscapes, anthropomorphic figures, and narratives are related to each other in more detail. First of all there is the notion of 'bounded naturalism' that frames a large diversity of scenes, both in non-monumental materials forms like vase-painting and in monumental ones like wall-painting. Within the pictorial spaces thus framed it is possible to recognise, among other kinds of iconographic elements, visual *topoi*. In its basic meaning *topos* refers to place, and the rendering of landscapes constitutes the spatio-temporal basis for Mycenaean artistic *topoi*. The spatial aspect of this can be discerned in the use of hills, seascapes, and architecture, while the temporal one can be noted in indications of seasonality.

In this spatio-temporal template the different anthropomorphic figures have to be related to each other. Because of the genericness of pictorial *topoi* the individuality of these figures is not developed, rather attributes are used to emphasise different social roles or statuses. This does not mean that these figures are completely subsumed by the *topoi*, however, as the presence of *ephemera* can create more idiosyncratic effects. Narrative provided a structure for grasping the relations between figures and their positions within landscapes. The case of the *ekphrasis* of the Shield of Achilles from the *Iliad* was held up as a model for understanding Mycenaean narratives. This was framed not as an argument for *ekphrasis* as a means through which meaning was inferred for all Mycenaean images, though for some cases this could well have occurred. Rather it showed that generic *topoi* such as the scenes on the shield can carry within them narrative meaning, which

can be analysed for Mycenaean art both for the micro-structures and macro-structures of narratives. Hence the concept of *topos* can link the landscapes, anthropomorphic figures, and the narrative actions together in a coherent framework. This framework can be seen as the 'iconographic syntax' of the representation of Mycenaean palatial society in art, and therefore comes prior to the more conscious messages that will be discussed for specific themes in section 5.2.

CHAPTER FIVE: CONTEXTS AND AGENCY OF MYCENAEAN ART

5.1: Introduction

This chapter brings together the three different aspects of Mycenaean art discussed in chapter four in two ways. The first of these is provided in section 5.2 and concerns the contexts of Mycenaean art. That is, it deals with the interplay between material forms, craft and materiality, and iconography in different spatial settings. After providing an overview of the different kinds of spatial contexts, mainly architectural ones, this analysis focuses on specific themes. These themes are divided into public ritual, warfare and elite culture, and the relation between the human and natural worlds. A final section considers the interrelationships between these themes. The true synthesis of the chapter, however, is to be found in section 5.3 on the agency of Mycenaean art. The analysis here follows a two-ponged approach. First of all the properties of the agency of this art in itself are investigated through the use of the three higher-level concepts of metaphor, semiotics, and praxis. As discussed in section 2.4.4, these three concepts cross-cut the more empirical study of material forms, craft and materiality, iconography, and contexts of art, allowing for a higher-level synthesis. This internal pattern of the agency of Mycenaean art can then be related to the other nine elements of this early civilisation and its *longue durée* framework, as outlined in section 3.4.

5.2: Contexts of Mycenaean art

5.2.1: Introduction

The study of the contexts of Mycenaean art demands first of all a good grasp of the built environment in which most of this art was embedded. Hence before turning to the three themes of public ritual, warfare and elite culture, and the relation between the human and natural worlds, it is necessary to discuss this built environment in more detail. Particular attention in this will also be given to the ways in which art was incorporated in architectural settings. To structure this discussion it is useful to outline the four basic architectural forms that carried Mycenaean art:

- 1. Palatial complexes, with a basic distinction between Minoan-derived court-complexes and mainland-developed plans centred on a megaron unit.
- 2. A more generic category of 'settlement buildings', which range from what can be termed houses to more elaborate monumental structures.
- 3. Architectural structures that are interpreted as sanctuaries.
- 4. Funerary monuments of a variety of types.

These categories are very general and etic ones, however, and need to be further contextualised. Starting with palatial architecture, it is possible to recognize two different plans. The first one was derived from the Cretan sites of the Neopalatial period and was focused on a large open court. The other plan was developed on the mainland within the Mycenaean palatial period, and was focused on a large and partially roofed central space called a megaron. The differences between these plan types can be seen in figures 31-32. It is important to take into account the succession of architectural forms within the Mycenaean palatial period²⁴⁰. In LM/LH II the only palace in the

²⁴⁰ A number or recent critiques have emerged of the notion that the Minoan palaces of the First and Second Palatial periods functioned as the seat of a ruler (Adams 2004, 2006; Driessen et al. 2002; Schoep 2010). One of the key arguments for this critique is the centrality of the large central court as a focus in the circulatory patterns of these buildings (Palyvou 2002). This has been used to argue that these 'Court Compounds' had a corporate function, in contrast to LM II - IIIA period Knossos and the palaces on the mainland that both were controlled by the state hierarchy led by the *wanax* ruler known from the Linear B tablets (Driessen 2002, 2-5). Hence the palatial designator can be used here without too many problems, although the critique of anachronistic analogies with Early Modern Europe (Driessen

Aegean was in fact Knossos, rebuilt from its traditional court plan, although a variety of monumental structures have been found at mainland sites. An example of this is the LH II Menelaion in Laconia with elements that foreshadow the later standard megaron plan (Wright 2006b, fig. 1.2, p. 12). In LH IIIA1 the first recognisable megaron plan emerged at Tiryns, and possibly at other sites as well but the evidence remains circumstantial (Wright 2006b, 21-25). Yet at Pylos in Messenia a strongly Knossos-influenced court-focused plan was in use during LH IIIA (Nelson 2001, 200-207). By the LH IIIB period, however, the megaron plan is the sole palatial architectural form found in the Aegean.

When considering the second category of sites, those classed rather generically as 'settlement', the picture is further complicated. This category encompasses a variety of buildings, including those within larger townscapes such as the Panagia houses at Mycenae (Mylonas Shear 1987), what seem to have been relatively simple houses in non-palatial settlements such as Korakou (Blegen 1921), and more monumental buildings at sites such as Gla (Iakovidis 2001), and the Menelaion (Catling 2009). These different sites cannot be easily subsumed under a neat typology, however, given that so much is uncertain about them. Finally, there are the sanctuary sites with traces of monumental art. Two of these sites are located outside the main settlements, namely Ayios Konstantinos (Konsolaki-Yannopoulou 2004) and Eleusis (Cosmopoulos 2003), while the Cult Center is situated within the Mycenae acropolis (Wardle 2003). Of these sanctuaries only the one from Mycenae has yielded enough fragments of wall-paintings to make interpretation feasible.

Despite the variations between and within these categories, the different artistic techniques were applied in much the same way in a technical sense. The only exception to this were the architectural façades. Of these only one direct example exists from a non-funerary archaeological context, namely the relief of the 'Lion Gate' at Mycenae. It has been suggested that this monument was a reused element from a LH II *tholos* tomb (Younger 1995a, 347). However, elaborate façades are known from a number of cult buildings/rooms (Gallou 2005, 67), and from the iconographic evidence as well, both for Minoan and Mycenaean wall-paintings (*Aegean Painting*, figs. 34-35, pp. 126-127). Caution should of course be observed for the correspondence of images to reality, but decorated façades may have been more common than can be inferred from the known material remains. Shaw has drawn attention specifically to the two altars which provide the platform for the central column of the 'Lion Gate', and has noted that such altars also frequently occur in depictions of architectural façades (Shaw 1986, 108-115). Although the Hittite evidence points to the possibility of major rituals taking place in gate areas (Thaler 2007, 305-306), the evidence from the Aegean is too meagre to support the possibility of such a hypothesis. Yet a generic symbolic role may cautiously be derived from the available sources (Shaw 1986, 122-123; Wright 1994).

Much more evidence is available to reconstruct the ways in which art was used in the interiors of building structures. Almost all of this material consists of painted plaster, which was applied to the floors, walls, and ceilings of structures. Although ceilings with painted plaster decoration have been hypothesized in a reconstruction of the central Pylos megaron (Betancourt 2007b, plate 8B), see figure 33, only a few fragments can tentatively be attributed to ceilings (Lang 1969, 155, 186), and the situation is worse at other sites. Therefore, little can be inferred as to what was and what was not depicted on ceilings. The situation is much better with regard to the walls and floors, with painting on the former including all decorative themes and the latter being limited to elaborate decorative motifs and nautical themes. These differences may suggest that different metaphors were appropriate for wall and floor surfaces, possibly as mirroring the natural world.²⁴¹ Painted plaster

^{2002, 6)} is valid for the Mycenaean palaces as well.

An overview of nautical themes in Mycenaean art (see figures 23-25) shows that most of them are depicted on floors, with the exception of more decorative friezes and scenes depicting ships (Petrakis 2011, table 1, p. 90). A wall-

was also applied to the hearth in the megaron plan palaces, especially in Pylos, where a so-called 'flame pattern' that seems to represent flames was decorated on the painted plaster incorporated in the hearths, as well as on tables of offerings and another artefacts (Lang 1969, 144).

Also of interest for understanding the interior use of painted plaster decoration are the different forms of painting in relation to architectural space. This is not an easy task given the fragmented character of the remains at most sites. Much analysis has therefore been focused on the LC IA wall-paintings of the Cycladic site of Akrotiri, and it makes sense to consider the evidence from this site before turning to the more fragmented Mycenaean material. In his analysis of the site from a general comparative perspective, Renfrew (2000, 139-143) has emphasized how three different kinds of arrangements for viewing the mural art of Akrotiri can be discerned:

- 1. Detached observer space, where a small-scale and schematic rendering of the images remove the viewer from what is depicted.
- 2. Decorative plane space, where the wall acts as a surface with decorative motifs.
- 3. Inclusive space, where the figures (and other elements) are of such a natural, larger size that they draw in the viewer in a more direct way.

These overall distinctions between arrangements for viewing the Akrotiri wall-paintings were, however, actualised in a variety of quite complex arrangements of wall-paintings in relation to other kinds of architectural features such as doors and windows (Immerwahr 2000, fig. 3, p. 472). Palyvou (2000, 415-417) has added important insights from the perspective of an architect about the different features of the relation between architecture and wall-paintings, one of them being the relative proportions of 'mass' and 'void'. Cases where mass exceeds void are those where the walls and the paintings on them are continuous and only interrupted by minor voids like single doors. By contrast, where void exceeds mass it is the overall framework that is most important and the wall-paintings form autonomous patches that are subordinate to the frame, which itself is not decorated. Another important feature is the strong compositional emphasis on horizontality, with the iconographic horizon being demarcated by base and upper zones. To Palyvou this suggests a common metaphor for both wall-painting and architecture in general:

"To sum up, the zoning concept is the most powerful principle of design in mural treatment. It is in itself a manifestation of continuity and horizontality, the very same horizontality prevails in architecture: despite the two and three storeys of the buildings, the basic concept is a structure which adheres well to the ground and stretches out in all directions; the palaces of Crete are literally conceived on this basis. The overall morphology of Aegean architecture declares horizontality through the horizontal timber zones of rubble walls, the ashlar courses and cornices, and the overall design of the buildings. As in art in general, there are hardly any vertical marking elements, unlike those characteristic of Egyptian architecture for example." (Palyvou 2000, 422)

Mycenaean monumental art shares this basic principle of horizontality with Cycladic and Minoan art. The tendency of floor paintings, unknown at Akrotiri but known from other sites (Niemeier 1996), to reproduce what would be underneath the surface only reinforces this principle. A similar notion of viewing arrangements as in Renfrew's differentiation between detached observer and inclusive spaces has also been used by Bennet (2004, 12-13) for the Pylos wall-paintings, who termed them respectively 'panoptic' and 'participative'. However, there are important differences in

painting from Gla appears to show dolphins actually leaping above the water surface (Iakovidis 2001, plate VIII). This would indicate that what would be represented on the floor would be phenomena that would be below one's feet (metaphorically) like the creatures of the sea, though they could be represented on walls if ships or leaping dolphins were involved. Yet in contradiction to this the repetitive friezes of nautili were depicted vertically on walls.

Mycenaean art, including changes in forms of painting, as discussed in section 4.2.3. In architecture there are also important differences, such as the disappearance of the grid pattern that can be discerned at the LC IA West House at Akrotiri (Palyvou 2000, 422-425). This causes for different relations between mass and void in Mycenaean architectural settings, with the latter being more dominant in the 'bounded naturalism' style of Mycenaean art discussed in section 4.4. Therefore, although there is continuity in overall style, the impact of changes such as 'bounded naturalism' can also clearly be recognised and were significant.

Turning in more detail to the inclusive or participative viewing arrangement, this is taken here to include all the larger paintings which directly drew in the viewers. Most of these were on the wall and level relative to the viewer, but the figurative floor paintings should be included as well. As noted by Palyvou (2000, 429), some of the paintings of ritual and procession may be seen as a 'photograph' of what took place inside. In that case the paintings would act like a metaphorical 'mirror' for participants in such activities, something which would be facilitated by the generic depiction of the figures, even if they represent a subset in terms of age and gender. Such a literal 'mirror metaphor' is unlikely, however, for the large-scale depictions of deities, sphinxes, bulls and lions on walls or nautili on floors. This viewing arrangement could rather be interpreted not as the wall-paintings projecting back what was there in the interior but rather what *ought* to have been there in Mycenaean conceptual terms. If that is accepted, the metaphor is one of a 'cultural mirror' that augments the reality of what takes place within the interior rooms by projecting ideal participants and other elements.

By contrast the detached observer or panoptic perspective seems to provide a way through which the viewer can look beyond the wall to a distant setting, as if through the telescope, even if that setting could include the exterior of the building itself. This 'window on the world' metaphor can be best seen in the miniature wall-paintings from LC IA Akrotiri, but such smaller-scale paintings are known from quite a number of Mycenaean sites as well. The connection with narratives was explored in section 4.4. It should be noted that two smaller-scale Mycenaean wall-paintings from Knossos and Pylos seem to depict a banquet that could conceivably take place in the room they were painted, and hence they would be 'photographic' in mirroring the interior rather than providing a perspective on the wider world. For the Pylos case, it may well me that an outside setting was actually depicted, as will be discussed in the next section. Yet it is important to emphasize here that the 'mirror metaphor' could potentially work for smaller-scale paintings as well, and that no exclusive correlation between the size of figures and their perceptions should be pre-supposed. This is true especially when larger groups are depicted, as in these two cases.

The third kind of viewing arrangement is that of the decorative plane space. As noted in section 4.2.3, wall-paintings could imitate wall-hangings, and there were other ways through which decorative motifs could be used to suggest architectural elements such as columns or exposed beam ends underneath the plaster (Palyvou 2000, 425-430). This is in addition to the more common dado and border functions used both in larger paintings for design, or simply as architectural effects in themselves. Yet, there is more than just architectural 'special effects' to the decorative plane spaces, as is indicated by the flame patterns on the hearth plaster and symbolic patterns such as the spirals and (half-) rosettes. It seems rather that this points to the intrinsic qualities of the painted plaster itself, highlighting and using its properties within architectural spaces. As such this metaphor can be linked with Gell's concept of architectural enchantment discussed in section 4.4.4, but this needs to be further qualified in section 5.2.4 below.

The final sub-category of the built environment to be considered is that of the funerary monuments. Most important here are the façades of the more monumental *tholos* and chamber tombs. The most

common façade decoration seems to have been ashlar, and can already be seen in similar tomb types of Neopalatial period Crete (Younger & Rehak 2008b, 170-173). Ashlar façades remain the norm in Mycenaean period Crete, as well as in the tombs of a Cretan-influenced region such as Messenia (Banou 2008, 51). Gallou (2005, 67-70) has analysed the cases from central Greece and the Argolid, and found a recurring pattern of façades with decorative motifs on the semi-columns flanking the entrance to the tomb, on the lintel, and on the section above the lintel called the *tympanon*. In the entrance system of one tomb at Thebes a painted plaster scene was found that shows two women in procession (*Aegean Painting*, 201), which may be interpreted as a participative viewing arrangement. Although a similar liminal role could be seen for the façades of palaces and sanctuaries discussed above suggest, the space that was entered was very different. The façades would then have formed a boundary in the transition to the 'chthonic' burial chamber (Gallou 2005, 74-75), which itself has been linked to caves and the underworld (Vermeule 1979, 51-54).

What then about art within the burial chamber itself? The material evidence for this is even more limited than for the façades. From the Minoan world several tombs are known that were decorated with Egyptian Blue (Panagiotaki 2008, 48), most notably the roof of Temple Tomb at Knossos, which should be seen as a decorative plane space (Evans 1935, 975). While no Egyptian Blue decoration has been found so far in any mainland tomb, the use of decorative plane space can be observed at the so-called 'Treasure of Minyas' tomb at Orchomenos, with engravings of rosettes, spirals and papyrus blossoms on the ceiling of the side chamber, and a similar kind of decoration may have been present at the 'Treasure of Atreus' at Mycenae as well (Gallou 2005, 68). A wall-painting of a spiral band with papyrus filling was found in the chamber of a rock-cut tomb at Thebes (*Aegean Painting*, 201). No participative or panoptic scenes were depicted on the walls of tomb chambers, and in fact the only figurative scenes were on the *larnakes* and other art objects that were deposited in these chambers.

Most of the high-value portable art objects and materials in fact derive from burial contexts, even if this may partly be due to the over-representation of burial evidence relative to that from settlement contexts. This does not mean, however, that the evidence from other contexts should be neglected. For the palatial structures at the site of Thebes a number of hoards can be noted (Dakouri-Hild 2012). In one of these an exceptional gold disc was found, located in the so-called 'Treasury Room', which can be understood as an object of prestige, for the conspicuous display of elite power:

"This view is congruent with the employment of precious commodities as material symbols of authority by the Mycenaean elite in general. But such an interpretation is also compatible with the nature of the overall archaeological assemblage from the Treasury Room (and other palatial sites, e.g. the Arsenal and the House of Kadmos), to which this artefact belongs. It seems that the most precious artefacts had been hoarded in the Treasury Room for the purposes of display during special events and perhaps limited, high-rank (gift) exchange." (Aravinatos 2005, 257)

As noted, however, most of the portable art objects come from burials, and this includes not only metal objects but also artefacts made from ivory and vitreous materials. Apart from the objects imported through long-distance exchange, many of them would have been worked in the Aegean itself. The discussion of the *chaînes opératoires* of some of these materials in section 4.3.2 pointed to patterns of workshop activities, which are known for many other materials as well. The evidence from both workshop contexts and deposition or 'consumption' contexts allows for more insights into the role played by high-value portable art objects in Mycenaean palatial society. Examples of studies that have explored this issue can be noted for the regions of Boeotia (Dakouri-Hild 2012) and the Argolid (Burns 2010, 163-190). Even if such studies are not yet as extensive as those for monumental art forms like the wall-paintings, these portable art objects already provide an

important complementary form of evidence. This can be noted for all the three themes discussed in the succeeding sections, but especially for funerary ritual and their relation to social structures.

5.2.2: Public ritual in Mycenaean art

Public ritual is the first theme of the contexts of Mycenaean art to be discussed, and it is known primarily from depictions in art. A distinction can be made for this theme between two different but closely related kinds of scenes: a) the procession scenes with a ritual character, and b) depictions of specific places of public ritual.²⁴² There also are the scenes of lamentation and other rituals connected with the deceased, which will be discussed separately. Starting with the procession scenes, Blakolmer (2008, 258-259) has proposed a minimal definition of them as a *topos* that shows multiple figures moving in a single file towards a variety of destinations that can include other figures, architecture, or simply a void. Furthermore, he sees a difference between two kinds of processions in wall-painting. The first seems to represent the transportation of equipment and animals to be used in some kind of ritual activity, and consists of smaller-scale images in a narrative-like setting. By contrast the other kind of procession scene involves larger-scale figures that carry high-value artefacts and flowers, which were likely intended as gifts. The first kind of procession scene then can be understood as part of the panoptic viewing arrangement, while the larger-scale figures would correspond to the inclusive or participative one.

The same kind of combination of panoptic and inclusive viewing arrangements can be seen in the depictions of public ritual in fixed spatial locations. Examples of the panoptic scenes are the banqueting and drinking scenes, of which it was noted in the previous section that it is unclear if they actually took place within the rooms in which they were painted. The inclusive viewing arrangements include larger figures that function in architectural contexts that were of ritual character such as a sanctuary or throne-room. Unfortunately, the painted plaster fragments of both processional and fixed-location ritual are hard to relate to their original architectural contexts, since many were found in dumps or other secondary locations. For example, fragments of life-size processional figures are known from the palatial sites of Knossos, Mycenae, Pylos, Thebes and Tiryns, but only at Knossos can interpretations be made with regards to their specific setting. Much the same is true of the other kinds of scenes. The analysis here will therefore focus primarily on the sites of Knossos, Mycenae and Pylos, where something more solid can be said about the interaction between architecture and different kinds of ritual scenes. The evidence from other sites will be considered mainly as a way to infer to what degree the interpretations from these particular sites hold true more generally.

A number of wall-paintings connected with ritual activity are have been found in LM II-IIIA contexts at Knossos. Very important among these are the life-size procession figures in the 'Corridor of the Procession' (*Aegean Painting*, 88-90), see figure 34. These figures may have totalled 24, mostly male, including two youths, but also two women. A few of these carry important gifts such as the so-called Cupbearer with a high-value metal vessel. The exact composition of the procession is unclear, although one reconstruction shows figures with high-value gifts and musical instruments approaching a goddess from two different sides (Hood 2005, fig. 2.17, p. 68). There are some suggestions of a background that would represent an outside setting, but on the whole the procession accompanies the person entering the palace from this side. Although the 'Corridor of the Procession' scene was not in register, as Evans originally thought (*Aegean Painting*, 89-90), this

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²⁴² Even if some of these ritual scenes do appear to show deities, there exist no parallels in Mycenaean monumental art, and few for portable art objects, for the diversity of epiphany scenes that can be discerned in the art of Minoan Crete (Burkert 2004; Marinatos 2004). However, the possibility of epiphany scenes should not be ruled out, as indications of the association between red-painted ears and epiphany have been found at Pylos as well (Earle 2012).

arrangement was used in the 'Camp-stool' wall-painting, see figure 35. This scene was reconstructed from a number of smaller-scale fragments found nearby a storage area (original context unknown), and shows two registers of seated and standing figures, many of them with drinking cups (Hood 2005, 61-62).

From a variety of sources it is clear that consumption of alcohol was important in Mycenaean ritual (Whittaker 2008b), and these two wall-paintings can be indirectly related to the impact of the Mycenaean domination of Crete. They do not represent a complete break with the past, however, as the procession resembles earlier prototypes of formalised ceremonial movement related to storage and consumption (Driessen & Langohr 2007, 183).²⁴³ Yet the two scenes can also be related to broader changes in material culture, especially those deriving from the increased focus on the consumption of alcohol:

"Perhaps even more than in earlier times, the Camp Stool fresco shows that individual members of the elite were tied to the palace by the practice of communal feasting and banquets, during which meat sacrifices were distributed and quantities of wine were consumed. This is illustrated clearly by the importance of more distinctive personal drinking vessels, at first the Ephyraean goblets and later the kylikes, champagne cups and kraters. The tablets provide clear evidence for such practices." (Driessen & Langohr 2007, 183)

The larger-scale wall-paintings of processions from the other sites are broadly similar to those of Knossos, except that only the Pylos fragments show predominantly male figures while the fragments from Mycenae, Thebes and Tiryns are exclusively with female participants (*Aegean Painting*, 114). Unfortunately, none of these scenes can be related to a clear-cut architectural context, though a corridor or staircase is likely given the evidence from Neopalatial Knossos and LC IA Akrotiri. The other kind of procession scene, the more panoptic and narrative-like kind, is known from Ayia Triada and Pylos. The Ayia Triada material is dated to LM IIIA and was found in a painted plaster dump outside the building that it would have been part of (*Aegean Painting*, 102, 181). Recent research has shown a combination of Minoan continuities and Mycenaean adaptations in these processions, of which a notable feature is the reconstructed use of friezes in a layered pattern (Militello 2006, fig. 12, p. 199), see figure 36. This can be seen as a clear impact of the 'bounded naturalism' on wall-painting, as can also be observed in the ubiquitous use of friezes in the later murals from the mainland palace of Pylos.

The one panoptic procession scene that can be more closely related to its architectural context is that from the vestibule of the central megaron of the Pylos palace, the narrative properties of which were already extensively discussed in section 4.4.3. To briefly recapitulate the argument here, a sequence from processional movement to fixed-place ritual activity could be discerned, taking place in an outdoor setting. Based on their costumes, a number of participants in both the procession and fixed-place ritual can be identified as elites and/or part of a priesthood. Despite the recognition of a narrative micro-structure in this scene the interpretation of its overall meaning remains that of a *topos* or stock-scene. McCallum (1987, 117-118), however, has proposed a connection between this scene and the religious festivals described in the Linear B tablets, in particular that of tablet Un718. This tablet lists the offerings made by various individuals and social groups in honour of Poseidon (*Documents*, 170). Most plausibly these offerings, which include oxen or bulls, were intended for a ritual festival, the location of which is given as the district of *sa-ra-pe-da* (Palaima 2004, 110).

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²⁴³ One difference with the preceding Neopalatial period can be seen in the absence of crowds in public ritual in the surviving record of LM II-III Cretan art, something that also holds true for the mainland. A good example of the role of larger crowds in public ritual can be seen in the Sacred Grove and Temple miniature wall-paintings from the Neopalatial period Knossos palace (*Aegean Painting*, 64-66; Hood 2005, 63-64).

Hence it is not implausible to link this ritual event with the procession scene, especially as both can be situated in outdoor contexts and involve cattle.

However, the connection between the pictorial representation of the procession and the written account of the provision of a specific festival should not be grasped as a specific, historical connection but rather as the sharing of a *topos*.²⁴⁴ This would be enhanced by the focus on seasonality implicit in the temporality of Mycenaean art in general and made explicit in the calendar of ritual events. A further dimension to this is added by the wall-paintings within the central megaron of the Pylos palace itself. The murals in this area can only be partially reconstructed, but what is known shows a broad, paradigmatic coherence with the procession scene in the vestibule area (McCallum 1987, 109-123). Apart from the flanking lion and griffin pair next to what may have been the throne, there were floor paintings of an octopus as well as decorative motifs. Other wall-paintings show a large-scale bull, a lyre-player sitting on a rock or hill with a bird or small griffin flying away from him,²⁴⁵ as well as two pairs of much smaller-sized male figures seated at tables (see figure 37). The lyre-player in particular has been connected with the notion of oral performance by bards, and can be understood within the more 'participative' setting of the wall-paintings of the central megaron (Bennet 2007, 18).²⁴⁶

The only other Throne Room for which an iconographic program can be reconstructed is that of Knossos. The setting of this space, although it lacked a hearth, had a gypsum seat with two flanking lion/griffin pairs and a dolphin that may either have been a floor or wall-painting (*Aegean Painting*, plates 47-48). It is somewhat similar to the Pylos case. Unfortunately this room and its art cannot be directly connected with either the Camp-stool or 'Corridor of the Procession' wall-paintings discussed earlier. The only other wall-painting that can be plausibly connected with the Throne Room is that of a bull in the anteroom to it (Hood 2005, 65), which can also be seen as a possible parallel to the use of a bull in the Pylos megaron. One of the reasons for the lack of connections between the wall-paintings discussed here seems to be that the Throne Room at Knossos was not a central focus in the centrifugal, court-focused layout of the building (Driessen & Langohr 2007, 184). Hence, the different paintings would not have had a singular and coherent architectural focus, as they had in the case of the megaron-focused plans.

A different kind of fixed-place ritual is known from the wall-paintings of the 'Room with the Fresco' in the Cult Centre at Mycenae. Although these have not yet received their final publication, a preliminary sketch has been available for some time (Marinatos 1988, figs. 1-3, pp. 249-251), which allows for a discussion of the broad outlines of the scene (see figure 38). The upper panel consists of two larger-scale female figures facing each other within an architectural space, as indicated by two flanking columns and a façade with decorative motifs to the left. The left figure holds a sword and has been interpreted as a warrior-goddess (Rehak 1999b). while the other also may have been a goddess (Marinatos 1988, 247). The figures in between had already been interpreted as possible facsimiles or *eidola* of humans in section 4.4.2. On the lower panel there is a

²⁴⁴ Palaima (2008, 348, 354) has argued that this pattern of religious activity inferred from Linear B and iconography bears some resemblance to the description in the *Odyssey* (Book III, 8-11) of a large-scale sacrifice of bulls to Poseidon presided over by Nestor at Sandy Pylos. According to Palaima the oral preservation of the king's name Nestor may have had actual historical connotations, but it seems at least as important to consider Nestor as a poetic exemplar of the wise and pious handling of the office of kingship.

²⁴⁵ The association between lyre-player and birds is not unique to this painting, as it can be seen in a few other examples as well (McCallum 1987, 127-129). Some kind of ritual association seems likely, something which is corroborated by finds of musical instruments, likely including a lyre, in the sanctuary at Phylakopi (Renfrew 1985, 383-384).

²⁴⁶ The role of music and musical instruments in general in ritual activity has also been emphasised for the ritual activities of Minoan Crete and the Cyclades, which played an important role in societal cohesion (Mikrakis 2011, 62-63).

smaller female figure, accompanied by a winged griffin, holding sheaths of what appears to be grain and which is also flanked by a column. The inclusive character of the viewing arrangement, as well as other features in the room like the hearth and the bench, point to the directly participative role of the paintings with the rituals that took place here. The painted plaster head discussed in section 4.2.2 is similar to that of the figure in the lower panel (Rehak 2005, 272). Unfortunately, the original position of the painted plaster head in this room is unclear.

Like the throne rooms of Knossos and Pylos, the wall-paintings in the Mycenae Cult Centre were of an inclusive character and directly implicated in ritual action. The key difference is, however, that in the case of Mycenae the area was much more secluded. The position of the room was evaluated by Morgan (2005, 171), who argued that it was closely connected in spatial terms with the 'Shrine of the Idols' elsewhere in the Cult Center, which together with the finds in both areas would point to a dual conception of life and death. In any case, the Cult Centre itself was connected to the central megaron through a 'Processional Way', which was partially roofed and carried a painting of a chariot and male figures, and which in another part could conceivably have carried the fragments of procession scenes found nearby as well (Morgan 2005, 162). Like the Knossos and Pylos cases, a basic connection can be made between these areas of ritual activity and the processions leading towards or otherwise connected with them. This may be seen as a series of layers of ritual action, going from intensive participation in rituals, to inclusive participation in procession, and finally to more panoptic representations of the broader settings of ritual activities.

Another kind of public ritual concerns the relations of the living to the deceased, especially as expressed in funerary ritual. As we saw in the previous section, the tomb façades acted as liminal boundaries, and both the façades and the interiors of tombs featured mostly decorative motifs. The exception to this was the wall-painting of a procession from a tomb at Thebes. The same site has also yielded indications of a processional way and open area connected with this tomb, and in the latter area funerary games may well have taken place (Gallou 2005, 126-127). Most of the images come from the *larnakes* that were deposited in some of the tombs, however, and they show a variety of images. Prime among them are the so-called lamentation scenes, which are known both from the Tanagra (see figure 39) and Cretan examples and point to elaborate rituals for mourning and remembering the death (Burke 2007). Apart from this kind of ritual, there are wildly divergent theories as to what the other images on these burial coffins represent, especially with regard to parallels either in the succeeding periods in the Aegean itself for the Tanagra case (Immerwahr 1995) or in contemporary Egypt for their Cretan counterparts (Watrous 1991).

Both in the use of friezes and the range of subject matters, the *larnakes* are very similar to other material forms of the art of the Aegean Bronze Age. One argument has been put forward that the scenes on the *larnakes* from Crete represent both the world in which the deceased dwelt and the journey they had to undertake to get there (Watrous 1991). For the Tanagra *larnakes*, Immerwahr (1995, 117) also tentatively sees a journey and possible depiction of the Underworld, but in a different way than on the Cretan coffins. Given that the Tanagra cases are insufficiently known, and in other features show much more affinity to Crete, it seems wise to refrain from positing essentialist differences between the two cases. It also seems overtly ambitious to relate such scenes of the afterlife to names such as Elysium, as proposed by Warren (2007), based on images that themselves are insecurely understood in terms of their iconographic meaning. Yet, an overall scheme can be discerned in terms of moving from the world of the living to that of the deceased. This starts with the lamentation scenes as well as possible funeral games, and then moves to the journey to the afterlife and possibly the depiction of the dwelling space of the afterlife itself.

As noted in section 5.2.1, most of the high-value portable art objects were found in burial contexts, and hence it is necessary to consider these as part of funerary ritual as well. One very important point with regard to the notion of value in the Shaft Grave burials was made by Voutsaki (2012, 161-164), who argues that it should be understood not just in terms of status but within a broader framework of identities. Identity in this sense would have been closely connected with emotional and aesthetic considerations as well, not just with position in social structure. In fact these different factors cannot be really separated from each other. This can be seen very well for the objects made from vitreous materials found in burial contexts, and for those of blue glass in particular. The *chaîne opératoire* and conceptions of materiality of blue glass were extensively discussed in section 4.3, and here one of its consumption contexts can be added to this. Nightingale (2008, 81-83) has provided a basic overview of the context of blue glass objects, which have also been found in settlement contexts. With regard to burial contexts, it can be observed that the larger glass objects were predominantly found in more elaborate burials, while beads were found in a wide range of burials without clear distinctions in the richness of the graves.

There also was no clear difference in the quality of beads in the different graves. In a few instances it is possible to note the elaborate layouts of these objects relative to the remains of the deceased (Nightingale 2008, 82-83). This brings up the notion of adornment, as was noted for the depictions of blue glass jewellery in section 4.3.3. This kind of funerary adornment using beads, of course not only made from glass, extended to children as well, for they have been found in 20-25% of children's burials of the LH II – IIIB period (Pomadere 2012, 436-437). Apart from beads other kinds of glass objects were also found regularly in tombs. This includes the glass seals that were mainly found in more peripheral areas in central and northern Greece, even if finds are also known from major centres (Dickers 2001, 77-79; Krzyszkowska 2005, 270). Much rarer were the larger glass pieces, which can be noted for the weaponry items in a very rich tomb at Dendra (Nightingale 2005). Finally, the moulds used for working glass were occasionally also found in burials (Hughes-Brock 2008, 136-137). The distribution patterns of these different kinds of glass objects in tombs can be related to the evidence for their working contexts, which as noted in section 4.3.2 were closely associated with the palatial framework of economic activity.

This brings up the relation between the (aesthetic) appreciation of these glass objects as part of identities and their value within the overall societal context. Very different models for this have been proposed. Sherratt (2008, 221) takes the view that with the greater amount of blue glass objects available in LH III their relative value decreased, becoming an inferior version of gold. Furthermore, the increased finds of glass objects in more peripheral areas indicates to her either a lessening of palatial control or a less exclusive valuation of glass as a material. These arguments with regard to the value of glass seem to depend on a basic notion of supply and demand, in which a greater supply relative to other materials indicates a lesser value. There are good reasons to doubt this, first of all because of the observation that the use of glass in the LH III Aegean is not congruent with a role as a cheaper substitute (Hughes-Brock 2008, 136; Nightingale 2008, 81).²⁴⁷ Instead these objects should be seen as valuable in their own right. One model for understanding their distribution is as 'tokens' of the palaces (Jackson & Wager 2011, 120).²⁴⁸ The distribution of glass seals in particular may indicate a relation between the palaces and local elites in the more peripheral areas (Bennet 2008, 163-164).

²⁴⁷ The case of Egyptian glass discussed in section 4.3.3 suggests that it was valued within a set of hierarchical levels of value, as part of a complex set of conceptions of materiality. Although supply and demand could play a role in the value of materials, as for the caravans discussed in section 3.4.2, there is no reason to assume that the value of materials would be determined by supply and demand in situations other than such long-distance exchange.

²⁴⁸ This idea of 'tokens' was originally formulated by Halstead (2007, 71-72) to account for the use of items such as clothing and jewellery to structure the relations between the palaces and their subjects. Somewhat similar ideas were expressed earlier in (Morris 1986).

This can be related to the extension of the palatial framework through seals discussed in section 4.2.4. In that section it was also observed that resources for ritual activities could be mobilised from areas far away from the major centres, as in the case of Boeotia. As such, the distribution of glass objects in more peripheral areas can be understood as an extension of palatial influence rather than as a degradation of it. Furthermore, the relation of blue glass to *ku-wa-no* has implications for the understanding of the value of the objects made from this material. This is not to imply that the Mycenaean deceased would necessarily have had knowledge of the Near Eastern conceptions of colour. Rather the aesthetic valuation of these objects would have derived from the intrinsic properties of blue glass, and also from the fact that it derived from the palatial sphere. Through this the glass objects would have been related to a broader set of material forms of art, such as the use of glass in architectural contexts and objects made from lapis lazuli. It is not surprising in this sense that beads have been noted as a 'marker' of Mycenaean culture, even in the more peripheral areas of this early civilisation (Nightingale 2008, 84-85). The deposition of glass objects in burials would have involved a shared identity, based on the intersection of economic value, adornment and colour aesthetics, as well as the emotional and moral connotations of death.

5.2.3: Warfare and elite culture in Mycenaean art

In those wall-painting scenes where what may be termed expressions of palatial power form the main subject, the primacy of 'courtly' and war-oriented iconographic elements and narrative forms becomes clear. This is something that is also paralleled in other artistic media, especially the decorations on various kinds of vessels and naturally also on the weaponry itself. Scenes of quotidian activities are entirely absent, at least as far as the limited evidence goes. This constitutes something of a break with the preceding art of Neopalatial Crete and the Cyclades, where activities such as harvesting were represented and larger crowds were depicted as well. Some characteristics of the courtly and war-oriented iconographic elements can also be discerned in ritual and hunting scenes, especially for the latter in the focus on violence and the importance of the chariot. Yet in their basic focus they remain distinct from the theme of warfare and elite culture. Within this broader theme two specific kinds of scenes can be recognised. The first of these involves warrelated scenes of a more narrative character, while the second consists of depictions of emblematic artefacts that can also be related to such activities.

Starting with the narrative scenes related to warfare, an overview of all Aegean Bronze Age monumental and non-monumental art has led to the formulation of a typology of different kinds of such scenes (Hiller 1999, 319-322). These different categories include warriors marching and involved in single or group combat, naval battles or attacks from the sea, and combat involving cities or palatial buildings. Individual scenes can be seen as excerpts of that broader set of images, deployed either singularly, as in glyptic, or in larger settings in wall-paintings. Although the typology changes over time, certain elements, such as the boar's tusk helmet, can be traced back to antecedents in Neopalatial period Cretan art. The recognition of such recurrent scenes can be related to the discussion of stock-scenes or *topoi* in section 4.4.3. The contemporary sites of Akrotiri and the Shaft Graves at Mycenae have also yielded important precedents, and the evidence for warriors on the former site has led to questions about its connection to the emerging mainland (Immerwahr 1977). One enigmatic feature, however, is that the apparent Minoan 'taboo' on depicting direct combat in wall-paintings, 250 seems to continue into the Mycenaean period on Crete. Neither the

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²⁴⁹ Even so, blue glass should certainly not be seen as exclusively being used for this, for other materials like amber were also used for adornment and prestige purposes in burials and other contexts (Maran 2013).

²⁵⁰ This pattern in Minoan monumental art is peculiar since weaponry and certain kinds of violence-related themes do occur on the non-monumental art forms, if not actual battles (Peatfield 1999). Furthermore, there are some indications

'Captain of the Blacks' wall-painting from the 'House of the Frescoes' at Knossos nor the earlier javelin throwers (*Aegean Painting*, 173, 176) can be plausibly related to a coherent combat scene, even if these can be seen on Mycenaean period Cretan vessels and glyptic.

Of the two cases where battle scenes can actually be related to their original architectural contexts, the material from the central megaron at Mycenae is less clear in terms of its overall composition (Aegean Painting, 123-125). Originally, the battle scene from this site may have formed a frieze of smaller-scale figures at eye-level, running alongside all four walls of the room, but two of those have collapsed and the (burnt) fragments cannot be directly related to each other. The different elements of the composition are clear, however. These include chariots that are not engaged in combat, women standing before architecture, a battle involving hand-to-hand combat, a hurtling warrior associated with palatial architecture (see figure 40), and female onlookers within a building. Although the overall composition remains unclear, it is possible to divide the fragments between those involved with preparations for battle and those involved in the actual battle (Kontorli-Papadopoulou 1999, 333-334). Fragments of an earlier scene, the so-called 'Groom fresco', involving chariots and a warrior (Aegean Painting, 192) can also possibly be connected with preparations for war.

The same kind of elements as in the Mycenae megaron frieze are also known from the fragments of Thebes and Orchomenos, which respectively included a warrior and architectural fragments with warriors, as well as horses and chariots (*Aegean Painting*, 125-128). The Pylos battle scene was of a different character, although caution should be applied to its interpretation as the fragments are currently being restudied. It was located in Hall 64, and involved different kinds of smaller-scale figures (*Aegean Painting*, 197). These include one group with boar's tusk helmets and short skirts, who engaged a group of 'Tarzans' in skins in hand-to-hand combat (see figure 41), while other elements are chariots and a chequerboard motif that suggests architecture, and a wavy line suggesting a river. Based on their reconstruction (Bennet & Davis 1999, plate XIV), Bennet and Davis (1999, 108-109) argued that the war-related activities were part of a frieze of both stationary chariots and active hand-to-hand combat, with a frieze of dogs below and a frieze of nautili above, and perhaps shrine façades as well. The combat scenes would then not be very dissimilar from Mycenae, Orchomenos, and Thebes, except for the 'Tarzan' skin-clad figures that are usually understood as being outsiders to palatial society (Blakolmer 2012).

However, restudy of the fragments has indicated that Shaw's (2001, 41-43) initial suggestion that a naval scene formed part of the decorative program of Hall 64 was correct. At least three ships can be reconstructed for this scene, though many details remain unclear (Brecoulaki 2005). Furthermore, this project has also revealed that the material from room 27 was not from a hunting scene, but rather depicts warriors and chariots in a war-preparation scene or perhaps even in procession (Evenson 2005), and a fragment of an archer has now also been recognized (Brecoulaki et al. 2009). The new analyses of the Pylos material, while still incomplete, broaden our view of depictions of war-related activities in Mycenaean art. There may be reason to reconsider the idea that the combat scene from Hall 64 represents an action taking place in Messenia itself, as plausibly

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that warriors could have been depicted on stucco relief from Knossos (Blakolmer 2007a, 222-223). Even so, the evidence is rare and models need to be developed to account for this (e.g. Weingarten 1999), in order to go beyond modern-influenced biases of violent Mycenaeans and flower-loving Minoans (Gere 2006, 117-144).

²⁵¹ Recent finds at the nearby site of Iklaina have included a wall-painting fragments that appears to show a ship with two male figures in it (Cosmopoulos 2009, 14).

²⁵² The archer may have been female, for which parallels exist on non-monumental art, and women may have hunted as well (Brecoulaki et al. 2009, 376-378). If true this would provide an interesting contrast to recurring images of female onlookers at battles and war-related activities, and challenge theories of an exclusive link between war, violence and masculinity (Nikolaidou & Kokkinidou 1997, 188-191).

interpreted earlier (Bennet & Davis 1999, 114-115).²⁵³ There might be alternatives that can be suggested, perhaps raids beyond the Mycenaean heartland, the possibility of which is suggested by the presence of foreign workers, especially the female textile workers from Anatolia (Ergin 2007). Yet considerable caution should be applied given the still-incomplete understanding of the overall composition of the pictorial outline of Hall 64.

In any case, what is important here is that the different battle scenes discussed here can be related to different parts of the overall typology of such scenes. Hence it can be argued, despite the limited evidence, that different kinds of 'stock scenes' or *topoi* could be deployed in different ways to suit the needs of individual compositions. Such an interpretation of the battle narratives corresponds to the 'paratactic' type of narrative scenes in Mycenaean discussed in section 4.4.3. There also exist images in which the human world is primary that cannot be directly related to military activity. The so-called 'Palanquin-charioteer' wall-painting, which also included a bull, from the Knossos palace (Hood 2005, 69-70) seems to indicate a more peaceful use of chariots. Also, another set of fragments from the 'House of the Oil Merchant' at Mycenae include indications of a palanquin, architecture, horses, as well as a charging bull, from different locations in the building (*Aegean Painting*, 193). A fragment from Gla shows two miniature female figures in what seems to be an architectural context (Iakovidis 2001, 139). These rather enigmatic clues would point not so much to an obscured set of depictions of quotidian scenes, but rather seem to belong to a set of images of high-status material culture, which can also be seen in the ceramic vessels (C. Morris 2006).

Finally, there are the figure-8 shields and the *ikria*, which have been interpreted respectively as emblems of military and naval power (*Aegean Painting*, 138-141). The latter are only deployed in an emblematic way in a near life-size frieze without a precise architectural context from Mycenae (Shaw 1980, 171-172). Friezes of life-size and smaller figure-8 shields are known from more sites. The earliest example in monumental art (with predecessors in the non-monumental art of the preceding period) comes from LM II Knossos in the form of life-size figure-8 shields in a frieze that was likely located in an upper floor loggia (Hood 2005, 74-75). For the mainland, fragments are known from Thebes and Tiryns (see figure 42), but at Mycenae there are two friezes, one life-size and the other half the size of that (*Aegean Painting*, 193). They are both from the Southwest Building of the Cult Centre, and can be related to the warrior-goddess figure of this building complex (Rehak 1999b). Another shield frieze is from the palace of Pylos, where it was found in an area that may have had a more security-focused role (Shaw 2012, 733). Both the shields and shipcabins are larger-scale paintings, and can therefore be understood as part of an inclusive viewing arrangement. Hence they would directly impress the viewer with their emblematic meanings, ²⁵⁴ complementing the panoptic narratives of naval and battle scenes.

Summarising the available evidence, we can observe that it runs in a continuum from the larger battle scene compositions to the emblematic friezes of *ikria* and figure-8 shields. Uncomfortably wedged in between, given the often highly fragmented material record, are the more isolated scenes involving chariots, horses, and architecture. Nevertheless, the overall emphasis on certain elements is clear, of which the most important seem to be monumental architecture, the use of chariots, the *ikria* and deployment of ships, and prominent attributes of warriors like the figure-8 shield and the

²⁵³ Another interpretation was offered by Yalouris (1989), who connected this battle-scene and Linear B references of skin-wearing warriors to a specific description in Homer (*Iliad*, VII, 152-156) of a battle between warriors from Messenia and Arcadia. This highlights the danger in making connections between Mycenaean art and early historical Greek poetry that are too specific for the evidence available.

²⁵⁴ The emblematic effect is enhanced by the repetitive frieze design, which for the figure-8 shields can also be seen on ceramic vessels, including from Neopalatial period Crete (Rehak 1992). For the *ikria*, if they existed as they were depicted in art, it can also be observed that they would depict a set of (textile) friezes within the wall-painting frieze, highlighting the connections between these material forms discussed in section 4.2.3.

boar's tusk helmet. With regard to their spatial distribution it is significant that, so far, the battle scenes and emblematic friezes were found in palatial contexts only, while the more isolated scenes have a wider distribution in the larger houses (at Knossos and Mycenae) and secondary centres (Gla and Iklaina). In this regard it should also be mentioned that depictions of chariots are fairly ubiquitous in Mycenaean vase-painting as well (Crouwel 2006), see figure 43, and may have derived from wall-paintings (Rystedt 2006, 245). At the same time depictions of ships are also quite common in vase-painting, especially the oared galleys on LH IIIB-C vases (Wedde 2006).

Rystedt (2006, 240) has argued that the depictions of chariots in vase-paintings and their relation to other iconographic elements, seems to indicate that they were a dominant theme in this medium. Even more so, she relates it to a diverse set of activities that include athletics that involve not only chariots and horses but also boxing and running, ceremonies with assistants carrying campstools and parasols, as well as religious festivals (Rystedt 2006, 245). This last element is not so farfetched as it may seem, given the goddess on a chariot drawn by griffins shown on the Ayia Triada sarcophagus (*Aegean Painting*, plate 53). It should be remembered that these pots were widely distributed, most of them having been found on Cyprus (Vermeule & Karageorghis 1982). From the reception of these vessels in Cyprus it is clear that we are dealing here with the consumption of the desire, through acquiring the painted vases as a commodity, to be part of an elite culture in which chariots played an important role (Steel 2013, 127-138). We may then observe in this different accumulation of pictorial themes in wall-paintings and vases already a pattern of enchainment in that 'fragments' of the former are put on the latter, but to gain a fuller picture it is necessary to turn to the instruments as well.

From the different instruments discussed in section 4.2.4, it is clear that the ships, weaponry, and chariots can be most profitably connected with the monumental art discussed above. These 'tools of power' would not only project palatial power, thereby ensuring its ability to accumulate goods and people, but also tie those using these instruments to the nexus of production and consumption of the palaces.²⁵⁵ This is true for weaponry in general, and can be seen especially well with regard to the chariots. Schon (2007, 137-138) has argued that while the making of the different parts of chariots and their assembly may have taken place in different locations, the overall process was still closely administered by the palatial scribes. Although the precise function of the various regional road systems of the Mycenaean world is subject to debate (Hope Simpson 1998; Jansen 1998), at least one of their benefits would have been to facilitate the movement of chariots at a regional level. As such they would have been useful for both dominating and incorporating the elite persons in outlying areas (Schon 2007, 144).

Both the weaponry and chariots can be understood through the notion of 'tokens' discussed for the beads in the previous section, in the sense that through the palatial framework materials were gathered and assembled to create finished goods that were then distributed to various individuals and groups. It is the centrality of the palace in this regard through its unique capacity to sustain a mode of organisation able to create and maintain a large amount of chariots that stands out in this, highlighting the intimate relation between the chariot and state power (Driessen & Schoep 1999, 396; Dickinson 1999, 25). To a certain extent this is indeed true for weaponry and military organisation more generally, signalling a co-dependence of the instruments of scribes and warriors at this point in time (Driessen & Schoep 1999, 389). To these instruments of power projection the ships should be added as well, not only because of their depiction in art but also because of the concern with naval matters in the tablets (Palaima 1991). Although there are depictions of chariots

²⁵⁵ Overall there was a shift away from the elaboration of weapons within funerary containers as 'intentionally individual' (Harrell 2012, 801). The evidence of the Linear B administration of Knossos also suggests a close palatial control over different forms of weaponry in this polity (Driessen & Schoep 1999).

and ships both before and after the Mycenaean palatial period, these states did control these crucial instruments of power during their existence.²⁵⁶

Synthesising the evidence, three analytically distinct levels of contexts of art can be recognised for the theme of warfare and elite culture. At the top level there are the palaces themselves, where as we saw earlier there was an almost exclusive concentration of the narrative and emblematic wall-paintings that can be related to palatial power. Furthermore, it was the scribe's stylus that made possible the nexus for the administrative control of tools of power such as ships, chariots, and weaponry in general, and also to a large degree for the control of their application. At this level, then, we can see a clear pattern of conspicuous display and the fabrication of objects that were both containers of prestige and instruments of power. The next level is not as concentrated spatially, but consists of a number of secondary sites, both houses and secondary centres, in which more isolated scenes of themes related to palatial power have been found. Given the fragmentary evidence it is best not to exclude the possibility that some of these have narrative connotations. An even wider distribution of scenes involving chariots and ships can be observed for vase-painting. Although these two should not be conflated, they both can be seen as different 'abbreviations' of the palatial art, and reflecting the broader sharing of elite groups in Mycenaean culture as a whole.

5.2.4: The human and natural worlds in Mycenaean art

Turning to the third theme of contexts of Mycenaean art discussed here, this concerns the relation between humans, animals, and the broader natural environment. It should be emphasised that any distinction between 'flower-loving' Minoans and game-devouring Mycenaean hunters is far from the truth, much as with war-related scenes as discussed in the previous section. Such ideas have, unfortunately, tended to hide much of the underlying complexities in this theme. In fact the relation between humans and nature arguably contains the most ubiquitous and diverse set of motifs and compositions of Mycenaean art. Furthermore, they also seem to have had the widest distribution both in terms of the number and different kinds of architectural contexts in which they were found, as well as in terms of representations on non-monumental art forms. These include agonistic scenes between humans and animals (whether of actual combat or of domination), more peaceful scenes of humans and/or animals in landscapes or seascapes, friezes with repetitive designs of animal motifs, and friezes of 'stylised nature' motifs. Each of these will now be discussed further in turn.

Starting with the agonistic scenes, these involve depictions of bull-leaping, hunting, and the 'master or mistress of animals' composition. In general terms it has been observed that such relations provide a symbolic parallel between the aggressive behaviour of wild animals and (mostly male) humans (Morgan 1995). The category of bull-leaping is closely associated with Crete and the preceding Minoan periods, and it occurs in the Mycenaean period predominantly in Knossos. Even so, there are examples of bull-leaping in LH IIIA wall-paintings from the mainland palaces and the later Tanagra *larnakes* that can be used to argue that this activity was not entirely unknown on the mainland (Gallou 2005, 126). Bulls occur at a number of different places in the Knossos palace, but the only example where bull-leaping can clearly be observed is in the 'Taureador Frescoes' from either the so-called 'Court of the Stone Spout' or an upper floor (Hood 2005, 79-80). It consists of a series of panels with smaller-scale figures, of which only one can be reconstructed in detail (see figure 44), which depict action taking place outdoors as indicated by changing background colour between the panels and segments of rockwork (*Aegean Painting*, 90-92). Overall, they indicated a

²⁵⁶ Wedde (2006) has pointed out the implications of the existence of certain continuities in the depictions of oared galleys and chariots in Mycenaean through Late Geometric vase-painting (cf. Crouwel 2006). On the assumption that the depiction of such objects would imply their actual use, this could be used to argue for a 'partial systems survival' because of the concentration of resources and personnel to make chariots and man ships (Wedde 2006, 265-269). The presence of post-palatial elites on the mainland was already demonstrated by Morris (1987, 1991).

series of episodes of bull-leaping, with both male and female participants, providing what is here interpreted as a panoptic overview of this activity.

This wall-painting can be placed in a tradition of bull-leaping scenes in Aegean Bronze Age art, which can be traced through time through the use of different ways of rendering them (Younger 1995c). In some examples from non-monumental art within this tradition, bulls are draped with a cloth for sacrificial purposes (Betancourt 2007a, fig. 30.2, p. 186) or are depicted in scenes where they being captured with nets (Younger & Rehak 2008b, 181). These point to both the ritual and hunting features that are associated with the animals, as we already saw for the role of bulls in scenes of public ritual discussed in section 5.2.2. Intriguingly, from the Linear B evidence it seems that bulls may have been referred to by noun-epithets such as wine-dark (Blakolmer 2004, 63). From the tablets it is clear that oxen were used for agricultural purposes, but they were never depicted in such capacities in wall-paintings, consistent with the lack of other domesticates and quotidian scenes.²⁵⁷ What is emphasised is rather the agonistic relation between the bulls and humans, and the mastery of the latter over the former is then represented in dangerous activities such as hunting and leaping over bulls, as well as in their being sacrificed in ritual contexts. A possible parallel to this ritual context for grain, can be seen in a wall-painting from the Cult Centre at Mycenae, showing a female figure holding two sheaves of grain (Aegean Painting, plate 61).

Even more agonistic are the hunting scenes, which are known only from non-monumental art on Crete but on the mainland are represented in different wall-paintings from Pylos, Orchomenos and Tiryns. Certainly the boar-hunt was already important before this, as can be seen in the early presence of boar's tusk helmets (Morris 1990). In fact boar's tusks can already be found in MH I contexts (Wright 2008, 251). All of these are rendered in the panoptic variant, and none of them were found in situ. The very fragmentary scene from Orchomenos is the most basic one and depicts hunters with and without boar's tusk helmets, hunting dogs and a fleeing boar (Aegean Painting, 195). The boar hunt scene from Tiryns is much more extensive, and from the hundreds of fragments from a dump three parts of the composition have been reconstructed (Aegean Painting, 129-130). The first group of fragments is of hunters walking with dogs, the second of groups of chariots driving in different directions and not directly being involved with hunting, while the third group depicts the various stages of the chase and killing of the boar (see figure 45). The vegetation associated with the different fragments indicate that they took place in different kinds of landscapes: a more open landscape for the chariot groups and a marshy terrain for the actual hunt itself.

For Pylos, the restudy of the fragments has led to new, if preliminary, conclusions (Evenson in Brecoulaki 2005), which indicate that the hunting composition from an upper floor room above Hall 64 also consisted of different scenes. These include two or three registers of hunters with dogs, the hunting and killing of deer by men and dogs, and the return from the hunt and the preparation for a feast (as indicated by the carrying of cauldrons). While the Pylos material may yield additional

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²⁵⁷ Shapland (2009) has discerned a similar situation for the rendering of nature in Neopalatial Minoan art, where the animals depicted similarly show a preference for the wild over domesticates used in everyday contexts. Cattle is the only animal able to transcend this difference, being both hunted and used in bull-leaping and involved in mundane agricultural tasks like ploughing. A plausible reason for this might be the difference between the oxen as used for farming labour and the bulls who were unsuitable for this. Here an interesting contrast can be noted, which would in broad terms also hold true for the Mycenaean case, between the administered domesticates and depicted wild animals:

[&]quot;By going in search of animals over the horizon, seeking relations with them, the inhabitants of Neopalatial Crete sought to bring the enduring qualities of animals to play in their own fluid social strategies. Whereas the Linear A documents show a relocation of domestic animals to or from the centre, the frescoes show a set of relations with nondomestic animals. In the case of bull-leaping, the animal might become non-domestic through the distinct set of practices it is involved in, but in the case of lions or wild goats, the animal's life beyond domestication affords a different set of relations which will set the human participants apart." (Shapland 2009, 124)

details for reconstructive work, it is enough here to note the significance of the division between the different scenes. This provides a parallel to the Tiryns composition and strongly indicates that the hunting wall-paintings can be understood as panoptic and with the same kind of 'paratactic' narrative as for the battle scenes.²⁵⁸ This may also hold true for the bull-leaping painting from Knossos, but from its preservation this is less certain. This kind of compositions can be contrasted with the 'master of animals' pose that was noted in section 4.4.2, in which the agonistic animals are subordinated in what is primarily a ritual context. Perhaps the relation of such animals can be understood as emblematic (even if with a different meaning) to the narrative scenes in the same way as the *ikria* and figure-8 shields, with a common theme of the domination of agonistic animals.

There are other kinds of scenes of humans within the natural environment, however, that are not agonistic. Two 'scenic' friezes have been reconstructed for two different locations in Pylos, consisting of seemingly tame deer, boars and horses alongside seated women and architectural façades or shrines (*Aegean Painting*, 133). These are argued to be 'wall-paper' made up of disconnected elements, but they might also simply be stock-scenes or *topoi* of peaceful landscapes. Perhaps a similar kind of scene can be seen on a Mycenaean krater found on Cyprus with a woman in a shrine, a landscape with flanking horses and, rather strangely, a large fish (Steel 2006, fig. 1, p. 148). If we are dealing with a recurring *topos* here, the scene of women with deer at an altar from Ayia Triada (*Aegean Painting*, 181) could also be included in it, even if this formed part of a larger ritual scene. The association between women, architecture, and tame animals that would otherwise be hunted, as well as the lack of dangerous creatures like lions and griffins, provide an interesting counterpoint to the hunting scenes. Here it is possible to recognise the contours, but based on only a few cases, of a distinction between peaceful 'inner' landscapes near architecture and hunting in 'outer' landscapes such as marshy areas.

There is more to depictions of animals, however, as they are also shown without humans in quite a few examples. A distinction has to be made here between animals in free compositions and those in repetitive friezes. The former category is harder to recognise since some of the isolated fragments may well have belonged to scenes with human participants, but nevertheless a number of cases have been reconstructed. The bull of the anteroom to the Throne Room of Knossos has already been mentioned, but another bull was found on the upper floor of the 'Hall of the Double Axes' and can be dated to LM II (Hood 2005, 73). Also discussed above was a bull from the Throne Room at Pylos, and a frieze of hunting dogs from Hall 64. From the same palace a frieze of at least ten lions and three or four griffins (one forming a lion/griffin pair) is known from Hall 46, a room with hearth that may have acted as the secondary megaron (*Aegean Painting*, 136-137). Fragments of sphinxes are known from Tiryns and possibly also from Thebes (*Aegean Painting*, 137-138). Finally, deer friezes with environmental settings are known from Pylos and Tiryns, although the latter has been associated with the larger boar hunting composition (*Aegean Painting*, 130-132).

²⁵⁸ The resemblance of the focus on hunting boars in Mycenaean art to the same activity in Hittite texts and art has been noted by (Cultraro 2004). He stressed in particular the relation of boar-hunting in both cases to royal ideology and warfare. Bachvarova (2010, 76) has noted the implicit connection between hunting animals and fighting, especially fighting 'outsiders', in Hittite epic, something that can for her be seen as comparable with the scenes of warfare in Hall 64 at Pylos, now supplemented with the hunting scene from the upper floor. The widespread sharing of a simile between warfare and hunting may be reflected in a more deep-rooted set of *topoi* that could be used in panoptic, narrative settings such as the Tiryns boar-hunt. This does not necessarily imply a complete similarity between the Mycenaean and Hittite cases, but the question of some forms of (mutual) influence should be considered:

[&]quot;But we should not neglect the strong possibility that many of the similarities in the ways of thinking that we can see in the Hittite material, Mycenaean art, and the later Greek epic tradition come from a common pool of conceptions of how man fits into his world, in which man is compared to animal to explore and explain man's relationship with the gods and to turn natural history into human history." (Bachvarova 2010, 77)

Paintings of marine animals are known from both floor and wall-paintings. Apart from the dolphins in the Pylos naval scene, these creatures were never associated with humans unlike for the fishermen of the LC IA Cycladic wall-paintings. An overview of the scenes includes dolphins, a variety of fish and mollusc species, as well as marine flora (Petrakis 2011, table 1, p. 190). Many of these paintings are floor paintings, but a wall-painting from Gla shows dolphins actually leaping above the water surface (Iakovidis 2001, plate VIII). The floor painting of an octopus from the Throne Room of Pylos may have been involved with the 'throne area', but such floor-paintings do occur in different contexts as well. For both the land and marine animals it seems that what is most noticeable about them is how little narrative potential there is to these scenes. Many of them are larger, some life-size, and can be interpreted as part of a more inclusive viewing arrangement. Unfortunately, it is unclear how the Mycenaean viewer would actually have related to these animals in these specific settings.

The repetitive animal friezes are therefore easier to understand as they can be categorised as part of the decorative plane space viewing arrangement. All of them are from the Pylos palace (*Aegean Painting*, 141-142), and adequately discussed in the catalogue (Lang 1969, 141-157). They include six friezes of stylized nautili, which are very unlike those in the freer compositions and may have been connected to designs used in inlays (Lang 1969, 143). There are also two snail friezes, as well as one of bluebirds. For the snail examples there is a close parallel with textile borders, as indicated by garments shown at wall-paintings from Ayia Triada and Knossos (Lang 1969, 144). They are hard to distinguish from the friezes with repetitive designs of decorative motifs, and indeed Lang treats them as part of a single group. Many other sites have similar decorative schemes, which include a variety of spirals, papyrus (sometimes together with spirals), rosettes and half-rosettes and triglyph motifs, see for a variety of designs (*Aegean Painting*, fig. 39, p. 143). Most of them occur throughout the palatial complexes, such as the elegant spiral friezes from Knossos that could be found in three different locations (Hood 2005, 72), but they are a common find at non-palatial sites like Gla as well (Iakovidis 2001, plates II, V).

It is not easy to interpret these repetitive friezes, and given the lack of indications from other sources it may be logical to simply denote them as 'ornamental friezes' (Aegean Painting, 142). There are clear parallels for this from borders on garments, and also to some degree from the *ikria*. In the art of the Neopalatial period such borders were shown alongside broader compositions of the natural environment on garments. A good example are the so-called 'crocus costumes' from wall-paintings of Akrotiri, which have been connected with a female deity and the different phases of womanhood (Rehak 2004, 97). At the level of the eastern Mediterranean artistic koine, it can be observed that the voluted palmette constituted an important element (Feldman 2006, 81-86). It coexisted alongside more local adaptations of vegetation (including the lily, Egyptian lotus and papyrus), which were often associated with agricultural abundance and royal power in Egypt and Mesopotamia. Feldman (2006, 84-85) sees some parallels in Minoan depictions of lilies and papyriform motifs. It would be unwise, however, to posit any kind of specific relation between the Mycenaean wanax and Near Eastern power figures based upon such motifs only, since many of them are still not well-understood in their Aegean contexts. This is especially true for the spirals, rosettes, and half-rosettes.

It is therefore hard to ascertain the meaning for both the repetitive friezes of animals, plants, and decorative motifs and those with freer compositions. Without direct interaction with humans, it seems, it is much harder to understand what they would refer to. There is another way to explore the

²⁵⁹ One notable feature of the nautili friezes is the careful and complex use of colours to depict their features, in particular for combinations of colours (Lang 1969, 142-143). Unfortunately, as noted in section 4.3.3 the 'naturalistic' use of colours in Mycenaean art and that of Aegean prehistory as a whole remains underexplored.

issue, however, one that focuses less on iconography and more on the conceptual aspects of these material depictions. This aspect can be better understood when considering the wall-paintings which simulate architectural features, which have the least potential for iconographic interpretation. These include dadoes, some with more complex designs suggestive of rockwork, and other kinds of simulated features such as beam-ends (*Aegean Painting*, 145-146; Brysbaert 2007, 337-338). The latter are especially interesting, since in some cases they are highly realistic and seem to have functioned as an 'X-ray' of beams that were actually present under the plaster (Palyvou 2000, 429-430). This raises interesting questions of whether the painted plaster 'represented' something else, for example a wooden beam, or whether it can be seen as congruent with the material 'simulated' by it. In effect this constitutes a form of 'naturalistic skeuomorphism' (cf. Brysbaert 2007, 337).

Recent work on Minoan art and architecture has also sought to challenge dualistic notions of a separation of art as concerned mostly with 'mind' and the natural environment (Herva 2005, 2006; Shapland 2009). Instead of representing something external, these studies suggest that through art animals and other natural phenomena became part of society. Based on the study of Minoan building deposits, Herva (2005) argues that buildings can be seen as being 'alive' and related to in a social way. Despite the perceived lack of naturalism, such models can be extended to the Mycenaean case as well. It should also be emphasised, however, that we are not dealing here with a generic animistic way of conceiving of the world but rather with the specific Mycenaean and eastern Mediterranean material ontologies that were described in section 4.3.3. Of special importance in this is the act of the (almost alchemical) transformation of materials and the rituals and religious obligations that were associated with this. Reference can be made here also to the concern with the transformative character of using painted plaster and its periodic renewal, as also noted in section 4.3.3. Of course architecture itself involved acts of transforming materials, but this should not necessarily be construed as being in opposition to the processes of the natural world.

This perspective would make it possible to see the more basic elements of nature in Mycenaean art not as the representation of a conscious ideology of power, but rather as a background congruent with the Mycenaean conceptualisation of the natural world. This would hold true as much for the 'pictorial skeuomorphism' of beam-ends and rockwork as for the repetitive friezes of snails and bluebirds, and perhaps for some of the decorative elements as well. The paintings on floors should also be grouped as part of this background. All could potentially be grasped as part of the 'transformed nature' that constituted the built environment. This makes it less surprising to find such 'natural backgrounds' at a wide variety of sites with evidence for the use of painted plaster. ²⁶⁰ The scenes of bull-leaping and hunting, however, were limited to the palaces and houses in palatial sites, at least as far as wall-paintings are concerned. They depict a theme of domination that can also be noted for the use of lions and griffins in the central megaron and other areas of the Pylos palace. Furthermore, the hunting scenes resemble in some ways the theme of warfare and elite culture, for example through the presence of chariots in the Tiryns case (*Aegean Painting*, plates 68-69). Hence the contexts of the theme of the relation between the human and natural worlds in Mycenaean art extends from a basic background to narrative extensions that highlight elite culture.

5.2.5: Contexts of Mycenaean art

Many of the patterns discussed in the previous section already pertain upon the agency of Mycenaean art that will be discussed in section 5.3. The goal here is merely to note the features that

²⁶⁰ This arguably makes it less remarkable that many of the wall-painting fragments at the secondary fortified site of Gla in Boeotia were found in a granary and a room used for preparing and cooking food (Iakovidis 2001, 138-139). These would have formed a 'background' without having been intended for any kind of direct propagandistic effect on the viewer (who presumably would have been mostly workers).

cross-cut between the different themes. Two of these stand out in particular. The first concerns the distribution of the different material forms of Mycenaean art over different architectural contexts. The second has to do with conceptualisations of contexts of art as they can be inferred from various art objects and representations. With regard to the spatial distribution of art the central role of the palaces is fairly clear. First of all most of the monumental art is located in these complexes, in particular the wall-paintings with more complex iconography and narrative content. Even so, to some degree such wall-paintings could also be found in settlement buildings, sanctuaries, and funerary monuments. ²⁶¹ This art is at a lesser scale, however, and lacks the broader programmatic connections that can to some degree be noted for the palaces, for example for the central megaron of the Pylos palace. The portable art objects allow further insights into this, in particular with regard to the idea that some of them would have functioned as 'tokens' of palatial society. The finds of (blue) glass objects in tombs in more peripheral areas highlighted the extension not only of social status but also of Mycenaean identity to these areas.

This highlights the need to focus not so much on the palaces as architectural structures, but rather as the central nodes in a network of different kinds of contexts of art. Different levels of interaction can be recognised in this, as between the palaces and secondary administrative buildings, between the palaces and sanctuaries, and finally between the palaces and elites in peripheral areas. Such relations need not necessarily have been the result of top-down impositions by the palaces, especially as they would derive in part from pre-palatial developments. The primacy can rather be located in the network itself, with art both reflecting and helping to constitute the relations within it. This also brings up the conceptualisation of that network as it can be recognised in the specifics of the art objects and the images depicted on them. The best way in which this can be seen is in the use of instruments such as weaponry, ships, and chariots as extensions of palatial power. The use of these different instruments in this way can also be grasped from their use in the warfare and elite culture scenes, as well as in the hunting scenes. In this way the portable art objects are related to the more extensive pictorial spaces of the wall-paintings, yielding more details with regard to the contexts in which they it was appropriate to use them.

Likewise seals and musical instruments can be related to depictions of public ritual, because of their respective roles in the provisioning and performative action of ritual events. Representations of processions form an important component of the visual repertoire of public ritual. They were shown in small-scale paintings in panoptic settings that could represent a narrative-like sequence, including those showing outside settings. Processions, however, could also be larger-scale murals and located in areas that may have been used for processional movement. Both kinds of scenes can also be related to fixed-place ritual, which could take place in palatial settings such as the central megaron of the Pylos palace. Here the 'throne area' and the paintings on the wall and floor surrounding it can be seen as the setting for a 'participative' and 'performative' context of art. In this same room there was also a depiction of a ritual drinking event, something that can also be seen at a different location in the Knossos palace. This provides some iconographic context for the different kinds of drinking vessels found widely in the Mycenaean archaeological record. As such, instruments, other portable art objects, and both panoptic and participative wall-paintings were all used to represent and help constitute Mycenaean public ritual. In section 5.3 below the connections between these different elements will be explored more in-depth in the discussion of praxis in Mycenaean art.

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²⁶¹ Some parallels may be drawn in this regard with Cameron's (1975, 243-253) outline of different themes of wall-painting in different architectural contexts for Minoan Crete, for example for the palace of Knossos, villas and more ordinary houses. More evidence is needed for the use of art in Mycenaean houses and sanctuary contexts, however, before a similarly elaborate interpretation can be offered.

5.3: The agency of Mycenaean art

5.3.1: Introduction

This section will provide the synthesis of the preceding analyses of Mycenaean art through a consideration of its agency. This is investigated at two distinct levels. The first of these analyses the agency of Mycenaean art in itself in section 5.3.2. Following the approach to art discussed in section 2.4.4, this involves using the higher-level analytical concepts of metaphor, semiotics, and praxis. Using these concepts allows for the recognition of patterns that cross-cut between the more empirical analysis of material forms, craft and materiality, iconography, and contexts of art discussed in sections 4.2, 4.3., 4.4, and 5.2. This also provides the basis for the comparison with LPC lowland Maya art in section 9.3. The second level of analysis in section 5.3.3 builds upon the first, in that it takes the higher-level patterns of the agency of Mycenaean art as a whole to return to the general interpretations of Mycenaean early civilisation discussed in section 3.4. This will allow for a better understanding of the role of the agency of art within the general *longue durée* framework of the Mycenaean Aegean.

5.3.2: The agency of Mycenaean art

The investigation of metaphor in Mycenaean art has to start with the basic material forms. From the discussion of these in section 4.2, the three main categories of it were recognised to be three-dimensional and two-dimensional containers, as well as instruments. The most abundant and well-known forms of Mycenaean art are the wall-paintings, together with a broad range of instruments that included weaponry and seals. Notably a number of patterns can be discerned that cross-cut between the different material forms, as discussed in section 4.2.3. One of these concerned the use of similar kinds of rendering art, which can be seen for complex iconographic scenes in wall-paintings and metal vases, and also for decorative friezes on pots, textiles, and wall-paintings. The iconographic relations that can be seen in this may well have derived from some set of 'model book' schemes. A second relation is that between seals and sealings, which in terms of symmetrical design of pictorial space can be recognised in stone sculpture and wall-painting as well. The seals had a dual role as containers of meaning, both of images and of material properties (including notably the use of semiprecious stones), and as instruments of administration. Based on the ideas formulated in (Wengrow 2014), the ability for seals to reproduce images on a large scale and across different material forms was stressed in section 4.2.5.

Another pattern is that of the common use of certain materials as inlays in different material forms, something that could be seen especially well for the use of blue glass in furniture and architecture discussed in section 4.3.3. One important property of blue glass as a material was its convertibility, both in terms of its exchange (as will be discussed in section 5.3.3) and in terms of its ability to be worked into different shapes through the use of moulds. Furthermore, this convertibility allowed for horizontal cross-craft interaction with other kinds of materials that derived from different *chaînes opératoires*, as discussed in section 4.3.2. The use of moulds and horizontal cross-craft linkages can be seen as a way to reproduce the aesthetic effects of certain kinds of materials on a large scale, and across a diversity of material forms (as through the use of blue glass inlays). In this reproductive effect it parallels the seals, but using very different techniques and different purposes. The same holds true for the possible use of 'model books' referred to earlier, which would facilitate the transfer of iconography from one material form to another. Although the seals, moulds, and 'model books' all point to some kind of design crossing between material forms there, as noted in section 4.2.5 the notion of a more overarching concept of modularity that would have governed all relations between materials forms is not proven.

Unrelated to the idea of modularity is the direct skeuomorphism from one material form to another, as can be seen very well for textiles and wall-paintings. A special case of this was the notion of 'naturalistic skeuomorphism' discussed in section 5.2.4, which involved the close imitation of both architectural and natural phenomena in wall-paintings. The 'second nature' thus created can be extended to the more 'decorative' designs of natural phenomena, such as the repetitive friezes of snails and bluebirds, as well as to various depictions of marine life. Showing such phenomena can be understood as part of a 'natural background', albeit one that depended upon the transformation of natural materials into an architectural structure. This transformation importantly includes the process of applying the painted plaster and painting it. As discussed in section 4.3.3, the initial application of plaster and pigment led to a gradual brightening of the colours of the wall-painting, only later to fade away and to be replaced by a new layer of plaster. In a very general sense this cycle of painted plaster would mirror the life cycles of the natural world. Unfortunately, the Mycenaean conceptions of the materiality of painted plaster remain mostly unknown, making it impossible to improve upon this generic outline for the moment. The same situation holds true for most of the materials used in Mycenaean art.

However, as discussed in sections 4.3.3 and 4.3.4, a much more specific interpretation is possible for the Linear B term ku-wa-no, later Greek kyanos. It was proposed in section 4.3.3 that ku-wa-no can be understood according to a template that is based both on the Mycenaean archaeological record and on the connections to the contemporary Near East. The basis for this template lies in the close association of lapis lazuli and blue glass, in terms of their uses and aesthetic valuation. This last aspect of aesthetics can be discerned in the conception of ku-wa-no as a colour term, encompassing not only lapis lazuli and blue glass but a wider set of metaphoric associations. Yet blue glass was also distinct from lapis lazuli in terms of its initial production, which involved a complex *chaîne opératoire* with pyrotechnology and the use of colouring materials such as copper and cobalt. As noted in section 4.3.4, this process of making glass can be seen as part of a wider set of techniques, especially metallurgical ones, that involved the intrinsic transformation of materials through pyrotechnology. At the same time dark blue glass was grouped together with naturallyoccurring (if imported) lapis lazuli in the primary glass-making areas of Egypt and Mesopotamia. The reference in Mesopotamia of 'lapis from the mountain' for naturally-occurring lapis lazuli and 'lapis from the kiln' for dark blue glass captures this well, and shows furthermore that a sharp distinction between 'natural' and 'artefactual' is hard to make.

Based on the template of *ku-wa-no* provided in section 4.3.3, two distinct kinds of colour-uses can be noted. One concerns the symbolic connotations of the blue colour of lapis lazuli and blue glass in Mycenaean and Aegean prehistoric art. This can be seen not only in the objects themselves, but also in depictions of jewellery in wall-paintings. On the other hand the use of blue in wall-paintings in general is not clearly symbolic but rather follows a 'naturalistic' pattern.²⁶³ This pattern is also reflected in the ubiquitous use of Egyptian Blue pigment in the LC IA wall-paintings of Akrotiri, which is not used either to symbolically highlight certain elements (excepting jewellery, and possibly for the wings of griffins) or in ways that reflect its value as a material. This raises the status

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²⁶² In particular it is not possible to ascertain to what extent the use of painted plaster to create wall-paintings was seen as an extension of nature or as an artificial parallel to it. Further avenues of study that might be able to shed more light on this question are: gaining a better grasp of the plaster dumps and patterns of replacing plaster, a more in-depth study of the notion of 'naturalistic skeuomorphism', and, finally, ascertaining whether the Hittite texts on rituals for building and plaster referred to in section 4.3.3 can be used to shed some light on the Mycenaean case.

²⁶³ To clarify, naturalism here refers to the specific Mycenaean and Aegean ways of rendering the natural environment, as discussed in section 5.2.4, and does not necessarily reflect colours as they occur in nature. The distinction with the symbolic use of colours is that there is no apparent relation to lapis lazuli or blue glass in, say, the use of blue on the fish of the LC IA fisherman wall-painting from the West House at Akrotiri (Doumas 1992, fig. 20-21, p. 53).

and character of *ku-wa-no* as a colour term, an issue explored for the use of *kyanos* in Homer and other early historical Greek poetic sources in section 4.3.3. There it was argued that instead of denoting a patch of a blue hue, *kyanos* metaphorically referred to a 'vital, vigorous, and lustrous darkish surface'. Colour as used in this sense in Homer is not specifically tied to a material, but rather can be seen as a dynamic phenomenon that can be expressed best in certain materials. A similar conception of the materiality of colours can be noted for the Mesopotamian textual sources on lapis lazuli, even down to the descriptions of lapis lazuli coloured facial hair of deities that also occur in the Homeric epics.

One reason to bring up the Mesopotamian case in particular is because of the spectacular finds from the Royal Cemetery of Ur, with its use of lapis lazuli (and gold) in the facial hair of bulls. This represents a clear example of how the symbolic connotations of the colour of lapis lazuli can be reflected in actual iconography. Other cases of this are known for the statuary of Mesopotamia and Egypt as well, but despite some enigmatic clues (the use of blue on the wings of griffins) there is no equivocal case of this in Aegean prehistoric art. Even so, the uses of lapis lazuli and blue glass, and their association with gold as well, in Mycenaean art points to a broad aesthetic coherence in terms of colour conception with the Near East.²⁶⁴ This brings up the question of value and its relation to the visual characteristics of materials, as they could be seen in Mesopotamian cases of the *ekphrasis* of objects and in the Egyptian evidence as well. In this regard that lapis lazuli and blue glass present an exemplary case of the extension from material metaphors to linguistic metaphors, with a degree of specificity that could not be achieved for other materials used in Mycenaean art. It is this extension from materiality to language that allows materials to be used within complex semiotic and value systems. However, it should not be assumed that because the uses and conception of lapis lazuli and blue glass in the Mycenaean case share a common template with the Near East, they are also valued in precisely the same way in different use contexts.

Not only are there no Aegean parallels to the Royal Cemetery of Ur or Egyptian temples and their statuary art, it can also be noted that lapis lazuli and blue glass were worked in Mycenaean workshops. Taking the specifically Mycenaean ways of working and using lapis lazuli and blue glass into account, can allow for a better grasp on the valuation of *ku-wa-no* as a material and linguistic metaphor in the Mycenaean context. It is useful in this regard to distinguish between four different kinds of usages of lapis lazuli and blue glass:

- 1. First of all it is possible to note the architectural use of blue glass, most notably the use of this material as an inlay in a stone frieze of the Tiryns palace. While the Egyptian Blue frit and lapis lazuli were also used in painted plaster pigments, it is not certain that this can be related to *ku-wa-no* as a symbolic colour term given the overall 'naturalistic' uses of colours in the wall-paintings.
- 2. Based on the Linear B Ta-series tablets from Pylos, *ku-wa-no* material was used as an inlay in elaborate pieces of furniture, in one case associated with an inlay of gold.
- 3. Seals made of lapis lazuli (imported) and blue glass (worked in the Aegean itself) were found in considerable numbers. An association between seals of both materials and gold foil could also be noted. More exceptionally, blue glass was also used in weaponry.
- 4. Lapis lazuli and especially blue glass beads were used for personal adornment, often also in combination with other beads made of gold and semiprecious stones.

The use of seals, weaponry, and beads can be related to notions of Mycenaean personhood as they can be grasped through artistic sources. Here the discussion of metaphor comes full circle, as the

Furthermore, because of the likelihood that at least some of the objects with kyanos in Homer refer to Bronze Age objects, it is probable that at least in a basic sense the semantics of kyanos as a colour term goes back to this period.

metaphors derived from the generic human body (containers, instruments) are used to understand the body and personhood in the specific cultural configuration of Mycenaean early civilisation. What prevents this circle from degenerating into a circular argument, however, are the linguistic and iconographic sources that allow the material metaphors to be related to each other in a culturally-specific framework. As noted in section 4.4.2 on iconography, Mycenaean personhood can be grasped as relational, implying that individuality is strongly structured within a nexus of social relations. In terms of artistic representation this relational character can be seen in the absence of true portraiture and an overall idealism in the rendering of human figures (showing no impact of ageing or bodily deformation). Key characteristics were instead expressed through skin colour (for gender), bodily gestures, emotional states, clothing, and attributes such as jewellery and weaponry. These different situational characteristics allowed for the expression of social roles such as gender, for showing activities like war, hunting, and ritual, and likely also for highlighting status through depicting specific kinds of clothing and attributes.

The use of lapis lazuli and especially (because of their greater quantity) blue glass beads, seals, and (parts of) weaponry would have functioned as attributes and adornment in this nexus of relational personhood. The use of beads as adornment in funerary contexts discussed in section 5.2.2 provides one of the best examples of how these materials related to identity and personhood. Yet it should be stressed that such portable art objects were related also, through the use of the same materials, to elaborate furniture and monumental architecture. Furthermore, for all these forms there exists the common linguistic term *ku-wa-no* and the symbolic colour conceptions associated with it. A key question, then, is how the semantics of colour encapsulated in *ku-wa-no* related to the individual use of lapis lazuli and blue glass beads, seals, and weaponry parts. One of the best ways for grasping this relation is to focus on adornment, especially in the use of beads for this. From the use of lapis lazuli beads and other small objects in Mesopotamia it can be inferred that their visual aura allowed the wearer access to protection, cures, and other kinds of magical forces (Winter 2010, 298-301). In this sense the lapis lazuli objects, and especially their visual qualities, acted as an intermediary between individuals and magical forces.

For the Mycenaean case it is not known whether lapis lazuli and blue glass were connected to magic, and if so what the specific qualities of these magical forces were. ²⁶⁵ But it is clear that the colour and visual properties of both materials in adorning the body would have acted as an intermediary between the individual wearer and the semantic meaning of *ku-wa-no*. This is based on the strong coherence in their uses in objects and the association with gold (including as described in the Ta714 Linear B tablet), the good evidence for the exchange of these materials with the Near East, and finally the etymological connection to early historical Greek poetic sources like Homer. As such, being adorned with lapis lazuli or blue glass would not involve the 'incorporation' of these materials in the body. Rather the intermediary role of the visual properties of lapis lazuli and blue glass should be seen as a material version of poetic techniques like noun-epithets and similes, which allow for different phenomena to be connected through linguistic metaphor. Even if many of the specific linguistic meanings of Mycenaean *ku-wa-no* remain ill-understood, ²⁶⁶ the basic pattern of the intermediary role of colour is of considerable significance in itself. It provides another example

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²⁶⁵ Based on the ideas of Helms (1993a), the fact that both the lapis lazuli and the blue glass found in Mycenaean contexts derived from long-distance exchange with the Near East would have bestowed upon them an extra layer of cosmological significance. This much can certainly be seen for the Mesopotamian myths surrounding lapis lazuli and other resources that came from far away lands (Aubet 2013). Unfortunately, the Mycenaean textual evidence is too limited to recognise similar myths related to lapis lazuli and blue glass.

²⁶⁶ As noted in section 4.3.3 a much more systematic approach to colour-use in Mycenaean art is needed to ascertain whether the metaphoric use of colours implied by the use *kyanos* can be recognised. The use of blue on the wings of griffins provided only a clue to this, to understand the phenomena properly a complete and highly detailed overview of colours in different iconographic elements is required.

of how the relational personhood inferred for Mycenaean art was qualified.

There exist other examples of more complex connecting metaphors pertaining upon personhood in Mycenaean art. Important is the parallel between animals and human beings as predatory beings, which as noted in section 4.4.3 could occasionally be shown in a simile-like pictorial setting. This does not involve the entire natural world, however, as it seems to focus mostly on hunting activity and by extension to warfare, ²⁶⁷ as discussed in section 5.2.4. Yet while this would provide another connection between personhood and a set of metaphors, the overarching worldview in which those metaphors would be embedded remains hard to grasp, as noted in section 4.4.2 for the element of specialised knowledge. One recent idea put forward by Shapland (2013), may provide the means to start remedying this situation. He uses the model formulated by the French anthropologist Descola of an analogical worldview, in which 'modes of relation' such as exchange, production, and protection define the relations between dissimilar elements (Shapland 2013, 192-193). ²⁶⁸ Even if this sounds very abstract, it can be understood in very practical terms for art and material culture in general, as in an ontology based on analogy 'connectors' relate different elements to each other. A good example of this discussed here earlier, is that of the analogy of hunters and lions (and by extension between hunting and warfare as well) in the art of the Shaft Graves (Shapland 2013, 197).

This 'connector' between humans and animals and their activities depended upon iconographic and linguistic metaphors, just as the 'connector' of lapis lazuli and blue glass in adornment used both material and linguistic metaphors. In a basic sense these connecting elements would derive from the patterns of skeuomorphism that were first established in the Neolithic (Shapland 2013, 198). Even if the overall worldview of Mycenaean early civilisation and Aegean prehistory as a whole remains very incompletely understood, the exploration of the various material, iconographic, and linguistic metaphors that acted as 'connectors' in an analogical framework would allow for at least some basic insights (with possibilities for expansion). Also important is how such metaphors would have been built up over the *longue durée* of Aegean prehistory:

"Earlier collectivities showed local responses to the influx of new things and bodies, before the emergence of elite collectives in the Middle to Late Bronze Age, which successfully incorporated a wide range of new materials, things, monsters, and animals as means of differentiation. This can be seen as a process of segmentation in response to the increasing contact with the world beyond the Aegean: an overarching analogy between the elite and the outside provided the basis for the formation of an elite collective centered on the palaces. This analogy can be seen most clearly at the point when a new elite collective emerged centered on Mycenae whose members, human and non-human, were brought together in the Shaft Graves. The change seen over the course of the Late Bronze Age as the circulation of materials increased in scale was an increased industrialization, involving the mass production of export goods." (Shapland 2013, 203)

Descola (2013, 366-377) had noted the suitability for the analogical mode to incorporate hierarchies among people and the natural environment. In this sense the expansion of the scope of the analogical mode is closely related to the emergence of palatial states and the hierarchies they entail. Some qualifications have to be made for the general scenario sketched by Shapland, however. First

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²⁶⁷ The boar's tusk helmet is an object that would have metaphorically connected these two kinds of activities as well, relating individuals to more general ideas in a way analogous to the lapis lazuli and blue glass beads.

²⁶⁸ Analogism is part of a scheme of four modes based on the relations between different phenomena in the world in terms of their interior and physical characteristics (Descola 2013, fig. 1, p. 122). In analogical modes both the interior and physical qualities of phenomena are different, hence requiring (metaphoric) 'connectors' to relate them to each other. The other three modes are: 1) totemism, with both shared interior and physical characteristics, 2) animism, with similar interior characteristics but different physical ones, and 3) naturalism, with different interior and shared physical characteristics of phenomena. This framework will receive more extensive and critical discussion in section 9.3.2.

of all the process of the development of hierarchies among humans, and with regard to nature in the form of domestication, was as much an internal Aegean process as it was influenced by long-distance contacts. For the case of the Shaft Graves in particular this can be seen in the role of kinship groups in the creation of the social hierarchies that influenced later Mycenaean palatial society, as discussed in section 3.4.3.²⁶⁹ A second qualification that needs to be made is that the impact of the transformative character of making glass and metal alloys, and their resulting convertibility in exchange and craft-work, is not sufficiently captured in the generic concept of analogy as defined by Descola. As such further work is needed to embed the analogical mode more closely within the specifics of Aegean prehistory. However, despite these two qualifications the use of the concept of analogy has provided important insights into the role of metaphoric 'connectors' linking human bodies, art objects and materials, iconography, and language. The next step is to consider the semiotics of these relations as expressed in Mycenaean art.

The first aspect of the semiotics of Mycenaean art to be considered here is that of the relation between words and images, as discussed in section 4.4.3. Little insight into this relation could be gained from the Linear B tablets. Neither is it possible to relate the use of noun-epithets and similes in oral poetic discourse directly to art, with the important exception of the relation between humans and animals in hunting similes discussed earlier in this section. Only at the very general level of *topoi* or stock-scenes can a generic similarity be noted between oral poetry and art. The example of the *ekphrasis* of the Shield of Achilles from the *Iliad* showed that there was more narrative potential to *topoi* than might be assumed. Yet the notion of *ekphrasis* only serves as an opener to reconsider the narrative qualities of *topoi* that seemed to lack them. In the absence of any insights into the content of Mycenaean oral performance, all the evidence has to come from iconography. For this reason the narrative micro-structures of Mycenaean art discussed in section 4.4.3 are of crucial importance, since these form the analytical basis for understanding the relations between the different kinds of iconographic elements.

As discussed in section 4.4.3, the first element to delineate in interpreting a narrative microstructure is the nucleus, which constitutes the core action of a scene. The examples of processions in section 5.2.2 and of war-related scenes in section 5.2.3 showed in particular that their nuclei consisted of standardised *topoi*. The same may well also be true for the hunting scenes discussed in section 5.2.4, but here the available evidence is more limited. Of course, the use of a *topos* does not imply that each scene that can be grouped under it is exactly identical. Also, in some cases catalysts (elements supporting the nucleus) could be used to add further details, even if in general their role is limited in Mycenaean art. More important is the role of informants, those elements that provide information on the qualitative characteristics of iconographic scenes. One important category of these informants are those that provide clues to the spatial settings of scenes. In the discussion of the way the macro-cosmos was rendered in Mycenaean art in section 4.4.2, the locational informants were those that define the spatial environment of the palatial states. This includes palatial and other forms of architecture, as well as the hillsides and seascapes that demarcated the valleys in which the palaces themselves were located.

Additional qualifications to this can be seen in the landscape settings for the peaceful interaction with animals and the hunting scenes, with the former taking place in an area with a shrine and the latter in more rugged, marshy areas. This suggests a more subtle conception of different kinds of

²⁶⁹ This is precisely why the relation between humans and things should not be seen as 'symmetrical', as this obscures the primal causal role of humans in fostering change. As discussed in section 2.4.4, this is why the agency of art should be seen as a social agency. Although things certainly structured social relations, the impetus behind these relations derive from social processes and the linguistic frameworks within which such processes were articulated.

²⁷⁰ This is less of a problem than it might seem, as *ekphrasis* is more incidental, providing added detail and with potential idiosyncratic elements. Iconographic depictions can be expected to carry the basic elements and framework.

landscapes and the activities that took place within them. Further qualifications may have been added in a temporal sense by seasonality, as can also be inferred for the ritual activities that would have been scheduled according to a month-based calendar. There are no indications as of yet, however, for the presence of other kinds of temporal or cosmological markers in Mycenaean art. ²⁷¹ Other informants qualify the human figures depicted in these spatio-temporal settings. As noted for the discussion of metaphor and personhood earlier in this section, these kinds of informants could include bodily features like skin colour, gestures, and emotional states, but also attributes such as jewellery, weaponry, and clothing. Such informants provided the necessary texture for the human figures to fulfil their role as part of the nucleus of a *topoi* or as catalysts to it. However, the notion of *ephemera* (non-lasting phenomena) discussed in section 4.4.2 highlights that the recurrent *topoi* should not be seen as imposing some kind of iconographic 'harmony'. Instead the *topoi* can be seen as the 'iconographic stage' for the metaphoric 'connectors', as discussed earlier in this section, to play out in a pictorial space, without denying the more idiosyncratic role of *ephemera*.

The metaphoric 'connector' of agonistic relations between humans and animals can be seen in its narrative extension in the hunting scenes discussed in section 5.2.4. Based on the discussion in that section some of the warfare-related scenes can also be understood through this 'connector' of agonistic relations, in particular the battle scene from Hall 64 in the Pylos palace. The use of lapis lazuli and blue glass is less clear in Mycenaean art, but the examples from the LC IA wall-paintings of Akrotiri discussed in section 4.3.3 provide a good example of their use in broader, iconographic settings. More basic material metaphors can also be noted in narrative extensions, as with the role of weaponry in hunting and warfare-related scenes. Of particular interest are also the depictions of ships and chariots, discussed in section 4.2.4 as instruments of power. The role of the chariot as an index of elite culture (tied to the palatial nexus of production and distribution) was noted in section 5.2.3, and its use in warfare-related and hunting scenes highlights this role in narrative extension. Although the functions of ships in Mycenaean art can as of yet not be understood in full detail, owing to the unpublished Pylos naval scene, ships do seem to have played some role in narrative settings. Finally, it is possible to note the use of musical instruments in both the performative and narrative settings of public ritual that were discussed in section 5.2.2.

Mycenaean art as a semiotic system, then, seems to have relied primarily on *topoi*, which provided iconographic settings for material forms of art, relational personhood, and metaphoric 'connectors' to be used in narratives. The relation of images to words would only have been at a more general level of cultural meaning, not for the technical properties of the narrative micro-structures of art or the use of noun-epithets in oral poetic discourse. However, there is one way in which images and words can be related more closely to each other. This concerns those 'participative' settings of art discussed in section 5.2.1 that may have functioned as special places for the performance of speech acts.²⁷³ These kinds of performative locations have to be understood not in a semiotic sense, but as part of the praxis of Mycenaean art, a subject that will be discussed presently. The best example of a performative setting of art comes from the wall-paintings in the central megaron of the Pylos palace, with its 'throne' area, lyre-player, and men drinking at tables. These three elements suggest a close relation between art and performative acts in this area. A relation between performance and art is less obvious for the LM II – IIIA wall-paintings of the Knossos palace, but at least there is a more

²⁷¹ The depictions on *larnakes* burial coffins of a location that may possibly have been the space where the deceased dwelt, as discussed in section 5.2.2, cannot be seen as an extension of the landscapes discussed here. Note also that there are iconographic indications that a journey by boat was required to reach this location.

²⁷² The uses of chariots in vase-painting seems even broader and dominant within the kinds of activities depicted on them (Rystedt 2006, 240), even if this also is paralleled by a lack of clear narrative contexts such as for the scenes of battles and hunting in Mycenaean wall-painting.

²⁷³ These speech acts may have involved not only recitations of epic, but also hymns, public declarations, and other kinds of ritual and public speech, all of course irrevocably lost.

clearly defined throne area and, from another area of the palace, also the Camp-stool mural that shows a ritual drinking event. Thirdly, there is the close relation between wall-paintings depicting ritual activity in the Cult Centre located in the Mycenae citadel area and the ritual practices that would have been carried out there.

In all three cases the supporting role for the wall-paintings for (ritual) performances took place in more secluded architectural spaces in palaces or in monumental buildings very near to them, allowing for only a limited number of people to participate in such events. This does not mean that ritual activity could not involve large numbers of people in other areas, especially in outdoor ones, but these numbers could not fit into the areas with highly symbolically-charged wall-paintings with complex iconography.²⁷⁴ A similar palatial focus can be noted for the various narrative, panoptic depictions of war-related, hunting, and public ritual scenes. The evidence from the 'Ivory Houses' complex at Mycenae showed that it is not impossible for narrative scenes to occur outside the palatial buildings proper, but at the same time this building of course was a part of the palatial centre as a whole. One qualification to be made for this observation is that the sample of Mycenaean wall-paintings may well be biased towards the palaces and larger sites. While this is true to some extent, it was also noted that there are at least 20 prehistoric sites on the Greek mainland from which painted plaster fragments have been recovered, most of them dating to the Mycenaean palatial period. This sample size makes it possible to make at least some generalisations about praxis from the distribution of wall-paintings over different kinds of contexts, however open these might be to future revisions based on newly published evidence.

The ideological dominance of the palatial centres can be seen in a number of different ways. The first of these is the theme of public ritual, discussed in some detail in section 5.2.2. Apart from the performative settings of wall-paintings, there are also the larger-scale representations of processions from a number of Mycenaean palaces and the smaller-scale, panoptic procession murals from Ayia Triada and Pylos. Of these procession scenes, the panoptic one from the Pylos palace is most useful for understanding the aspect of praxis, as it can be related to other wall-paintings and to other kinds of sources as well. Based on the discussion of this scene in sections 4.4.2 and 5.2.2, a number of observations can be made for this scene. First of all, the narrative micro-structure of this wall-painting indicates a sequence of procession toward an architectural setting located in an outdoor context, where a fixed-place ritual activity will take place. This pictorial layout represents a *topos* which provided a paradigmatic link to the wall-paintings of the central megaron itself, based on the overarching theme of the cycle of ritual festivals. As noted in section 3.4.2, the festivals of this cycle were supplied through a ritual economy based on the donation of sacrificial cattle and other goods by various elite persons and social groups.

The combination of this ritual economy and the performative character of the festivals themselves would have had an integrative effect. The coordinating role of the palaces in this is clear from the seals and the Linear B tablets, which also show the geographical aspect of this in tying outlying regions together to a centre. Conversely, outlying sanctuaries would have extended the coordinating role of the palaces back to more remote regions. The wall-paintings of the central megaron and its vestibule of the Pylos palace show this very clearly, involving both the performative art in the megaron itself and the panoptic scene depicting a *topos* of a major ritual in an outlying area in the

²⁷⁴ A contrast noted in section 5.2.2 with Neopalatial Crete concerned the lack of crowds in depictions of Mycenaean public ritual. At the same time it should be noted that the best example of the Minoan crowds in the Sacred Grove and Grandstand miniature wall-paintings were located in the small-scale and relatively inaccessible Room of the Spiral Cornice (*Aegean Painting*, fig. 35, p. 86-87). Even so, most of the wall-paintings in the Knossos palace seem to have been more accessible than their counterparts in other Minoan palaces and houses (Letesson 2012, 49).

²⁷⁵ The use of sanctuaries in outlying regions can also be seen for the later Greek *polis* (De Polignac 1994), even if no direct parallel of this to the Mycenaean situation can be established.

vestibule. Hence the central role of the palace in the ritual economy and the cycle of religious festivals was highlighted, together with the importance of this coordinated ritual activity for relating the outlying areas to the palatial centre. This means that the metaphoric 'connectors' of art depicting public ritual worked in two distinct ways. In the participative settings of art they would provide a highly symbolically-charged context to support the actual performance of rituals, while in the panoptic, narrative representations of ritual *topoi* the broader context of the cycle of ritual festivals would have been referred to.

Unfortunately the remains of art from the sanctuaries outside palatial settlements, such as Ayios Konstantinos on the Methana peninsula, are too fragmentary to ascertain whether such performative and panoptic scenes were used here as well. This would imply a broader sharing of art depicting public ritual. Better insights into the relation between palatial centres and their subjects can be gained from the burial evidence, which was also discussed in section 5.2.2. In certain exceptional cases art was used at a monumental scale in funerary contexts, such as for the Shaft Grave circles and the tomb façades at Mycenae, Orchomenos, and Thebes. For the case of Thebes a processional way and elaborate funerary ritual was also suggested, and depictions of funerary ritual are known from the Tanagra and Cretan larnakes burial coffins. Such elaborate funerary ritual and monumental art would, however, be limited to a small minority of the deceased, most likely the wanax king and the upper stratum of society associated with him. As a metaphoric 'connector' monumental funerary art would serve to underline the importance of this special class of the deceased in the overall social framework. For the majority of burials it is the portable art objects that yield insights into social relations. The discussion of the distribution of blue glass objects in burial contexts in section 5.2.2 is especially relevant for tracing social relations through art. Blue glass objects in burials were mostly beads, but there were also the seals, and occasionally more exceptional finds like the weaponry items from a Dendra grave in the Argolid.

Given that many of these blue glass objects were found in burials in more peripheral regions, the question of what this implies for the relation of these areas to the palatial centres arises. The notion of blue glass objects as (status) 'tokens' was noted, yet this also involved complex notions of aesthetics and identity. This can be seen particularly well for the use of beads in adorning the dead, but the seals also raise questions in this regard. 276 The use of blue glass for artistic purposes in palatial architecture is suggestive of a part/whole relation with the portable art objects made from this material. Furthermore, through the Linear B term ku-wa-no, blue glass was metaphorically connected to lapis lazuli and a complex aesthetics of colour. Ultimately the glass was imported through long-distance exchange with the Near East, and the common template of materiality of kuwa-no to Egyptian and Mesopotamian worldviews also suggests considerable influence in this regard. However, it is likely that the working of blue glass in palatial sites or in those under palatial control provided the key interface for the beads, seals, and other objects made from this material found in the burials. As such, the use of blue glass in funerary contexts functioned as a metaphoric 'connector' between the personal identity of the deceased and the palatial framework, which supplied both the art objects themselves and the colour aesthetics that made them very suitable for adornment and use in funerary contexts.²⁷⁷

A different set of part/whole relations between the palatial states and their subjects that involve art can be discerned for the theme of warfare and elite culture, which was discussed in section 5.2.3.

²⁷⁶ As noted in section 4.2.4 the seals may well have functioned as an index for status, but the possible role of the glass and soft-stone seals in administrative practices of some kind should not be completely ruled out either.

²⁷⁷ Although there is no space to consider this matter here, it is likely that some of these blue glass objects would have had more elaborate cultural biographies not necessarily tied to the palaces. The process of their distribution is not known, but it may have involved social relations within the framework of patrimonialism discussed in section 3.4.2 for the element of class and inequality.

First of all it is important to recall from that section that there were three levels of contexts of warrelated scenes in Mycenaean art. At the palatial level this can be seen in the narrative wall-paintings of battle scenes, as well as in the emblematic use of figure-8 shields. At the same time it was noted that the palatial states, partly through the scribes' stylus, controlled the key 'instruments of power' such as weaponry, chariots, and ships, as well as the contingents of warriors and sailors that used them. The second level was that of a more limited set of wall-paintings involving scenes related to war and elite culture, some possibly narrative in character, in houses as the palatial centres and also in secondary settlement sites. To this can be added war-related portable art objects in burials (which included ornamented weaponry). This art would be accessible to a broader elite group involved at a higher level in military matters, but who were on a personal basis also dependent upon the palace for the supply of key items such as chariots.

These chariots would have functioned not only as instruments of power, their depictions in art (including in houses at palatial sites) also suggest that they formed part of a more general elite culture. This can be seen in the third level of contexts of artistic depictions of war and elite culture, that of vase-painting. The common depiction of chariots, and to a lesser degree also of ships, are more indicative of a general elite culture than directly connected to the organisation of warfare. The wide distribution of these pots to areas outside the control of the palatial states such as Cyprus points to a widely shared elite culture, one that can be seen in the art styles of other contemporary cultures too (Feldman & Sauvage 2010). These different kinds of contexts of artistic depictions of warfare and elite culture imply different kinds of praxis. Within the palatial states the relation between the centre and its organisational capacities and the elite groups encapsulated in its framework can be recognised in the part/whole character of this theme of Mycenaean art. That is, the totality of narrative and emblematic art as shown on palatial walls, as well as the 'instruments of power' controlled by them, can be seen in more limited wall-paintings and portable art objects in houses at the palatial centres, secondary settlements, and burials.

In this way elite groups are tied not just to the palace through a basic need for the mutual coordination of military activities by a central authority, but also by a more broadly shared ideology that shaped their identity as a subject of the palatial state. The more complex narrative battle scenes such as that of Hall 64 in the Pylos palace (cf. Bennet & Davis 1999) and that of the Mycenae megaron would have reinforced such identities. Through the metaphoric 'connector' between hunting and warfare noted in section 5.2.4, the narrative hunting scenes could potentially have added to this identity as well, especially for the elite groups. The broader distribution of vase-painting scenes beyond the Aegean, however, has to be seen as separate from this palatial nexus of identity. Instead it can be seen as a looser sharing of certain elements of elite culture, adaptable to specific local contexts, as can be seen for the cultural biographies of some of the Mycenaean painted vases on Cyprus (Steel 2013, 209-216). This 'international' context can be seen more or less alongside the lines of the 'template' inferred for the relation of Mycenaean conceptions of lapis lazuli and blue glass to their Near Eastern counterparts, sharing basic similarities but adapted to specific socio-political contexts.

'Connector'	Description
'naturalistic skeuomorphism'	forms a basic natural background that links architecture to the natural world within which it was embedded
agonistic animals/humans	visible in a basic sense as a simile, but expanded further in narrative settings of hunting and battles
topoi public ritual	refers both to performative settings of ritual and to the overall cycle of ritual festivals
ku-wa-no	connects personal identity to a broader nexus of palatial production and distribution, as well as an aesthetics of colour-use influenced by the Near East
chariots	act as an index of elite culture and palatial control, visible in narrative extension in warfare-related and hunting scenes

Table 5.1: Material, iconographic, and linguistic metaphoric 'connectors' in Mycenaean art.

In this section the analysis of the agency of Mycenaean art moved from an outline of its metaphors to the semiotics that related these metaphors to each other in narrative and non-narrative pictorial settings, and finally to the role of the praxis of art in structuring social relations. Throughout the analysis a number of metaphoric and semiotic 'connectors' could be discerned, which are summarised in table 5.1 above. These 'connectors' can be understood within the model of Shapland discussed earlier in this section, which posited a developing set of analogical relations between humans and things that had been developed since the Neolithic in the Aegean. Here linguistic and iconographic 'connectors' are added to this analogical framework as well, as with the connecting role of visual *topoi* of public ritual and the semantics of colour-use of *ku-wa-no*. The list provided in table 5.1 is by no means a complete one of all the possible 'connectors' in Mycenaean art. More detailed investigations than the present one and new forms of evidence would undoubtedly add other 'connectors', as well as provide important qualifications to the ones presented here. However, for the present purpose of providing an overall synthesis to be used for the comparison with the Maya case, the analysis presented here is sufficient in having captured what are arguably some of the main features of the agency of Mycenaean art.

5.3.3: The agency of Mycenaean art in its longue durée context

Having outlined the agency of Mycenaean art in the previous section, the next step to be taken here is to situate that agency within the *longue durée* framework of Mycenaean early civilisation. The analysis in this section will follow the fourfold division of the *longue durée* trajectory of the Greek mainland of section 3.4.3, focusing on the Neolithic, the Early Bronze Age (EH I – II), the Shaft Grave period (MH III – LH I), and finally the Mycenaean palatial period of LH III. To start with the Neolithic period, it can be observed that this supplied many of the basic pre-conditions of the later civilisations of the Bronze Age, including agriculture, feasting, and the emergent modular household. Yet there is little in the limited artistic record of Neolithic Greece that can be connected to the art of the Mycenaean palaces, even if this does not imply that this art is not interesting in itself.²⁷⁸ At most an argument can be made that the basic patterns of skeuomorphism that can be seen in the Neolithic (Perlès 2001, 252-254), lay at the basis of later Mycenaean relations between material forms. Yet skeuomorphism in Mycenaean art involves quite different patterns and

²⁷⁸ Of particular importance in this is the agency of Neolithic Greek art as it relates to the early communal forms of organisation and later development of modular households. In particular portable art objects used for adornment (Perlès 2001, 221-226) have been used for arguments concerning Neolithic forms of personhood (e.g. Chapman et al. 2011).

techniques, so the relation (if it exists) is a highly generic one.

Just as with the Neolithic, the impact of the Early Bronze Age (specifically EH I – II) on the later development of Mycenaean art lay not in the direct continuation of a specific mainland art style. Rather, the developments in this period helped to establish another pre-condition of Mycenaean art and its social agency. In the case of the Early Bronze Age the key development lies in the introduction of seals, weights, and metal alloys. As noted in section 3.4.3, these three features can be related to the overall development of economic practices involving weighing, administration, and metallurgy in a 'social field' stretching from the Aegean to the Indus. The use of seals and particularly the weights, together with evidence for the exchange of metals, can be understood as part of Renfrew's notion of the 'commodity nexus' (see figure 46). This is an important concept for the discussion here and therefore deserves a more detailed treatment. Basic to the commodity nexus is the interaction of the four basic elements of commodity, measure, exchange, and value (Renfrew 2012, fig. 12.1, p. 254). It is useful to define these terms here in more detail, based on the present author's understanding of their meaning:

- 1. A commodity is a material or object created through social labour, which is allocated through exchange for serving one or multiple needs within a specific social context.
- 2. Measure involves establishing the physical properties of a circumscribed amount of material or standard form of it, according to some standard of size and/or weight.
- 3. Exchange is the process that connects the creation of materials and objects through labour to a demand based on socially-defined needs.
- 4. Value derives from the social needs for different commodities within a social context.

The definition of these four basic terms should make it clear why the evidence for weights and the exchange of metals (likely based on their weight) in the Early Bronze Age Aegean is so important, as it involves the introduction of complex forms of mensuration in exchange. The seals furthermore point to new kinds of economic relations based on the need for some form of accountability and control over commodities. The relevance of all of this for art can be seen in another aspect of the commodity nexus, namely the role of materials and objects related to notions of prestige. Renfrew (1986b, 157-159) used Marx's discussion of commodity fetishism to argue that what is significant in a prestige good is not so much the thing itself, but rather the nexus of social relations that made such goods prestigious in specific times and places. As such, prestige as a symbolic and social force plays an intermediary role not only in social interaction, but in the relation of humans with the material world at large as well.²⁷⁹ This can be seen in more practical terms for his discussion of the role of gold in the 5th millennium Varna cemetery in Bulgaria (Renfrew 1986b, 148-149). Gold was used in these burials to adorn the dead and also for more elaborate objects, functioning as a material of distinction in the social ranking that can be discerned in the Varna burials.

²⁷⁹ These notions go back to Renfrew's (1972) systems theory analysis of the emergence of civilisation in the prehistoric Aegean. The idea of the primacy of symbolism as a mediating role between humans and the material world in this work is derived from Cassirer (Renfrew 1972, 404-405), who can be situated in a broader tradition that had its origins in Vico (Verene 1985). It follows from this that the structural symbolic relation between the orders of humans and that of things, is what allows for social relations to be expressed in material terms. For Renfrew this is also what allows individual agency to shape history within systemic contexts:

[&]quot;Out of this equation of material objects and social activities or values, which in cold logic are simply not equivalent, existing as they do in different dimensions, arises the whole complex pattern of interactions among human activities such as those which we have been describing.......The essential kernel of many of the interactions between activities and between subsystems, interactions which are the mainspring for economic growth, develops from the human inclination to give a social and symbolic significance to material goods. For in this way a whole complex of activities in the material world satisfies aspirations, ambitions and needs which are, at first sight, entirely without adaptive significance in facilitating the continued existence of the individual or the species." (Renfrew 1972, 496-497)

The uses of gold to adorn, therefore, added prestige and in this way related the material to social distinctions. Although the characteristics of gold in terms of its colour aspects and durability likely influenced its selection for prestige objects, it was not intrinsically valuable but rather valued in social terms, which is captured in the notion of 'prime value' (Renfrew 1986b, 159). According to Renfrew (2012, 259-260) the use of gold as a material of prestige in the Varna cemetery, and later in the Shaft Graves as well, was more separated from an exclusively religious context of symbolically-charged materials. That is, gold would be used for adornment as personal display within a context of status competition in a funerary setting. This 'secular' use of gold would make its later fungibility (through being valued in weight) in coinage more easy to develop, in contrast to other cultures where materials like gold remained sacred and unique (hence immeasurable). As such, it is possible to sketch an overall trajectory of value systems in western Eurasia from the prestige use of a material like gold in its initial stage, later developing into an elaborate exchange system based on measurement and standardised units of value (Renfrew 1986b, 162-163). The particular pattern of the use of gold in the Varna and Shaft Grave cemeteries therefore lies at the basis of the later use of coinage and by extension even of modern capitalism (Renfrew 2012, 260).

Using these ideas provided by Renfrew, some aspects of the Mycenaean use of blue glass can be related to a broader theoretical framework. Although the use of blue glass cannot yet be seen in the Early Bronze Age, the pre-conditions of the commodity nexus as part of a broader social field stretching from the Aegean to the Indus were already present, as noted in section 3.4.3. It is useful to consider the general properties of Mycenaean blue glass as part of the long-term trajectory of the commodity nexus before turning to its actual use contexts in the palatial framework. The first general feature of blue glass to be considered here is its convertibility, as discussed in section 4.3.4. This convertibility depended upon the transformative process of glass-making, creating a material with very flexible working qualities. Just as with metals, glass could be shaped in a great variety of ways (including through the use of moulds), and another connection with metallurgy can be seen in the use of copper and cobalt as colouring agents in the making of blue glass. Based on these material properties, two different kinds of convertibility were possible. The first of these concerns the cross-craft linkages discussed in section 4.3.2, but more important here is the role played by convertibility in the exchange of blue glass.

As with the metals, the flexible working properties of glass allowed it to be shaped into a variety of forms, including the blue glass ingots found in the late 14th century BC Uluburun shipwreck. These ingots can be understood as being part of a commodity nexus, in the sense that their value in this context derived from their weight and by implication that they have number-based value. Even so, there are strong indications that as commodities these blue glass objects were not freely exchangeable with any other kind of material on a supply and demand basis. The exceptional 15th century BC Egyptian painting from Karnak noted in section 4.3.3 show a hierarchy of levels of different kinds of materials, including blue glass. This provides an alternative way for relating the value of commodities made of different materials to each other. The close proximity of blue glass to lapis lazuli in this painting, on the same level in the overall hierarchy, points to additional complexities in the value of blue glass. For the relation between lapis lazuli and blue glass was not based on their interchangeability as commodities, but rather on their close association in terms of materiality and a complex colour-based aesthetics.

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²⁸⁰ This brings up the question of comparison with other kinds of systems for determining value in different regions of the world, which may be of relevance to understanding their long-term trajectories as well (Renfrew 1986b, 163). This question will be addressed in section 9.3 for the comparison of Mycenaean and LPC lowland Maya art.

The role of the conception of materiality and colour of lapis lazuli and blue glass as captured in the Linear B term ku-wa-no was discussed extensively in the previous section for the agency of Mycenaean art. There it was argued that the use of blue glass beads and other objects made from this material to adorn the deceased acted as a metaphoric 'connector' between personal identity and the palatial context in which the material was worked. The close relation of blue glass to lapis lazuli and the broader semantics of colour-use implied by ku-wa-no, as well as the association with gold, provides additional meaning to the role of blue glass as a 'connector' between individual adornment and collective identity. In this sense blue glass clearly functioned as a prestigious material in the Mycenaean palatial framework. Yet at the same time it was also exchanged as a commodity in long-distance exchange, where its value was determined by the numerical weight of the ingot shape. It is not the case that the difference between blue glass as a material for adornment and as a weight-based commodity would have been due to a strict separation between the sphere of the palaces and that of long-distance exchange. For it is the template of materiality and colour conception that related lapis lazuli and blue glass to each other that was shared over a large area, creating similar aesthetic uses across the area of the Near East and eastern Mediterranean.

Both exchange and the colour-based aesthetic of blue glass were spread over a large area, which implies that the roles of blue glass as a commodity and as an aesthetically valuable material were not incompatible but rather complementary. This can be seen as an intermediary stage in Renfrew's outline of a long-term trajectory in western Eurasia from the use of prestigious materials like gold from 'secular' status to coinage. Furthermore, as noted in section 4.3.4, there was a pre-existing colour aesthetics before the advent of metallurgy as well, which has to be taken into account (cf. Chapman 2007, 70). Based on these observations a more refined trajectory, if also more Aegean-focused, can be sketched for the development of (colour-based) materials for prestigious adornment in relation to the commodity nexus:

- 1. The use of naturally-occurring copper for ornamental purposes, which can be seen in the Near East as early as the 11th millennium BC.
- 2. A new preference for gold as a prestigious material for adornment, together with the use of semiprecious stones for this, after the initial development of metallurgy. This corresponds to the case of the Varna cemetery as discussed by Renfrew.
- 3. The expansion of the amount of materials used for adornment through the larger-scale use of materials such as blue glass. This scale in the use of blue glass was possible because of its flexible working properties as a material, something that also facilitated its convertibility in exchange and cross-craft uses. It was this flexibility that allowed blue glass to be used both as a commodity and a prestigious material.²⁸²
- 4. The development of standardised, weight-based units of universal value in coinage.

Based on this it is possible to qualify Renfrew's idea, discussed earlier in this section, that the 'secular' use of gold as a material of prestigious adornment in the Varna cemetery can be seen as the

As noted in section 3.4.2 for the element of specialised knowledge, the use of a weighing system involves both measuring the physical properties of a material and relating that weight to the value of the material in exchange relations. This may be related to the latent opposition between value as determined within the process of exchange and value as a social relation discussed by Marx (Harvey 2010, 49). Basic to this opposition in modern capitalism is the abstraction of value as a number in money. It may well be that the abstraction of number in the weighing systems of Bronze Age western Eurasia represented a first step towards this dichotomy, but one circumscribed by the lack of coined money and the limited scope of the exchange of commodities. Wengrow (2008) emphasises the parallel between Bronze Age and modern commodities based on other factors like the seals for 'branding' commodities, but this would be more for facilitating their exchange than for determining value.

²⁸² This flexibility was similar for metals, as noted in (Sherratt 2000), but these were used for a wider range of purposes than blue glass. Even so there are relations between metals and aesthetics as well, as can be seen for the use of tin in creating colouring effects on the surfaces of Mycenaean pottery (Gillis 2004).

starting-point for the development of the commodity nexus. It remains plausible that the initial step towards this nexus involved the prestigiousness of gold, which derived from the development of metallurgy and the emergence of a ranked society. It is the conception of the place of Varna in the overall sequence that needs to be changed somewhat. First of all, it can be noted that the colour aesthetics of gold developed out of a pre-existing colour aesthetics. It is indeed very likely that the emphasis on gold in the Varna cemetery was induced by the introduction of metallurgy, but it is less clear why this should lead to a more 'secular' conception of gold as separate from religious ideas. The much later case of the Mycenaean use of blue glass can provide some clarification of this for the Late Bronze Age, even if it should not be used to directly influence the interpretation of the Varna material. One notable feature of blue glass, as emphasised numerous times, was its convertibility. This allowed for it to be used both as a commodity and for working it into a variety of forms to be used as a material for adornment for the deceased in burials, as well as its use as an inlay in architecture and furniture.

This 'promiscuity' of the different roles of blue glass derived from its convertibility, which in turn derived from the flexible material properties of the material created through the transformative process of glass-making. As noted in section 4.3.4, this sequence of transformative creation through pyrotechnology, to convertibility in working and exchange (ingots), and finally to use contexts of materials can also be seen for metal alloys. One difference, however, is that blue glass was limited to aesthetic uses. These aesthetic uses, furthermore, were part of a broader conception of colours and materiality that related blue glass to lapis lazuli, and both materials in turn to other materials (gold) and to a wider set of semantic meanings implied by the term *ku-wa-no*. Two important points derive from these observations. The first is that as a 'connector' based on linguistic metaphors, the term *ku-wa-no* cannot be understood as either 'secular' or 'religious'. Rather, based on the discussion of Homer and the Bronze Age Near Eastern textual sources in section 4.3.3 the semantics of colour terms can be seen as allowing for a variety of uses, some of which are highly charged in a religious sense and others more in terms of prestigious adornment. These uses can sometimes be hard to disentangle, as in the use of gold and lapis lazuli in the Royal Cemetery of Ur.

The semantics of colour-use in the Mycenaean use are less well-understood, but based on the shared template with the Near East outlined in section 4.3.3 would have been similar in basic principles. This brings us to the second point, namely that it was the convertibility of blue glass as a material that would have allowed for a more extensive sharing of the prestigious and other metaphoric qualities of lapis lazuli. In fact, the Mycenaean use of blue glass can be seen as the commodification (through the exchange of ingots) and mass-production (though the moulds) of items of adornment, to be distributed across a greater segment of the population. 283 As such, this seems to represent an intermediate position between the use of a material (gold) for prestigious adornment, as in the Varna cemetery, and the use of coined money. Blue glass was dual in that its value lay both in its weight and its aesthetic colour qualities, both of course deriving from the transformative process of glassmaking. Much more research is needed, however, to situate the Mycenaean use of blue glass in particular and the Late Bronze Age aesthetics of blue glass and lapis lazuli in general within the overall trajectory that stretched from the early metallurgy of Varna to the Iron Age and the adoption of coinage. This is beyond the scope of the work here, but it may be useful to focus more on the relation between metallurgy and convertibility, as it is related to aesthetics and (prestigious) adornment in the earlier stages of the western Eurasian trajectory.

²⁸³ Once again, it should be stressed that even if the quantities of blue glass were much greater, the relative value of lapis lazuli to blue glass remains unknown. Based on the Egyptian evidence referred to in section 4.3.3 there is no reason to assume *a priori* that lapis lazuli was intrinsically seen as the more valuable material.

Having considered the long-term trajectory of some aspects of Mycenaean art, it is now time to turn to the actual formation of a distinctly Mycenaean style in the Shaft Grave period. Of course it should be constantly borne in mind that both in terms of craft-work and style, Mycenaean art was largely derivative of the art of Minoan Crete and the Cyclades. Some particular mainland influences can be seen in style, as with the notion of 'bounded naturalism' discussed in section 4.4.2, but the real distinctiveness of Mycenaean art lay in the kinds of subjects emphasised in it such as war and hunting. As noted in section 3.4.3, two other elements of the later Mycenaean early civilisation first developed in this period, namely a warrior culture and a lineage-based pattern of class and inequality (the conical clan). These two elements can be recognised in a fairly straightforward way in the art of this period. The patterns of portable art objects in the Shaft Grave burials, and in burials in other regions such as Messenia as well, show a concern with adorning the dead and prestige objects. Without going into detail for each kind of artefact, the overall pattern can be understood according to the ideas of prestigious adornment of Renfrew referred to earlier. This facilitated the process of social distinctions discussed for the Shaft Grave period in section 3.4.3.

One notable feature of the portable art objects of the Shaft Graves is that they depended upon outside influences (mostly from Minoan Crete) in terms of craft-work. Some of the finds are highly exceptional, such as the 'black bronze' daggers referred to in section 4.3.3 that carried more complex iconographic scenes. The prominence of weaponry within the burial assemblages is paralleled by a clear concern with hunting and warfare in the extant imagery on both the portable art objects and on the stelae. It can be recalled from the discussion in section 4.4.3 that the simile between humans and lions in pursuing prey, as well as the further extension from hunting to warfare, derived from scenes on a Shaft Grave stela and a 'black bronze' dagger. Some form of narrative extension can also be noted in the Shaft Graves in the form of the battle-scene on the Siege Rhyton (Blakolmer 2007a). In more general terms the focus on prestigious adornment and hunting and warfare-related imagery can be understood as part of the articulation of identity within and between emerging conical clans. Prestigious adornment in this sense served as a 'connector' to the longer-distance contacts within the Aegean, in particular with Crete, in which elite lineages would have played a dominating role.²⁸⁴ Warfare-related images would have functioned as a 'connector' to the role of military force involved in the expansion of polities organised around conical clans. The theme of hunting acted as a broader extension of warrior prowess and prestige, which can also be seen in adornment using boar's tusk helmets in burial.

The discussion of the agency of Mycenaean art in relation to the other elements of this early civilisation during the palatial period of LH III, has to start with a consideration of the palaces as monumental complexes containing art. The use of the 'connector' of 'naturalistic skeuomorphism' discussed in the previous section related these buildings themselves to the natural world of which they formed part, and with which they interacted through administration and the projection of state power. The use of wall-paintings in these buildings also created the possibility for more complex narrative depictions of themes from the art of the Shaft Graves, as well as for the introduction of new themes and performative settings. The rendering of the spatio-temporal environment in wall-painting highlights the palatial *Umwelt*, showing its architecture, the boundaries provided by the sea and hills, as well as more complex terrain settings for different activities and indications for seasonality. In this way a pictorial counterpart was created to the administrative conception of the spatial layout of the Mycenaean kingdoms in the Linear B tablets. Both the artistic image and the administrative text would create a form of 'legibility' of the spatial context in which the palaces

²⁸⁴ Here the work by Helms (1988, 1993a, 1998) on the importance of distance as a 'cosmological' factor in pre-modern cultures can be noted. Her argument that privileged access to craft-work and ideas from distant sources fostered prestige and legitimacy has also been used for the Shaft Graves (Wolpert 2004).

were embedded, and in this way art can be seen as a form of specialised knowledge as well.²⁸⁵

The themes of hunting and warfare-related scenes that could already be seen in the Shaft Graves continued into the palatial period. However, its role in relation to the elements of a military organisation and class and inequality was changed by the addition of a third element: that of the palatial states. The full-scale development of Mycenaean states created important changes in military organisation, as discussed in section 3.4.2, including the administrative monitoring of land and naval contingents, control over weaponry items, and the construction of large-scale fortifications and road systems. Given the pre-existing warrior culture and its social base in conical clans, there would exist a need to incorporate this culture within the new palatial framework. The extensive discussion of the praxis of Mycenaean art in the preceding section is very relevant in this regard, for it showed a part/whole relation between the palaces and elite groups for the theme of warfare. Although the battle-scenes and other war-related art in the palaces were concerned with Mycenaean ideology and identity in general, elements were incorporated separately into more clearly defined elite contexts.²⁸⁶ The chariot played an important role in this, functioning as a 'connector' between the wall-painting narratives and palatial control over its production on the one hand and elite prestige on the other, a prestige expressed more broadly in vase-painting.²⁸⁷

Another part/whole relation in the agency of Mycenaean art noted in section 5.3.2 was for public ritual. Here, however, this relation was not between the palaces and elite groups, but rather between the use of wall-paintings in performative settings of ritual (as a part) and the use of narrative wallpaintings to refer to the overall ritual cycle (the whole). This duality of ritual performance and more generic topoi of public ritual related the palatial centre and its coordinating role in the cycle of ritual events to the outlying areas of the realm. This cycle of religious festivals and its provisioning through a ritual economy had an integrative effect, not only between the palatial centre and its hinterland but also between different social groups. As noted in section 3.4.2, there was a strongly corporate aspect to these events, as reflected in the terminology of obligations used to describe them and also practically in the large-scale distribution of meat. It is unclear whether this ritual cycle of the Mycenaean palaces developed out of a pre-existing system. Yet with the further development of the LH III palatial framework there existed a clear reason to capture the broader set of ideas concerning public ritual in both performative settings and narrative topoi. Hence just as the metaphoric 'connectors' of hunting and warfare could be adapted from the Shaft Graves for new purposes in the emergent palatial framework of LH III, so new 'connectors' could be created to facilitate new roles of public ritual as well.²⁸⁸

A third change induced by the development of the Mycenaean states was that the praxis of prestigious adornment as they could be seen in the Shaft Graves and other early Mycenaean burials

²⁸⁵ The notion of 'legibility' was discussed in section 2.4.4 as the use of schematic templates to provide conceptual order, allowing for elite control. However, the administrative conception of space of the Linear B scribes should not be conflated with the artistic rendering of space, since the latter was based on the long-standing iconographic conventions that were discussed in section 4.4.2.

²⁸⁶ The role of the hunting narratives in this is very interesting. The way hunting narratives were depicted in Mycenaean wall-painting seems more suggestive of hunting being an elite activity, based on the presence of chariots, the clothing and attributes of the participants, and the use of hunting dogs, and generally the elaborate character of the activity. It may be that as warfare became a larger-scale activity involving large groups of warriors, hunting became a more suitable way to showcase special qualities in warrior prowess for elites.

²⁸⁷ Chariots were depicted in the Shaft Graves as well, as on one of the stelae, the concern here is with the shift towards the palatial control over this artefact, however.

²⁸⁸ Of course the evidence for continuity noted for the LM II – IIIA palace of Knossos in section 5.2.2 with regard to public ritual should also be noted in this regard. One argument made for the 'throne' are as a locus of ritual activity was that it was 'transferred' from Knossos to the mainland palaces after the destruction of the Knossos palace at the beginning of LM IIIA2 (Maran & Stavrianopoulou 2007, 290-291)

changed. This can be understood as part of the overall trajectory of value systems sketched earlier in this section, something that is not surprising given that this sequence was related closely to the Aegean evidence. The introduction of blue glass created changes at a more technical level, in that its convertibility made it possible to be exchanged as a commodity and worked on a larger scale using moulds and cross-craft techniques (including notably for inlays). Based on this there were also changes in patterns of prestigious adornment, shifting away from the exclusivity and reliance on outside craft-work that could be seen for the Shaft Graves. First of all, despite the lack of glass-making abilities and the consequent need to import blue glass from Egypt and Mesopotamia, the material was worked extensively within the Aegean itself. Based on the blue glass ingots found in the Uluburun wreck, the Linear B references to workers dedicated to *ku-wa-no*, and the distribution of moulds, working blue glass would have taken place within the palatial framework.

As discussed in section 5.3.2, the blue glass objects such as beads, but also seals and weaponry parts were used in burial contexts to adorn the dead. This would involve an aspect of prestige, but also more broadly notions of identity. The broader semantics of colour aesthetics as they could be noted for the term *ku-wa-no*, based on a shared template with the Near East, provided a further extension of the blue glass to lapis lazuli and a complex material ontology. Furthermore, lapis lazuli and blue glass were both used in palatial settings, as can be seen in the hoard contexts of seals made from lapis lazuli in the Thebes palace and for the architectural use of a blue glass inlay in the Tiryns palace. The use of *ku-wa-no* inlays in elaborate furniture, even if it was unknown whether this concerned lapis lazuli or blue glass, provided another example of the high valuation of either of these materials. The relation between the palatial hoards and display of *ku-wa-no* materials to their broader distribution in the form of smaller, portable art objects like beads is very much a part/whole one. In this regard it can be useful to return to the concept of the palaces as 'storehouses of value' referred to in the discussion of the element of economic relations in section 3.4.2. Although not concerned with blue glass specifically, the argument made by Killen in this regard is of considerable relevance to the present discussion:

"It is possible, indeed, that some of the items of luxury production which are mentioned in the tablets were never intended for use in the narrow sense of the term, but were objects that would have remained in store until such time as the need arose to dispose of them by way of a diplomatic or other gift. Other manufactured goods may have been used for conspicuous display in the palace buildings (one thinks here particularly of the elaborate furniture recorded on the Pylos Ta tablets); and this again would have been an important means of enhancing prestige (and hence also power) of the centres. Some products, again, may have been used for trading or other external exchanges: most probably, exchanges conducted or controlled by the centres themselves." ²⁹⁰ (Killen 2008, 178-179)

The notion of the Mycenaean palace as a 'storehouse of value' is also useful to understand the relation between the palatial context of the production of chariots and their distribution to elite groups. The palatial 'display' of chariots within narrative wall-paintings of hunting and war-related scenes added additional meaning to this 'instrument of power' as an elite good, as did the ubiquitous depictions of it in vase-painting. Value in the sense of prestige was in this way again related to broader stories and metaphors, through the 'connector' of art. This leads us to some observations on the general role of art within the LH III palatial states. It was stated at the start of the discussion of LH III art in this section that the rendering of the spatio-temporal environment in the wall-paintings helped to make 'legible' the environment within which the palatial states were situated. The

²⁸⁹ Of course on the basis of the iconographic evidence this would have had its parallel in adorning the living as well. ²⁹⁰ Killen (2008, 178) notes similar relations between storage and wealth for the Near East and Homer (cf. Finley 1977, 65-67). The kinds of objects in Homer and the organisation of their manufacturing are quite distinct, however.

'naturalistic skeuomorphism' also provided a 'connector' between architecture itself and the physical world of which it formed part. Based on the discussion of war-related art and the role of chariots, depictions of public ritual, and the role of blue glass, it is possible to argue that these artistic elements functioned as 'connectors' between the different social relations in a 'legible' framework. These 'connectors' both reflected and helped shape the 'relational personhood' of different kinds of actors such as elite groups, the broader social groups that participated in ritual events, and communities located in more peripheral areas that used blue glass beads for adorning the dead.

Viewed in a certain way the role of art in the Mycenaean palaces can almost be seen as a form of *bricolage*, with the palaces taking the different metaphoric 'connectors' listed in table 5.1 as they were available from different sources. In particular the role of warfare-related and hunting scenes would derive from the Shaft Graves, the rendering of public ritual to some degree was derived from Minoan art, and the blue glass and the broader aesthetic metaphors associated with it were literally imported from the Near East. Of course, the emphasis on a limited number of themes here implies that a more refined overview of Mycenaean art, taking into account more evidence, might reveal more internal coherence. Nevertheless, the patterns as presented here have to be accounted for. Here it is important to emphasise that despite the *bricolage* character of the use of the different kinds of metaphoric 'connectors', a common aspect of all of them is the dominance of the palaces. This can be seen particularly well for the part/whole relations as they can be observed in both iconography and the distribution of portable art objects. It was argued in section 5.3.2 that these part/whole relations can be understood within an 'analogical' worldview, in which phenomena intrinsically different from each other could be related through metaphoric 'connectors'.

The relation of these analogical connections discerned for Mycenaean art and the role of the palaces within it can become clearer when we recall the discussion of an 'archival' system of administrative order in section 3.4.3. The point there was that a nexus of weighing, administration, and metallurgy formed the core ordering principle of Bronze Age palatial states like those of Mycenaean Greece. It was furthermore noted that as an administrative system this existed parallel to a structure of power based on patrimonialism, which had developed from the Shaft Grave period onward. It is at the intersection of these two that the social agency of Mycenaean art can be seen most clearly, drawing different social groups together through metaphoric 'connectors' within the framework defined by the 'archival' system. In general terms the function of weighing and administration can be argued to have created regulative 'connectors' between people and things, but it would go too far to ascribe the work of the artists as derivative of that of the scribe (or the other way around). However, further investigation of the relation between the two may well prove very fruitful, as can be seen in a recent study of the iconography of monsters or 'composite beings' in Bronze Age art as it relates to the role of seals and the broader administrative framework (Wengrow 2014).

Some final comments have to be made about the role of metallurgy. It is quite clear that the nexus of weighing, administration, and metallurgy that forms the core of 'archival' systems was tied to the use of specific kinds of metals, namely bronze alloys. At least as noted in section 3.4.3 the origin of this nexus in the 3rd millennium BC and its demise after the spread of large-scale iron metallurgy, broadly corresponds to the period in which this kind of metallurgy was dominant. In fact one of the factors behind the disappearance of the Mycenaean palatial system itself was argued to have been a change in exchange patterns of metals (if not attributable to iron). Furthermore, the use of lapis lazuli and other semiprecious stones was also connected to the emergence of the nexus of weighing, administration, and metallurgy. The later prominence of blue glass can be seen as a Late Bronze Age extension of this. Notably the entire aesthetic complex of lapis lazuli and blue glass completely ceased in the Aegean after the collapse of the palaces (if not completely so in the Near East), except for faint traces in oral poetic tradition. These developments point to the importance of

understanding changes in metallurgical technology as they relate both to changes in the organisation of society and to changes in aesthetic preferences. This issue cannot be properly addressed on the basis of the Mycenaean case alone. However, using the comparative case of the LPC lowland Maya early civilisation and its art, a case without any metallurgy at all, it will be possible to discuss this question further in section 9.3.

CHAPTER SIX: INTRODUCTION TO LATE PRECLASSIC LOWLAND MAYA EARLY CIVILISATION

6.1: Introduction

This chapter starts the analysis of the Late Preclassic lowland Maya case by outlining its key characteristics as an early civilisation. As such, its structure is similar to its Mycenaean counterpart of chapter three, having the same dual purpose of introducing both the means available for interpretation and the overall interpretations of this case that have been formulated. The main sections will follow the sequence of chapter three, starting with section 6.2 on terminology and chronology. This is followed by section 6.3 on sources, which together with 6.2 will be used not only to introduce the Maya case but also to evaluate its comparability with the Mycenaean one in chapter nine. Section 6.4 then discusses the general interpretations of the LPC lowland Maya early civilisation, following the framework established in section 2.4. The purpose of this is threefold. Not only is the case itself hereby introduced, but the overall interpretations also serve to facilitate the analysis of the agency of art in section 8.3. Furthermore, this section also forms the basis of the general comparison of the Mycenaean and LPC lowland Maya early civilisations in section 9.2.

6.2: Terminology and chronology of the Late Preclassic lowland Maya

In order to grasp the terminology and chronology of the Late Preclassic lowland Maya it is necessary to consider the broader terminology of Mesoamerican archaeology as well (see figure 47 for its geographical outline). Although the area stretching from Northwest Mexico to western Honduras was implicitly recognised as a cultural macro-region from the late 19th century onwards, the first explicit and coherent formulations had to wait until the 1940s. In that period Paul Kirchhoff put forward a conceptualisation of the area as a region with a coherent set of cultural traits shaped by a common long-term historical trajectory (Willey & Sabloff 1980, 165, 167).²⁹² This was also the time when the interpretation of Mesoamerica in anthropological and sociological terms started to be carried out in a more systematic manner (Wolf 1994, 2-4). More recent definitions have refined this group of shared and long-lived social and cultural practices, as listed in table 6.1, though linguistic and geographic factors also play a role in defining the macro-region (Joyce 2004, 3-12).

²⁹¹ Hereafter the term Late Preclassic will be abbreviated to LPC and Middle Preclassic to MPC, except in the titles of chapters and sections where they will be written in full. In absolute dates the range of the MPC is 700/600-250 BC, and that of the LPC 250 BC – AD 100/150, see further below.

²⁹² Other early researchers such as Pedro Armillas (1948) argued for limiting the terms to those periods and areas with early civilisations only, but this argument has by and large not been followed.

Practice	Examples	
agricultural production	basic crops maize, beans and squash	
	intensification though raised fields (Aztec chinampas)	
	specialized use cacao, amaranth and maguey	
long-distance exchange	trading obsidian, cacao and jade	
ontology and ritual	vigesimal number systems	
	basic divinatory calendar	
	different kinds of writing systems	
	ritual warfare pattern	
	related forms of religious architecture	
socio-political structures	social distinctions in dress	
	distinctions in personal ornaments and accessories	

Table 6.1: Shared Mesoamerican practices as adapted from (Joyce 2004, fig. 1.2, p. 4).

Together with the formulation of the concept of Mesoamerica as a cultural macro-region, a chronological framework was developed as well. Ultimately the work of Willey and Philips (1958, 3-4) proved most influential in this regard, as they used a descriptive culture-historical approach in such a way that it could facilitate processual explanation. They outlined a scheme that could link together the components from individual sites to the 'integrative units' of tradition (local temporal sequences, mainly of ceramics) and horizon (shorter-term geographically extensive spreads of specific artefacts). This allowed them to link the entire archaeological record of the Americas in a single terminological framework (Willey & Phillips 1958, fig. 1, p. 41). As fleshed out in empirical terms, this entailed a developmental scheme comprised of the Lithic, Archaic, Formative, Classic, and Postclassic stages, each with distinct characteristics (Willey & Phillips 1958, 200-205). In principle this scheme was used to make sense of all of the archaeology of the Americas, but with the Classic and Postclassic periods being limited to the early civilisations of Mesoamerica and the Andes.²⁹³ Yet the further development of archaeology has led to a more pragmatic consideration of the specifics of the long-term Mesoamerican trajectory, even if the terminology is retained (Evans 2012), though not without misgivings (Sabloff 2004, 17).

One thing that can be learned from the culture-historical approach outlined above is that the definition of Mesoamerica is bound up with the terminology of cultural development. Whereas the archaeology of human dispersal in the Americas is best viewed on a continental scale, research specific to Mesoamerica starts with a special focus on the process of the development of a food-producing economy through domestication, especially of maize (Blanton et al. 1993, 35-49). It can

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²⁹³ Both in Mesoamerica and Peru the Classic period was seen as the 'climax' of development (Willey & Philips 1958, 39-40), which carried with it certain Winckelmann-like connotations. For example, the change from Classic to Postclassic in both areas is seen as a decline in aesthetics and religion, and a shift to secularisation and militarism (Willey & Philips 1958, 204-205). As with many culture-historical schemes there is a tendency to overemphasise qualitative differences between periods, which have been almost invariably qualified and nuanced by later data.

be argued that after about 2000 BC the development of a food-producing mode of subsistence went hand in hand with the establishment of village life and new social relations, which are expressed also in distinct artistic ways (Joyce 2004, 4-5). Most of the elements discussed in table 6.1 derive from this development. Also highly important for the specific character of Mesoamerica as a distinct macro-region is the development of a 'metaphysics': a set of interrelated ideas, artefacts, and practices (Clark 2004). These developments had a crucial impact on the subsequent development of Mesoamerica as a macro-region. Developments in the Maya lowlands were somewhat later, as only at the start of the MPC period (about 1000 BC) the first substantial, longer-occupied sites can be recognised. The reasons for this slower development are as of yet not well-understood (Houston & Inomata 2009, 74).

Despite the uneasiness with the more theoretical biases of culture-history and the discovery of considerable overlap in cultural features between periods, terms such as 'Preclassic', '294 'Classic', and 'Postclassic' are retained in Maya archaeology as chronological signifiers, even if their content has been greatly modified (Houston & Inomata 2009, 16-17). This is especially true for the LPC period, which previously had been defined mostly by the emergence of village life and agriculture. Willey and Philips (1958, 149-151) had acknowledged the existence of some trends toward ceremonial centres and other elements of the Classic stage in the later phases of their Formative stage (which corresponds roughly to the Preclassic) in different parts of Mesoamerica. Yet they also argued that there was insufficient concentration of these elements to achieve a true transformation into a Classic-type culture. In the past decades Maya archaeologists have disproved this through discovering a relatively dense concentration of larger LPC sites in the lowlands, and much the same can be observed for other Mesoamerican regions. The implication is that the first urban and state societies have to be pushed back into the LPC period (Estrada-Belli 2011, 53).

The focus here lies on the Maya lowlands, an area which itself is divided into a number of specific regions. Primary is a division between the northern and the southern parts, owing to differences in terrain and vegetation (Houston & Inomata 2009, 9), but within these parts a variety of different regions can be recognised as well. Examples of these are the Petén and the Usumacinta river basin, but there are no very clear-cut topographical boundaries to divide them from the overall area. The high biodiversity and differences in soils and hydrology rather make for a mosaic of subtly different regions, which offer different agricultural potentialities. In the LPC period the densest concentration of important sites can be found in the Petén and Belize, as shown in figure 48. Many important sites for this period have been found in the southern Maya area, incorporating both the Guatemalan highlands, especially the site of Kaminaliuvu, and the Pacific coast. Here what has been described as a city-state culture flourished during this period (Love 2011). The impact of the developments in this area, as well as from those of the Gulf coast Olmec centres, on the Maya lowlands is much debated (e.g. Hansen 2005). A recent discovery at Seibal has revealed, however, that an important architectural feature characteristic of the lowland Maya, the so-called E-group, was already present in the early MPC period (Inomata et al. 2013). This implies that the relation between the Maya lowlands and other areas of Mesoamerica have to be grasped more from an interactive perspective than as an imposition from the outside.

With regard to the internal chronological subdivision of the lowland Maya Preclassic, this is divided into the familiar tripartite scheme of Early, Middle, and Late. Starting with the Early Preclassic, sometimes called Archaic, this period is aceramic and is conventionally dated to c. 2000-1000 BC

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²⁹⁴ The term Preclassic is most commonly used in Maya archaeology, whereas in other regions of Mesoamerica the term Formative remains in use. Confusingly, in Belizean archaeology the term Formative is still used as well (e.g. McAnany 2004a, 3). Here the term Preclassic will be used consistently for the lowland Maya, including Belize, and the term Formative will be used for the rest of Mesoamerica.

(Sharer & Traxler 2006, table 2.2, p. 98). Recent evidence suggests farming populations may already have been present by 2400 BC in the Maya lowlands (Estrada-Belli 2011, 38-39). Lacking ceramics and other substantial remains of communities, little can be said as of yet about the particulars of this period. By contrast, with the beginning of the earlier part of the MPC period (c. 1000-700/600 BC) a number of different regional ceramic complexes can be observed. Collectively these are known under the rubric pre-Mamom, but can be recognised separately as the Ek, Ox, Eb, Cunil, Xe, and Swasey spheres (Houston & Inomata 2009, fig. 3.1, p. 67). One puzzle remains the later adoption of ceramics in the Maya lowlands, although the earliest ceramics may date to somewhat before 1000 BC (Hansen 1998, 55). It may be that the Early Preclassic farmers were less sedentary or used containers made of perishable materials, but another possibility is that the development of ceramics can be linked with changes in social structures and diet. Different hypotheses have been proposed, including the use of pots as markers of status (Estrada-Belli 2011, 43-44), and as evidence of food-sharing between nuclear families (Cheetham 2010).

For the later MPC period (c. 700/600-250 BC) and the LPC itself (c. 250 BC – AD 100/150), it is possible to recognise ceramic spheres, respectively called Mamom and Chicanel, whose geographic reach spans the Maya lowlands as a whole, and even can be found in the northern lowlands (Ringle 1999, 198). The trajectories of different sites within these broad Mamom and Chicanel ceramic spheres can be traced using a combination of stratigraphy, architectural phases, and scientific dating techniques. Following these periods, a more tentative, transitory phase is the so-called Protoclassic or Terminal Preclassic period, usually dated to AD 100/150 – 250. The ceramic basis on which this period is defined is more problematic, however, as there is a mixture of continuity and new innovations like mammiform supports and polychrome decoration, which are not found at all sites (Estrada-Belli 2011, 118-119).²⁹⁷ The state of research for the later Preclassic phases is such that it is not possible to develop the more fine-grained chronologies, as they have been outlined for the Late Classic Maya period where resolutions as fine-grained as 20-30 years can sometimes be achieved (Demarest 2009, 260). Given the absence of the ubiquitous Long Count dates of the Classic period that allow for tracing some royal dynasties over centuries (Martin & Grube 2008), the LPC period is essentially devoid of a substantial historical record.²⁹⁸

In terms of analysis at the site level, there is a reliance on a combination of stratigraphy, scientific dating techniques, and architectural phases, as well as the development of site-based pottery typologies.²⁹⁹ The result is that cultural developments can be broadly traced, and that more weight should be given to the substance of the archaeological record than to the precise meanings of terms like Preclassic and Protoclassic. On the basis of this other subdivisions can be made, some of which are based on the Long Count cycles of the Maya calendar. For example, the most important LPC

²⁹⁵ It should be noted that all the dates used here are highly approximate and can vary quite a bit according to different researchers and different sites, and thus blankets much of the underlying site-based complexities. Note for example the differences here with Cheetham (2005, fig. 3.2, p. 29).

²⁹⁶ As part of the nomenclature of the 'type: variety-mode' system used by most Maya ceramic analysts, the different phases at sites are referred to as complexes, which are further subdivided into facets such as early, middle, and late, see for definitions (Powis 2002, 20-21). The sphere is then defined by a number of complexes that share most types, as with the Sierra Red type vessels found widely in the different sites belonging to the Chichanel sphere.

²⁹⁷ A rather different order was proposed on the basis of a ceramic reanalysis of the transitory phases of the Protoclassic, proposing two phases of a 'ceramic protoclassic' dated to 75 BC – AD 150 and AD 150-400 (Brady et al. 1999, 35).

²⁹⁸ Based on Classic period retrospective texts there is some, but very limited, information on earlier kingship. It can be inferred that the first king of Tikal, Yax Ehb'Xook?, likely founded his dynasty between AD 63-138 (Martin 2003, 5). As such it has been connected to the rich burial 85 at the site, dated to AD 75 (Estrada-Belli 2011, 56), but solely on logical grounds, as there is no direct evidence to that effect from the burial itself (Coe 1990, 217-220).

As part of the nomenclature of the 'type: variety-mode' system used by most Maya ceramic analysts, the different phases at sites are referred to as complexes, which are further subdivided into facets such as early, middle, and late, see for definitions Powis (2002, 20-21). The sphere is then defined by a number of complexes that share most types, as with the Sierra Red type vessels found widely in the different sites belonging to the Chichanel sphere.

developments can be framed temporally from the start of the Cycle 7 *bak'tun* into the Cycle 8 *bak'tun*, more pragmatically subdivided in the periods 354-58 BC and 58 BC – AD 159 (Reese-Taylor & Walker 2002, 88-99). Here this temporal division will be accepted based on the substance of the archaeological record, but no use will be made of the Long Count terminology. There are two reasons for this, the first being the continuing uncertainty whether the Long Count was used in the LPC lowland Maya area. The second reason is that, as will be discussed in section 6.4.3, the use of such period markers can be associated too closely with certain models interpretive models.

6.3: Sources for the interpretation of the Late Preclassic lowland Maya

The current state of work in Maya archaeology, especially with regard to its sources, has been described as a 'golden age' in a recent overview (Houston & Inomata 2009, 3). This is true both for 'dirt archaeology' and textual approaches. To start with the former, the conditions for surface survey in the Maya area are difficult because of the terrain and vegetation, especially in the more densely forested parts of the southern lowlands.³⁰⁰ Initial work by explorers such as Stephens and Catherwood in the first half of the 19th century was mostly concerned with finding and drawing the major monumental centres. With the advent of excavations in the first half of the 20th century, more attention was paid to mapping the structures surrounding the central monuments. But it was not until Willey's Belize River Valley survey of the 1950s (Willey et al. 1965) that survey techniques were introduced to fulfil the aims of studying settlement patterns as a worthwhile research goal in itself. One particular feature of the regional projects in which these surveys were carried out is that they almost always incorporate some form of excavation, as is characteristic for settlement pattern studies in the Americas in general (Stanish 2003).

Due to the difficulties of the terrain in the Maya lowlands, survey areas are often limited to only a few or at most tens of square kilometres. What is recorded are primarily structures, rather than the surface distribution of ceramics (which are largely obscured by the density of vegetation), but these are sampled and sometimes excavated as well. This has resulted in a varied dataset from different regions (Blanton et al. 1993, table 5.2, p. 182), but since greatly expanded. These data have allowed scholars to question the view of Maya monumental structures as 'vacant centres' devoid of urban surroundings and with a sparse population supported by swidden farming, a view which predominated until the end of the 1960s (Becker 1979; Dunning & Beach 2004, 112-114). Based upon evidence from both near the monumental 'cores' and transects in their hinterlands, a new picture has emerged of relatively dense populations spread over large areas: both in the 'urban' and 'rural' areas, which are not always easy to distinguish. Survey work has also allowed a better understanding of the causeways that connected different Maya centres with each other or with their hinterlands (J. Shaw 2001). This work has a great impact on the understanding of urbanism in the Maya area, as discussed in the next section, and is further facilitated by new technologies such as airborne LiDAR surveying that can provide a very important additional dataset (Chase et al. 2011).

Excavations in the Maya area were put on a sound footing after World War One when a number of projects were started, most prominent among them a series of excavations by the Carnegie Institute (McKillop 2004, 47-51; Black 1990). A significant number of excavations is on-going, carried out both by universities and national agencies such as Mexico's INAH and IDAEH of Guatemala. Initially, most information on the LPC period came from excavations of the Carnegie at the site of Uaxactún in the 1920s and 1930s, where monumental art from this period was first discovered (Ricketson & Ricketson 1937). The later discovery that the very large site of El Mirador was dated

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³⁰⁰ This can be seen in one epic account of the 1966 season of the 'brecha survey' at Tikal (Parsons 2010). Despite these limitations, which vary between different regions, recent work shows that through survey transects it is possible to trace settlement trajectories over the *longue durée* beyond the major centres (Garrison & Dunning 2009, 535).

to the LPC period, after some initial scepticism, can be seen as a watershed for the perception of the period. Today there exists a large record of excavations of dozens of sites, with much work remaining to be done, that were either abandoned after the end of the LPC period or subsumed under later constructions (Estrada-Belli 2011, 52, 67). As in the Aegean area, the full range of scientific techniques are applied to enhance the information that can be derived from excavations, from environmental studies to the analysis of the craft-work involved in the creation of LPC art, as will be shown in section 7.3.2 of the next chapter.

Despite early insights into the calendrical and historical properties of the Maya hieroglyphic script, its decipherment was made possible by the work of Knorosov (Coe 2011). Through his comparative knowledge of ancient writing systems, he determined in 1958 that the Maya script used phonetic signs.³⁰¹ It is now established that it is in fact a logosyllabic script, based on a combination of logographic and phonetic signs (Grube 2012, 847-850), much like those from the early civilisations of China, Egypt, and Mesopotamia (Coe 1992, 146-148). The language in which the Classical period texts were written constitutes a special 'elite' form of the Cholan branch of the Maya language (Houston et al. 2000). Studies from the 1970s onwards have been successful in deciphering about 75% of the surviving texts from the Classic period (Grube 2012, 845), and discoveries have pushed back the emergence of writing back to at least 300 BC (Saturno et al. 2006). A further challenge is to interpret the texts not just as deciphered blocks of information, but as literature in its own right, and part of a tradition that has evolved into present-day Maya alphabetic writing and culture (Tedlock 2010, 1-3). The continuity of this tradition is indicated not only by similar subject matter, such as elements from the colonial era Popol Vuh, but also by the use of the same poetic techniques, in particular the use of parallelisms (Carrasco & Hull 2012, 1-5). This poetic form, also known as hendiadys or difrasismo, is also known in other Mesoamerican representative modes like Mixtec semasiography (Jansen & Pérez Jiménez 2011, 10).

Unfortunately, only a few texts survive from the LPC period and those that do are less well-understood than those from the Classic period (Houston & Inomata 2009, 91-92). Nevertheless, the handful of texts that are known do show quite some variation in the material forms on which they have been written, which include stelae, wall-paintings, a relief sculpture from a cave, as well as a number of portable objects. There is also evidence that bark paper may have been made as early as the MPC period (Hammond 2006; McAnany & Ebersole 2004, 318), though it is far from certain that it was actually used specifically for making books in this period (Houston & Inomata 2009, 77). Remains of painted gesto found in a LPC tomb at Tikal may indicate the original presence of a codex here (Estrada-Belli 2011, 56). The properties of the record, as it stands, conform to that of the Classic period in the focus on the religious and political functions of writing rather than on administrative tasks. One interesting difference is the lack of monumentality of most LPC period texts, which tend to be rather small and deployed in more intimate contexts (Houston 2011). Their may have been less emphasis on the monumental articulation of the historiography of different dynasties in the LPC period compared to the Classic era, despite the archaisms seen in the latter period. At any rate, the notion that pre-Columbian Maya texts functioned as 'containers of

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³⁰¹ Decipherment of scripts is one area in which comparative research has made a greater impact that in many other areas, which may at least be partially due to the great technical rigour with which the subject can be pursued, as can be seen in one recent account (Trigger 1998b). More recently work of similarly great sophistication has emerged for number systems as well (Chrisomalis 2010).

³⁰² Writing can also be inferred indirectly for other media through their representation in art, as for the tattoos of day signs, among many other designs, on human heads (Houston et al. 2006, 19-21), a practice also known from the early Colonial period. No depictions of this have yet been found for the LPC period.

³⁰³ Bark paper may also have been used for making mats (cf. Herring 2005, 234). Mats are known from incised designs on early MPC period ceramics already (Estrada-Belli 2011, 43).

propaganda' ignores the structuring role of poetic techniques (Carrasco & Hull 2012, 3).³⁰⁴ The challenge, to be taken up in section 7.4.3 of the next chapter, is to situate the limited record from the LPC Maya lowlands instead in its proper cultural context.

To some extent the evidence from contemporary and earlier sites outside the Maya lowlands may be connected not only to better understand the connections between sites and areas, but also to facilitate the interpretation of the LPC lowland Maya. This is particularly true for the preceding Olmec sites on the Gulf coast and both preceding and contemporary sites in the southern Maya area of the Guatemalan highlands and the Pacific coast of that country and of Chiapas. As noted in section 6.2, the specifics of the Maya lowland area should not be seen as completely derivative from these areas, but rather follow a trajectory of their own that intersects with these regions. Such longer-distance connections are quite common in Mesoamerican archaeology, despite the limits of land-based transportation that depended primarily on human carriers (Drennan 1984). A good example of this are the widespread examples of direct interventions of Teotihuacan in Early Classic Maya polities, as well as a Maya presence in that site (Demarest 2004, 103-104; Taube 2003a). The outside influences on the LPC Maya lowlands can be less directly traced. Through the demonstrated existence of long-distance exchange and the presence of similar stylistic features, they can be used to clarify the interpretation of particular elements, if not supersede their specific context.

Finally, an important source for the interpretation of LPC lowland Maya early civilisation is the evidence from the succeeding Classic, Postclassic, and Colonial periods, as well as from ethnography. The fact that a variety of sizeable social and linguistic Maya groups exist today in the modern countries that encompass Mesoamerica, with a history that is directly rooted in the area itself despite the enormous upheavals of the Spanish conquest, presents the possibility of connecting the present with the past. Furthermore, the social issues facing these groups, the lingering impact of colonialism, and the stewardship of their culture and its heritage, makes these groups active agents in this (Jansen 2004; McAnany 1995, 167-168). For the present purposes it is important to stress that the use of later sources to interpret the Late Classic period has to be evaluated using the 'direct historical approach' (Trigger 2006a, 509-510). This method is used to establish a homology between similar traits of the same culture in different periods, but should be handled with care to avoid a proliferation of fuzzy analogies. A clear example of how this method can be misleading can be seen in the misinterpretation of the terms k'ax, which due to different conceptions of agricultural fields in Maya and Western thought led to a highly distorted view of Maya agricultural practices (McAnany 1995, 66-67). Another case is that of the impact of post-conquest ideas of cosmology, deriving from European sources, on an elaborate model of the Mesoamerican cosmos (Nielsen & Reunert 2009). However, as will be discussed in the next two chapters for art this method can certainly be of some use, in particular when the causal reasons behind continuities are considered.

The sources available to allow for more rigorous applications of the direct historical method are significant. For comparison with the LPC period archaeological record there are not only the Classic and Postclassic sources, but also the ethnohistoric and ethnographic ones. These are particularly insightful for interpreting cultural and linguistic meaning. Sources include the rich Classic and Postclassic artistic and textual records, four books (codices) from the Postclassic period, Maya (alphabetic) and Spanish colonial sources, 305 and a body of ethnographic fieldwork that has

³⁰⁴ This is not to deny that the record of Maya writing does show manipulation for political purposes. The point made by Marcus (1992, xviii) in her book on Mesoamerican writing systems, that for them modern concepts of propaganda, myth, and history cannot be considered separately, is well-taken. However, here the role played by Maya ontology and conceptions of narration in shaping and constraining such messages over their more generic function is emphasised over conscious manipulation. These questions will be further addressed in section 7.4.3 of the next chapter.

³⁰⁵ Most important among these ethnohistoric sources in the *Relación* of Diego de Landa, although analysis has shown that not all the work was in fact his (Restall & Chuchiak 2002). In the analysis here the ethnohistoric literature will only

accumulated since the end of the 19th century. For ethnography there is also the possibility for gaining, through dialogue, an indigenous perspective on phenomena. This can be seen in Barbara's Tedlock's (1992, 3-6) initiation as a 'day-keeper' in the Guatemalan community of Momostenango, through 'human intersubjectivity'. Finally, debates have raged between those who see more disjunction between periods, such as George Kubler (1969, 8, 1973), and those who argue for continuity and interconnections at the level of Mesoamerica as a whole (Willey 1973). The latter perspective dominates in Maya archaeology, and this is true for the study of LPC lowland Maya art as well, as will be explored in the next two chapters.

6.4: Interpretations of the Late Preclassic lowland Maya

6.4.1: Introduction

As befits a major player in world archaeology, the interpretation of the Maya has been influenced by the dichotomy between processual and interpretive approaches. The caveat in the Maya cases is that, unlike in almost all other cases, the sources for political and ritual patterns are actually better than that for more mundane issues of economic management (Demarest 2004, 172-174). This ran to some degree against the overall post-1945 trend in Mesoamerican studies to focus on economic questions (Wolf 1994), but key figures in Maya archaeology have long advocated a more integrative approach in which art and architecture were not seen as mere epiphenomena. This kind of holistic perspective has remained a strong current in Maya archaeology, even as it takes in the latest scientific techniques that overturn older ideas and theories (Marcus 2003, 71-72). Of course there is still a tendency for data from surface surveys and scientific studies of artefacts to cluster in ecological and functionalist interpretations, while art and writing point to political and culturalist ones. Given this situation, the notion of political economy is wedged in quite uncomfortably in between these opposite poles, but concepts like the 'ritual economy' (McAnany & Wells 2008) provide ways to bring together different elements in a more coherent and holistic framework.

In terms of its institutional context, Maya archaeology involves all three of Trigger's categories of imperial, nationalist, and colonial archaeology, sometimes mixed in ways that are confusing for outside observers. For example, the concept of *indigenismo* in Mexican archaeology has more strongly nationalist connotations, although this concerns a nationalism quite different from that of modern Europe and one that should be seen in its Latin American context (Patterson 1995). By contrast the work of foreign archaeologists in Mexico fits more the imperialist mode, while the notion of 'internal colonisation' as the imposition of outside categories on Maya communities, in varying degrees, fits both. However, under these broad covering blankets there exists a clear recognition on the part of archaeologists of many different stripes of the close relation between the ethics of the self-determination of indigenous communities in relation to their past (McAnany 1995; Jansen 2004). As such, the basic conditions for a more cosmopolitan, post-colonial world archaeology exist for Maya and Mesoamerican archaeology. To some degree this is also reflected in a keen interest in comparative studies by scholars working in this field (e.g. Blanton 2004; Coe 1961; Graña-Behrens 2009; Marcus & Flannery 1996; Smith 2012).

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occasionally be referred to, seeking first to connect the LPC period to the succeeding Classic one, and through that to the long-term trajectory of the Maya lowland area.

³⁰⁶ This is not to say that Maya archaeology remained closed-off from the impact of the New Archaeology, as both methods and models were increasingly being applied throughout the 1970s, including more complex system-based models to account for the Classic Maya collapse (Sabloff 1990). But in the Maya case it proved possible to connect the new insights into human ecology to the rich iconographic record, as can be seen in one study from the 1970s that links the new models of agriculture based on raised fields and canal-use to various aquatic aspects of Maya art (Puleston 1977). Since the decipherment of the Maya script, however, more attention has been paid to historical and dynastic aspects and their ideology, but the connection of these with water and agriculture is not neglected (e.g. Lucero 2006).

6.4.2: Elements of Late Preclassic lowland Maya early civilisation

The discussion of the LPC lowland Maya starts with the element of the ecological and agricultural basis. As noted in section 6.3, it is clear that certain ethnohistoric sources had played a misleading role earlier, as these had resulted in a very influential and dominant theory that all Maya farming was of a swidden, slash-and-burn kind (e.g. Meggers 1954). This would have placed severe limitations on the population levels that could be supported in the area, and was one of the reasons for the idea of the Maya having been a city-less early civilisation. But the steady accumulation of data from survey and excavation led to a major reconsideration of the issue, and it is now accepted that a form of urbanism was already present in the later Preclassic period (Sharer & Traxler 2006, 279). This means, however, that swidden farming cannot be seen as a stable long-term strategy. Indeed, recent studies have stressed the variety of farming techniques, as well as arboriculture and the use of marine food sources, creating what can be seen as a 'managed mosaic' of land-use strategies in the Maya lowlands (Demarest 2004, 130-146; Houston & Inomata 2009, 237-239). In principle, a 25 kilometre radius around most Maya sites would yield all the material resources, including for building and craft, required for a community to perpetuate itself (Demarest 2004, 149-152). This did not include special materials such as salt, obsidian, and semiprecious stones like jadeite, among others, that could only be acquired through long-distance exchange. Even if there were no stable long-term techniques, there were two factors present throughout the *longue durée* of Maya agriculture: maize as the key staple food and the need for an adequate water supply. 307

Described by Fernand Braudel (1981, 158-163) as a 'miraculous plant', the productivity and labour input requirements of maize cultivation were such that they could easily sustain cities and early civilisations. One important characteristic of maize was that its productivity was gradually improved after its initial domestication, and that yields varied considerably according to the degree of irrigation (Blanton 2004, 211-212). Research in recent decades has resulted in the recognition of a more diverse set of possible strategies to achieve suitable conditions for water-management from the Preclassic onwards (Marcus 2003, 80-81). These can be observed for the LPC lowland Maya as well, where both the construction of terrace systems by small-holders in smaller communities (Wyatt 2012) and larger-scale water-management systems as at El Mirador (Hansen 2012, 151) have been discovered. The use of a diversity of water resources has been seen as a key both for the ability to produce larger surpluses to sustain urbanism and as a factor for the hypothesized Terminal Preclassic decline (Dunning et al. 2002; Hansen et al. 2002). In overall terms, it has been argued that this kind of intensification can be understood as part of a 'labour-tasking' economic logic, in which various tasks to sustain intensive cultivation are parcelled out to different agricultural workers (Scarborough 2003, 13-16). Even with a stone-based technology, the properties of maize and the other available resources allow for the potential to sustain large populations in the 'managed mosaic' of the Maya lowlands.

These ecological and agricultural parameters also shaped the formation of a particular kind of urban and rural landscape, which has been analysed in general terms as 'low-density urbanism' (Fletcher 2011; Smith & Isendahl 2012). It has been argued that this can be seen as a general mode of adaptation to tropical forest environments such as those of the lowland Maya and the Khmer in Cambodia (Fletcher 2012, 302-310).³⁰⁸ It allows for the replication of a fairly homogeneous kind of

³⁰⁷ Maize was the prime staple of Maya diet, but is not sufficient due to the lack of amino acids which would cause health problems, and a large variety of different plant, animal, and marine sources were used by the Late Classic Maya (Houston & Inomata 2009: 220-224). Maize also requires a process called nixtamalisation, soaking the kernels in lime water, to prevent serious disease and prenatal deformations, which can already be recognised at 1500 BC (Tate 2012, 88). Scientific studies such as isotopic research are providing significant new insights into maize consumption, allowing insights into how it was consumed by the different social groups of the Maya world (White et al. 2006).

³⁰⁸ An important early comparative study of the same two cases had focused on the same connection between tropical

settlement pattern over very large areas, with larger urban foci of monumental structures. Such a settlement system is characterised both by spread-out cities and relatively high non-urban densities. This can be seen for many Maya sites of different periods, where the distinction in density of structures between site core, periphery, and rural areas follows a smoother fall-off curve rather than a sharp break-off (Blanton et al. 1993, table 5.2, p. 182). Such sites could become very large, for example Tikal, Calakmul, and Caracol in the Classic period, the first of which had a population of 65,000–80,000 persons spread over an 120.5 km² area that included a 9 km² core (Blanton et al. 1993, 177). The polity of Tikal as a whole could have included as much as 425,000 people, but likely most Classic Maya city-states were more in the range of Copan with 5,797 – 9,214 people in its core and 18,417 – 24,828 persons in the surrounding valley it dominated (Grube 2000, 556).

With regard to the LPC period it is possible to recognise a range from the 196-330 people living at the community of Chan with its small monumental core (Robin et al. 2012, 30), to larger sites with substantial monuments and art such as Cival at 2,000 – 5,000 persons (Estrada-Belli 2011, 77), and Seibal at 10,000 (Sharer & Traxler 2006, 688). Of course there was also the super-site of El Mirador with its core area estimated at 16 km² and with a peripheral density of structures that is comparable to that of Classic Tikal (Dahlin 1984). Another feature El Mirador shared with its largest Classic counterparts was the presence of *sacbeob* (literally: white road) or causeways of monumental scale. These were several metres high and tens of metres in width, extending from the central core of the site to Tintal and Nakbé, and may also have been connected with water-management for agricultural purposes (Hansen 2012, 155). LPC period *sacbeob* have also been documented at smaller sites like Cahal Pech, Cerros, and San Bartolo, as well as at Komchén in the northern Maya lowlands. Apart from their more mundane functions, *sacbeob* likely also were important in facilitating processional movement and pilgrimage (Ringle 1999, 204-209), as can be seen very well in the use of one in the civic-ceremonial core of LPC Tikal (Laporte 2003, 288).

Turning now to urban function, here it is necessary to refer to the influential model put forward by Sanders and Webster (1988), who argued that Mesoamerican cities in general could be termed 'regal-ritual', as all except the greatest of them lacked the functions of economic and administrative central places. Instead they would act as foci for ritual action in a more dispersed landscape of settlement. This model has received considerable criticism for its typological schematics, with recent work instead emphasising a multi-scalar approach that looks at the ways different urban functions played out in the landscape (Blanton 2012, 713-714). To do so also requires grasping in more detail the internal layout of cities. For this an 'ideal type' has been proposed for 2,000 years of Maya urbanism, composed of a civic-ceremonial core that was surrounded by clusters of residential households, which themselves would focus on minor civic-ceremonial structures (Isendahl 2012, 1119). The evidence of smaller temples associated with residential areas (Ringle 1999, 195-198), suggests that in very broad outlines this pattern may be discerned in the LPC period as well. Finally, there is the notion of Mesoamerican cities as 'moral communities', which would be reflected in the layout of sites analogous to a cosmogram (Blanton 2012, 716), a notion that is not uncontroversial, as will be discussed in section 8.2.1.

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environments and the lack of conventional urbanism, creating an impact on the structural properties of both early civilisations in contrast to those in other kinds of environments (Coe 1961, 81-84). Comparisons have also been made between the agricultural regimes of the lowland Maya and Bali, based on a similar dependence on a 'labour-tasking' adaptation to tropical environments (Scarborough 2008). Yet, there are more subtle differences here in that the use of oxen at Bali (Mohamad et al. 2009) would allow labour-saving as well. Furthermore, the tropical environment in which the Yoruba early civilisation developed gave rise to very different conditions compared to those of the Maya, as the overall analysis of these cases shows (*Understanding*, 279-314). The upshot is that such comparisons demand more attention to the specifics of land-use and its relation to urbanism in each individual case.

The third element to be explored here is that of surplus mobilisation, craft specialisation, and economic relations in their broadest sense. With regard to the first aspect, the evidence is highly limited, making it almost impossible to infer directly whether and how surplus was mobilised through elite or state agency.³⁰⁹ Certainly, the scale of monumental architecture and of the *sacbeob* indicates the ability to mobilise labour, which may also have been used for the water-related works at El Mirador. The seeming lack of clear central economic control, perhaps reflected in the prosperity of smaller sites, has led some Maya scholars to develop interesting models that distinguish between the political economy of states and social economy of households (Sharer & Traxler 2006, 631). It should be stressed that this distinction is not just based on the negative evidence of a lack of information on central economic control, but also on the positive recognition of the independence of craft activity from central management. Research at various sites, such as the Belizean sites of K'axob (McAnany & Peterson 2004), Chan (Meierhoff et al. 2012), Colha (Brown et al. 2004), and Cuello (MacSwain et al. 1991), show that both craft production and the consumption of those products can be understood within the contexts of the social economy. ³¹⁰ The distinction can be grasped well in the following quotation:

"Nevertheless, the dualistic economy is primarily based on the proximity of a sizeable constellation of small communities that play their own ballgames and honor their own agricultural rituals detached from the formalized marketplace centers. They interact with one another under the shadows of the largest centers and participate in the latter's grand activities through negotiation, rather than coercion. Other populations within the immediate orbit of the largest civic centers are attached to the highly 'visible' political economy as identified by the tribute mode of production, but even these populations have latitude in defining their own economic well-being." (Scarborough & Valdez 2009, 221)

Different mechanisms can be argued to relate the two spheres, ranging from the familiar opposed categories of redistribution by the state to marketplace exchange,³¹¹ but also including newer ideas such as that of 'ritual economy' (McAnany 2008; Wells 2007). Following the discussion of Mycenaean economic relations in section 3.4.2, the concern here will lie not so much with providing a typological definition of the LPC lowland Maya economy but rather with investigating the means of exchange. Because of this the exchange patterns in the LPC period will here be

³⁰⁹ Unlike in central Mexico, no large-scale, centrally located storage facilities have been discovered for the lowland Maya, and there are few indications for staple-finance on a significant scale (Houston & Inomata 2009, 240-243). Ethnographic work on storage in the Puuc region of the northern lowlands suggests a focus on the mobilisation of outside labour to create larger surpluses (Smyth 1991, 69, 71). Although there are clear differences with the pre-colonial Maya in terms of the presence of livestock and the over-arching role of the modern economy, the emphasis on labour mobilisation rather than on labour-saving capital is similar. It may well be that the redistribution of staples was limited to extended households, something which can be inferred from the food-sharing between larger groups known from early MPC period ceramics (Cheetham 2010, 361-363). At the same time, this allows for considerable differences between households, as will be explored below for the element of class and inequality.

³¹⁰ It may be that the political economy facilitated exchange between different communities, so that it would be possible for communities to acquire materials and products from beyond their immediate hinterlands (Sharer & Traxler 2006, 635). On the other hand, as noted below for long-distance exchange, such materials were already exchanged before the emergence of the first states in the Maya lowlands.

³¹¹ Hirth (2012, 640-641) notes that marketplace exchange should be seen as an institution, to be distinguished from the economic activities of the household. Whether this institution can be recognised for the Preclassic period remains a contentious point, although there is some linguistic evidence to suggest that this kind of exchange could be traced this far back (Tokovinine & Beliaev 2013, 171-172). In his study of the long-term trajectory of marketplaces in the lowland Maya area, Braswell (2010, 132-135) argues that initial exchange would have been either an open system based on reciprocal relations or a polyadic one bound to high-status individuals. Given that little analysis of this kind has yet been done for the Mirador Basin sites, it would seem prudent not to jump to conclusions on the presence or absence of marketplace exchange. Yet, the point that marketplaces expanded and contracted based on the fortunes of the states within which they were embedded seems to hold until the Postclassic, implying greater state control in the periods preceding the Postclassic (Braswell 2010, 138-139),

characterised more as 'open-loop' (indicating the absence of direct central control) rather than as market-based. Even so, further work may well reveal markets. In this regard, it is important to take note of important recent work on the role of bundles in exchanges of various kinds, which can be recognised both for the Classic and Preclassic periods. The evidence for the Classic period is more extensive, even if actual accounting records are lacking (Stuart 1995, 352-354). In general, the Classic Maya state seems to have focused on the collection of five specific items: quetzal feathers, spondylus shells, jadeite, textiles, and cacao beans (McAnany 2010, 286). From artistic depictions it seems that a distinction can be made between *ikatz* bundles of jadeite objects and *pih* bundles of quantified amounts of goods such as cacao beans (Stuart 2006, 141-142).

There is some textual evidence linking bundles to 'payment' (Stuart 1995, 358-359), but the differences between those that contained objects that could be quantified and those that could not points to important differences. One further aspect of the Classic period evidence is that one form of tribute payment was closely related to warfare, including possibly as ransom for captives (McAnany 2010, 278-283; Stuart 1995, 359-363). The evidence for the LPC lowland Maya is more limited due to the properties of the iconographic and textual records, but some aspects of the use of bundles can still be recognised. Recent data from El Achiotal points to the presence there of a so-called 'bundle house', with a conflation of the economic, political, and ritual roles of bundles at this site (Acuña 2013, 358-359). In particular the depiction on a mural of a bundle with a trefoil Jester God motif can be noted (Acuña 2013, fig. 6.7, p. 260), which will be discussed for its iconography in section 7.4.2. Most important here is that it bears the closest resemblance to the Classic period *ikatz* bundle of jadeite objects, based on a shared metaphorical concern with maize. This can also be recognised for an Olmec depiction of a bundle (Freidel & Reilly 2010, fig. 9, p. 651). Whether or not the term *ikatz* can be projected back into the Preclassic period, the overall relation between bundles of jadeite objects and maize symbols appears to have been present.

This also brings up the question of the role of jadeite and related stones in exchange, which for the Olmec has been variously interpreted as treasure to be used in ceremonial exchange (Taube 2004a, 18), or as a currency used in marketplace exchange (Freidel & Reilly 2010, 641-642). Little can be said about bundles of quantifiable objects in the Preclassic, even if there is some evidence for the use of cacao in feasting contexts, as will be discussed below for the element of public ritual and feasting. As such, they may be related to the notion of feasting as a redistributive event, either in a household context or in a more public sense. There is a generic relation here with Monaghan's notion of liturgical economic allocations', as it can be seen in the cargo system of the contemporary Mixteca Alta and the liturgies of Classical period Athens (Monaghan 2008). Also, it may be that spondylus shells were used as valuable or currency in the later part of the LPC period, based on their use together with jadeite at Cerros and other Belizean sites (Freidel et al. 2002, 68-77). But in the absence of clear iconographic and textual evidence, little can be said about the actual uses of these objects, and this holds true for other materials known from the Classic period as well. Instead, it is possible to point to the relation of bundles of jadeite objects to maize symbols, and the further

³¹² Some indications of accounting figures can be seen in Classic Maya courtly art, in contexts that seem to suggest a higher status at the court (McAnany 2010, 284-286).

Taube notes how celts served as standard shapes and as the basis for carving special objects, but argues that there is no standardisation based on size and weight and that therefore they are better described as treasure, while Freidel and Reilly discount the importance of standardisation. All refer back to an early study for Formative Oaxaca (Flannery & Schoenwetter 1970), that argued that early farmers would have used such objects both to store wealth and to establish ritually-charged relations between communities, both to mitigate cases of crop failures. The difference between the use of the terms of treasure and currency is that in the first case the inter-community (or inter-elite) relations are held as being more important, while for currency the notion of convertibility of wealth and staple items is paramount. Neither can be directly inferred for the Olmec and Preclassic lowland Maya cases, although the lack of standardisation would seem not to fit very well with notions of convertibility according to marketplace exchange, while the bundles would be more supportive of the notion of treasure.

relation of both to the office of kingship. The further interpretation of this depends mostly on grasping the iconography and contexts of art objects, and therefore will be addressed following the analysis of LPC lowland Maya art, in the synthetic section 8.3.

Extending from the discussion of economic relations, and bundles in particular, is the element of long-distance exchange.³¹⁴ It is possible to note not only the physical importation of certain rare materials from far-flung sources, but alongside them also ideas. The exchange of such materials as jadeite, obsidian, and volcanic ash can be observed already in the Early Preclassic period (Cheetham 2005, 34). Important in this were also the ubiquitous spread throughout Mesoamerica of specific symbols that are found on the ceramics of the different pre-Mamom complexes of the Maya lowlands in the Early Preclassic (Estrada-Belli 2011, 41-44). These widespread symbols point to the interaction of communities across larger distances, which is linked with elite groups (Estrada-Belli 2011, 43-44). This may well be the context in which materials were exchanged as well, as is known for the Classic period (Demarest 2004, 160-162). In the LPC period another feature emerged: that of community-based specialisation such as the production of salt at Komchen in the northern lowlands (Sharer & Traxler 2006, 275), and of obsidian and chert at Colha in Belize (Santone 1997; Brown et al. 2004). As noted, it is hard to ascertain what kind of exchange mechanism existed in the LPC period, but it is notable that many smaller sites had access not only to basic materials but to materials and objects that could only have been acquired through long-distance contacts, as at Chan, Cuello, and K'axob, among many other examples.

Another element to be discussed is state form. The size and monuments of El Mirador, as well as the *sacbeob* that extend far from it to other sites, can be used to make an argument that it was the core of a larger territorial state that encompassed at least the 2,200 km² Mirador basin (Marcus 2012, 96-97). However, in the LPC period the basin was densely settled and evidence for kingship can be found at different sites, including stelae and large-scale architecture (Hansen 2012, 154-159). There are also artistic representations and other indications of kingship at many sites outside the Mirador basin proper, for example at Cival (Estrada-Belli 2011, 85) and San Bartolo (Saturno 2009). This indicates that the LPC political landscape in the Maya lowlands would have been much like that in the Classic period, consisting of a network of city-states. In such a constellation of polities a few much larger states can act as hegemonic powers, without having the ability to create a true territorial state.³¹⁵ In this sense it fits the *cacicazgo* model often used in ethnohistoric work, including for the northern Maya lowland area (Redmond & Spencer 1994). Unfortunately, such an inference can only be made on the basis of indirect evidence, as the Preclassic lacks the 'Emblem Glyphs' (referring to either specific locations or ruling lineages) that have been so useful in delineating Classic period city-states and their potential territories (Grube 2000, 549-550).

With regards to the structural properties of the state, such as administration and bureaucracy, little can be said, which may be due to the focus of the surviving record. Even for the Classic Maya, where the textual sources are admittedly biased toward historical and religious matters, there are only limited insights into the role of nobles in the functioning of the royal court (Houston & Inomata 2009, 168-176). For the LPC lowland Maya only the office of kingship seems to have significant interpretive potential, based especially on artistic representations. One problematic feature of kingship for this period, however, concerns the role of burials. For the Classic Maya there

³¹⁴ An early model by Rathje (1971) emphasised the role of long-distance exchange in the emergence of lowland Maya early civilisation, based on the fact that the core regions in which it developed, in particular the Petén, lacked several important resources. Even today, however, the model cannot be confirmed by the limited evidence.

³¹⁵ The jury is still out as to whether, and if so how much, the impact of El Mirador can be equated with a direct political impact on different sites outside the Mirador Basin heartland (Houston & Inomata 2009, 102). Unfortunately, these kinds of problems are very difficult to resolve based only on the archaeological record, and textual references that shed light on this question are unlikely to be forthcoming.

exists an abundant funerary record related to royal ancestors, as part of a well-defined ideology (Fitzsimmons 2009, 170-183). But this ideology cannot be simply projected back in time to a less sophisticated LPC burial record, as this record seems to have been qualitatively different with regard to kingship. Not only are LPC burials that could be interpreted as royal rarer (Houston & Inomata 2009, 92-94), they were also not placed in the same centrally located pyramids as their counterparts of the Classic period, even in the case of Tikal burial 85 (Estrada-Belli 2011, 55-57).

But as new discoveries add to the LPC lowland Maya archaeological record, more insights emerge into the patterns characteristic of royal burials in this period. Recent finds from the sites of K'o and San Bartolo indicate the presence of royal tombs here, if again not located in central pyramids (Estrada-Belli 2011, 62-63). One hypothesis that has been put forward by Acuña (2013) focuses on the role of funerary bundles to grasp the relation between royal funerary ritual and architecture in the Preclassic period. As was noted for the element of economic relations, bundles were very important in the LPC period for economic reasons as well as ritual ones, while their relation to burial can be seen in Tikal burial 85 (Coe 1990, 218). Acuña (2013, 352-354) argues that the 'bundle houses' she recognises at El Achiotal and Uaxactún could have acted as alternative places to gather ancestors, rather than in dedicated pyramids of the Classic period. The function of these buildings needs to be established with more evidence, but the emphasis on bundles is a promising avenue to further investigate royal funerary ritual, as will be discussed in chapter eight. Another strand of evidence where more progress can be achieved lies in the recognition and investigation of buildings that may have functioned as palaces. Although palatial structures are hard to define even for the Classic period, it does seem clear that in terms of function the LPC period evidence shows them to be qualitatively different from chiefly houses (Runggaldier 2009, 326).³¹⁷

Closely related to state form is the presence of the element of organised means of coercion, that is: the physical ability to project political power. There is substantial evidence for the LPC period both for various defensive works like walls and moats and for the sacrifice of captives (Houston & Inomata 2009, 96). In particular it is important to note the defensive works at El Mirador (Medina 2012). In broader terms the Preclassic Maya seem to have conformed to more general Mesoamerican notions of ritualised warfare, in which physical acts of war go hand in hand with spiritual battle (Reilly & Garber 2003). This can potentially be observed in so-called desecration deposits, in which the 'power' inherent in architectural features is terminated through ritual action, a phenomenon that has been linked to warfare events for Blackman Eddy and Cuello in the MPC period (Brown & Garber 2003, 98-103). It would be misguided to counterpoise this ritual aspect of war to its practical uses, however, for both would have been inseparably linked in the specific Maya conception of status rivalry (O'Mansky & Demarest 2007, 17-18, 20). Finally, it has been proposed that a ritual template for the relation between warfare and kingship can be traced back to the Olmec, and also involved the Jester God image (Reilly & Garber 2003, 146-148). At present this cannot be recognised in the LPC lowland Maya record, as the discussion of the Jester God in section 7.4.2

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³¹⁶ More continuity between royal burials in the LPC and Early Classic periods can be seen in the offerings deposited in the graves (Krejci & Culbert 1999, 109). McAnany (2010, 146-148) argues that the lack of royal burials in the Preclassic pyramids may have had something to do with a more communally-focused ritual framework, elements of which can still be recognised in the Classic period.

³¹⁷ Such chiefly houses have been proposed for some MPC sites in the Maya lowlands, but are here recognised as related to the later emergence of temples rather than of palatial structures (Powis & Cheetham 2008). At the sites of K'axob, to be discussed in section 8.2.5, the same shift from house to temple can be observed in great detail. Palaces, then, may have emerged as a secondary phenomenon of state formation, rather than as the initial central focus of it, even if the available data on them remains too thin to make anything but the most generic statement on them.

³¹⁸ However, the wall at this site was admittedly construct late in the LPC period (Medina 2012, 61), making it hard to square with the notion that warfare would have played an important role in the initial emergence of the state (O'Mansky & Demarest 2007, 19). This pattern can be observed at many lowland Maya sites, for example at Cival where provisional defensive works were constructed at the end of the LPC period (Estrada-Belli 2011, 131-132).

below shows no relation to war.

The element of class and (semi-)institutionalised inequality is a very difficult one for Mesoamerican archaeology, and, given the lack of substantial information from texts, for the LPC period in particular. The problem is twofold, involving both the evidence itself and conceptions of class as they are held by archaeologists and by the Maya themselves. As noted for the Mycenaean case, one important strand of evidence for inequality can be found in mortuary ritual. However, viewed from a straightforward class perspective the burial record of the LPC Maya lowlands appears highly puzzling. Leaving aside the royal burials discussed earlier, the evidence from sites such as Cuello (Hammond 1999), Chan (Novotny 2012), and K'axob (Storey 2004), seems to suggest that the concern seems to be more related to the 'curation' of the ancestors than with the articulation of so-called 'aggrandising' individuals, even if over time the male segment of the population becomes more articulated. This articulation should not necessarily be construed as dominance, however, and the selection of ancestors would have been according to criteria based on the organisation of the lineage, rather than of class (McAnany 1995, 60-61). As will be discussed in section 8.2.1, there were no formal cemeteries, and at any rate the number of burials recovered is insufficient to constitute any significant social stratum.³¹⁹

The focus on ancestors and, by implication, the lineage in mortuary ritual can be placed alongside the observation that, on the basis of the available evidence, economic production remained within household contexts (Hendon 1999, 118). Lineages, then, occupied a central position in Maya society, acting as a 'crucible of inequality' for both internal inequality and between different lineages (McAnany 1995, 111).³²⁰ A related but distinct model focuses on houses as corporate entities rather than lineages as descent groups, as can be seen in the application of the notion of 'house societies' derived from Levi-Strauss (Gillespie 2000). It is very hard to decide on this matter for the LPC period, given the meagre evidence, but the notion of 'house societies' as a social type would seem to be too constrictive, 321 especially in the face of the large labour mobilisation to construct monumental-scale civic-ceremonial centres. The implication of all of this is that a simple dichotomous model opposing a well-defined upper class to a generic mass of commoners, seems no longer tenable (Brumfiel & Robin 2012, 674; Marcus 2004; Lohse & Gonlin 2007, xxiv-xxv). In their analysis of the Classic Maya, Houston and Inomata (2009, 28) have used the duality of moral community and divided society to capture the complexity of the situation. Of particular interest with regards to the former is the notion of the 'covenant' that involves not only different human groups and individuals, but all that serves to sustain the community, including the landscape and deities.

The notion of the covenant is therefore very important for a better understanding of the way in which the Maya conceptualised human relations within their cosmic context. Originally derived from ethnographic studies (Monaghan 2000, 36-39), the basic premise of this concept is that of a phagohierarchy in which different orders of being such as the landscape, animals, humans,

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³¹⁹ Much the same pattern can be seen in Formative central Mexico for the site of Tetimpa, and by extension for early Teotihuacan as well, as here the number of burials relative to the population and occupation span of the site was so low that it would average one burial per generation (Uruñuela & Plunket 2007, 39-41).

³²⁰ The two economic factors in this are that lineages would have retained rights both for working land and for receiving labour services from others, the latter also being adapted by states (McAnany 1995, 112-113, 136-139). Clearly this needs to be further explored in terms of recognising such patterns in the archaeological record. Some recent work for the Classic period site of Isla de Los Cerros (Ensor 2013, 95-113) suggests that this is possible, including for relating class, gender, and kinship to each other in a comprehensive perspective.

In the discussion of agriculture earlier the argument of Cheetham (2010) was noted, which held that early MPC period pottery shows that extended households shared food, a pattern that continued into the LPC period. But it is impossible to infer whether this implies lineages or the corporate groups favoured by the 'house society' model. The evidence from the better known Classic period seems to run counter to the socially constructionist views of kinship in corporate groups, as proposed in the 'house society' model (Houston & McAnany 2003).

ancestors, and deities stand in a reciprocal yet hierarchical relation to each other. Debts have to be paid to the orders of the ancestors and deities, and this takes the form of 'feeding' them through offerings made in specific locales in a landscape that is itself conceived of as an animate order of being (McAnany 2010, 70-79). This conception of a 'covenant' has proven quite influential for interpreting pre-Columbian Maya history, even if here the term moral community will be used instead.³²² One implication of it is that carrying out elite tasks can be viewed through the indigenous concept of taking on a 'burden' for the community, thus ensuring the debt repayment to the orders of the ancestors and deities (Houston & Inomata 2009, 62; McAnany 2010, 90-95). At the same time it has been pointed out for the Classic period that within such a moral community there is nevertheless much scope for inequality along the lines of what may be termed a timocracy. In this kind of arrangement power is based on individual strife for honour, especially in the warfare-related status rivalries discussed earlier (cf. Houston & Inomata 2009, 48).

Given that it is the primary subject of the thesis, the element of monumental architecture and art will be extensively discussed in the next two chapters. The only feature to be, briefly, discussed here is the issue of labour mobilisation involved in the building of the various monumental constructions in the LPC Maya lowlands. One interesting feature of Preclassic lowland Maya architecture is that it tends to favour solidity and mass, in contrast to the Classic period with its veneer-like use of stone in monumental constructions (Houston & Inomata 2009, 87), which maximised the labour that went into the preparation and application of stones (Hansen 1998, 103). The construction of the Danta pyramid at El Mirador alone has been estimated to have involved the equivalent of 10-12 million working days (Hansen & Guenter 2005, 60). Although as the largest known Mesoamerican pyramid it is an outlier, the numerous other cases of monumental architecture at the site, as well as the *sacbeob* and monuments at other sites, point once again to the relation of labour mobilisation to state formation. In principle, though at a much lesser scale, this capability was present in the MPC period in the Mirador basin (Hansen 1998, 60-61), and such labour mobilisation has been recognised in many other regions of early Formative Mesoamerica (Rosenswig 2012).

The penultimate element to be discussed here is that of specialised knowledge, in which the calendrical systems and astronomical knowledge stand out for their importance. It is unfortunate that at present no Long Count dates have been found in the Preclassic Maya lowlands archaeological record. However, it is very likely that the basic elements of the Calendar Round, the *tzolkin* 260-day calendar and the *haab* solar year, were already present in the Preclassic period. This can be inferred from a number of sources. The first concerns a wall-painting from San Bartolo, on which the day sign (3) *Ik'* (wind) of the *tzolkin* calendar can be recognised (Taube et al. 2010, 20). Another important indication of calendar use can be seen in the spatial orientation of the so-called E-groups, named after Group E at Uaxactún (Aveni 2012), in relation to the movement of the sun. This can be seen especially with regard to the importance of 20-day intervals and the seasons

³²² The problem with the term 'covenant' is that it derives from the Biblical notion of a formal agreement between an individual deity and a religious community. There are no indications whatsoever that in Mesoamerica there existed a clear parallel to this. In this sense, the term 'moral community' is commendable for its vagueness, and is best specified further only when sufficient evidence is available.

³²³ There are Long Count dates from the Formative sites of El Baul and Tak'alik Ab'aj (Sharer & Traxler 2006, 246), but the earliest one from the lowland Maya area (Tikal Stela 29) is dated to AD 292 (Houston & Inomata 2009, 105).

³²⁴ The association of this sign with one of the four world-directional trees and associated self-sacrificing figures, has led to the interpretation of these figures as 'Year Bearers' (Taube et al. 2010, 19-22). This scene will be explored further in sections 7.4.2 and 8.2.4, but of significance here is that these year-bearers are a strong indication of the use of the Calendar Round. The interaction between the *tzolkin* and *haab* calendars is mathematically structured so that only four of the *tzolkin* day signs coincide with the start of the solar year, and one of these year-bearing day signs has been traditionally defined as *Ik'* (Tedlock 1992, 89-92).

³²⁵ In its basic form the E-group consists of a rectangular platform with three smaller platforms build upon it, which is aligned with a larger pyramid to its west.

as they relate to agricultural activities (Aveni et al. 2003, 162-163). The 20-day time unit or *uinal/winik* is also recognised in artistic representations of the Preclassic Maya lowlands (Coggins 2007, 221-228). Although there are variations in the alignments across the different sites of the Maya lowlands, the cases of the E-group at Cival (Estrada-Belli 2011, 78-79) and a variety of buildings at El Mirador (Šprajc et al. 2009) do point to the agricultural importance of such alignments. As such they would have had both a practical, observational role, together with their commemorative, ritual function (Šprajc et al. 2009, 88-92).

Important in this regard is also the tendency of E-groups to be placed in the centre of sites, as well as a focus of burials and caches within their structures and the plaza area partially bounded by them (Estrada-Belli 2011, 79-83). The quadripartite layout of the cosmos is reflected in many of these finds as well as in representative art, as will be explored in the next two chapters. This reflects the relation between the physical shape of the cosmos and time, and the dependence of spatial form on temporality.³²⁶ The calendrical and astronomical aspects of the E-groups, as well as the even more extensive alignments at El Mirador, indicate the presence of specialised knowledge from the MPC period onwards. In its basic elements this recalls the interconnections between calendrics, astronomy, ritual work, and divination known from ethnographic fieldwork in the Guatemalan highlands (Tedlock 1992). Important in this were ritual specialists called day-keepers, who were trained and initiated for divination and associated rituals and can be found throughout recent and contemporary highland Guatemala (Tedlock 1992, 84-85). This is not to say that the specifics of recent Maya specialists can be literally transposed back to the LPC period, 327 but it is possible to posit the existence of specialists concerned with the same conceptual nexus. Furthermore, the chronological primacy and wide distribution of E-groups prior to state formation proper, points to the origin and continued broad distribution of such knowledge beyond elites.

Turning now to the final element of a cycle of festivals of public ritual and feasting, it should be clear from the discussion of the previous element and the notion of the moral community discussed earlier, that this played a crucial role in LPC lowland Maya society. Unfortunately the written and artistic records of this period do not allow for a reconstruction of a particular cycle and the names of feasts and ritual events, but the archaeological record clearly indicates that they were present. This can be seen in a large number of deposits, which may have been ritually charged in themselves as well, containing the remains of such activities, as for example the jute shell deposits at Chan that indicate communal feasting in the MPC to LPC periods (Keller 2012, 257-258, 269). Also important in this is the consumption of cacao in beverages that were associated with ritual and feasting, which seem to have already been present at the site of Colha in Belize by 600 BC (Powis et al. 2002). As noted in the discussion of urbanism the *sacbeob* at El Mirador and other sites have also been connected with processional ritual and pilgrimage. Unfortunately, the LPC record

³²⁶ The focus on intervals of time has been much explored for the surviving Maya codices, where notions of astronomy and divination are often hard to separate (Aveni 2011). This means that cosmology should be grasped differently. Rather than as a mapping of the heavens in terms of its geography, as in the Western astronomical tradition that goes back to Mesopotamia it is the intervals of time that provide the basic template (Bricker & Bricker 2011, 842).

³²⁷ So far little direct information for the practice of divination has been found in the LPC lowland Maya record. For the Classic period the community building of the site of Chan has yielded a set of artefacts that strongly indicate that divination took place there, paralleling a similar set found at Cerén (Robin et al. 2012b, 145-147).

³²⁸ It may be that some of these beverages were alcoholic in nature, for which there exist broad parallels for this from other Mesoamerican regions and periods (Henderson & Joyce 2006, 147-153). As cacao does not grow well in many areas of the Maya lowlands certain areas may have been favoured for cultivating it, thereby creating inter-regional specialisation. Proposals for this have been made for the Xibun river valley in Belize (McAnany et al. 2002) and the Soconusco region on the Pacific coast (Kaplan 2008), but in neither region can such regional specialisation be directly recognised for the Preclassic period.

³²⁹ It may also be that the Loltun cave in the northern Maya lowlands, with art dating from the later part of the LPC (Stone 1995, 59), was the focus of longer-distance pilgrimages. Such pilgrimages are well-known both from the Classic

lacked the Classic period artistic depictions and other kinds of evidence that would have allowed further insights into the role of feasting and public ritual.

6.4.3: Late Preclassic lowland Maya early civilisation in its longue durée context

After the consideration each of the ten elements separately, it is now time to consider their interaction within the framework of LPC lowland Maya early civilisation. This can be achieved by taking into account the *longue durée* context in which this interaction played itself out. First of all, it is of great significance that the shared Mesoamerican practices listed in table 6.1 above can be recognised in broad terms for the specific LPC lowland Maya case discussed here as well. This points to the strength of the recognition of continuity rather than disjunctions between different regions and periods of Mesoamerica, thereby providing some support for the use of the direct historical method discussed in section 6.3. Naturally, the more detailed specifics of the elements are determined by the particular regional and period context, but the overall context is clear. This does not necessarily imply the notion that there was a singular 'mother culture' that accounts for these similarities, rather it can be imagined as taking shape in the exchange of materials and ideas, and to some degree people as well, over long distances. In this way the notion of Mesoamerica as a coherent macro-region that transcended regional, linguistic, and other kinds of differences (Wolf 1994) seems to be reinforced.

Here, however, the concern is with the interplay of temporalities within the Maya lowlands. Given the recurrent pattern of the growth and collapse of Maya states from the Preclassic through Postclassic periods, it is not surprising that models have been developed to account for this. One important example is the 'dynamic model' developed by Joyce Marcus (1998a), initially to account for the lowland Maya but later extended to include the dynamics of other early civilisations. This particular model explores the tension between the centrifugal role of kinship and centripetal forces of kingship as they shaped the structure and dynamics of Maya polities, a well-recognised tendency which has also been explored in the work of others (McAnany 1995, 163-165). More recently, Marcus has suggested that it may be possible to trace the trajectory of a particular state, in this case the Kaan ('Snake Head') polity, which actually may have moved from different sites, possibly starting in Nakbé, moving through El Mirador to end at the Classic period super-site of Calakmul (Marcus 2012, 106-108). In one way this is an appealing model, but by only focusing on the fortunes of states, it effectively subsumes communities and households under their umbrella and thereby somewhat neglects the dynamic properties of these forms of social organisation.

period evidence and ethnographic research of contemporary Maya groups (Vogt & Stuart 2005).

³³⁰ One model proposes to project back the notion of the *may* cycle of 13 *k'atun* periods (256 years) as a temporal structuring device, known through ethnohistoric sources, all the way back to the Preclassic. According to the model, after the end of each cycle the 'seating' of the *may* would shift from one capital to another, with states competing to take over this role (Rice 2013, 687). The shift from Nakbé to El Mirador would also have taken place based on this model (Rice 2007, table 8.3, p. 186). The problem is that this model based on ethnohistory does not even work well for the better-known Classic period (Grube 2013), let alone for the LPC record that is without substantial deciphered texts.

	El Mirador	Chan
Element		
agriculture	large-scale water-management	small-holder based terraces
urbanism	very large (16 km²)	less than 400 persons
	extensive ceremonial core	small E-group ceremonial core
	sacbeob	
economic relations	large-scale labour mobilisation	household-based
	tribute?	
long-distance contacts	rare goods imported	rare goods imported
state form	kingship	community-based
	hegemonic power?	
physical means coercion	large-scale defensive works	no conclusive evidence
	captive-taking?	
class, inequality	larger compounds as foci	small differences, lineage-based
monumental architecture	multiple large pyramids	small plaza-focused core
specialised knowledge	astronomical orientation	astronomical orientation
	writing, artistic expression	
public ritual, feasting	large-scale processions	community-based feasting

Table 6.2: A comparison of the presence of key elements of the Preclassic Maya at El Mirador and Chan.

A more multi-faceted approach has been proposed by Iannone (2002, 74-76) in his use of the *Annales* scheme of different temporalities to account not only for the cycles of state formation and dissolution, but also for the relation between the state on the one hand and communities and households on the other. He recognises the same interplay between kinship and kingship as does Marcus, but allows for a more complex interplay between the different elements, thereby breaking down the more general categories of states, communities, and households into their constituent elements (Iannone 2002, table 1, p. 75). One problem with this breakdown, however, is that it overemphasises the differences between *longue durée* features and their *conjoncture* counterparts in an almost dichotomous way, although they would always be conflated together within *événements*. This reinforces notions such as the distinction between the Great and Little Traditions, which has been questioned for Maya archaeology (McAnany 2002). Rather than simply adopting the models of Iannone and Marcus, therefore, they can be used as the basis for further considerations of the contexts and temporalities of the elements of the LPC Maya lowlands discussed in the previous section. To structure this, it is useful to consider the contrast between the small site of Chan and the super-site of El Mirador, which are outlined in table 6.2 above.

First of all, the temporalities of both sites need to be taken into account. Even though Chan was by no means a static site, it did function as a coherent community focused on a small civic-ceremonial core, for which coherent ceramic complexes can be recognised from the MPC through the Terminal Classic periods (Kosakowsky 2012, table 3.1, p. 44). This involves a period of more than 1,500 years and can be compared with the maximum 450 year LPC period focused *conjoncture* of El Mirador (Hansen 2012, 154-159). However, if the theory that the Kaan polity was a long-term

political structure holds true, then it would be misleading to contrast community and state as belonging to different temporalities. Instead they would follow distinct, if not completely separated, *longue durée* trajectories, based on their own characteristics.³³¹ The key question, then, is how Chan and El Mirador were different, and what the implications of this are for the understanding of the relations between households, communities, and states in the LPC lowland Maya case. Focusing first of all on the ten elements outlined in table 6.2, it can be seen that for many of the elements El Mirador was similar to Chan, or if different more in terms of scale rather than in kind.

Similarities include agricultural intensification based on water-management, the presence of a civic-ceremonial core, basic economic relations that are focused on the household, the importation of goods through long-distance exchange, specialised knowledge related to astronomy and calendrical systems, and public ritual. This is not to say that the difference in scale was completely unimportant for these elements, as can be grasped for the difference between the communal feasting at Chan and the large-scale public ritual that would have taken place at El Mirador. But the presence of elements usually associated with state formation itself or its ramifications in the hinterland at a site like Chan, estimated at less than 400 inhabitants, is already significant. Deriving from initial development during the MPC period, they also pre-date the emergence of states in the LPC period and therefore cannot be seen as state-based impositions. However, there are also clear differences, starting with the larger scale of El Mirador and the consequent need for greater organisation and control in the mobilisation of labour. Given that basic production remained organised at the household level, this can be seen as the vertical appropriation of labour from the social economy to the political one, to borrow the terms from the dualistic model discussed in the previous section.

The existence of the larger compounds suggests that there may have been other forms of appropriation as well.³³² The question of appropriation also brings us to the question of wealth. For the element of economic relations the role of bundles of precious materials was notable in this regard, especially those containing jadeite, known as *ikatz* in the Classic period. Small quantities of jadeite have been found in the caches and burials of Chan, while the evidence for this from El Mirador has not yet been published in sufficient detail. However, based on the data from other larger sites, it seems fairly clear that jadeite objects with complex iconography and writing would belong more exclusively to the larger sites.³³³ As such, the specialist knowledge required for making them would be paralleled by the monumental art and also the archaeoastronomical orientations that can be seen at El Mirador. The question how the uses of jadeite and specialist knowledge differed between small and large sites cannot be answered here yet, as it depends upon the analysis of the agency of art that will be addressed in section 8.3. With regard to elements like the richer, royal burials and the Jester God motif, there is little doubt that they belonged to the larger sites, as part of the institution of kingship.

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³³¹ Another long-term aspect of some of the larger sites can be seen in the ritual activities at abandoned structures, as can be seen at different sites in the Classic period Mirador Basin, which was also emphasised by epigraphic references to the Kaan kingdom (Hansen et al. 2008). Another case for which this can be observed is the Tigrillo 'palatial' complex of Preclassic San Bartolo, which was a focus of Late Classic (re)building activity that seems to have focused on the social memory of the structure, acting as an 'architectural heirloom' (Runggaldier 2009, 288-293).

³³² This is based mostly on the evidence from similar compounds at Nakbé, which are better known and will be discussed in more detail in section 8.2.2. As noted in the previous sections, labour could be appropriated for many of the services of elites, ranging from house chores, to agricultural and artisanal work. Unfortunately, even if well-documented from ethnohistory and ethnography (McAnany 1995, 136-139), it is also very hard to recognise archaeologically.

³³³ Unfortunately, this argument is not as tight in terms of the evidence as it is in terms of plausibility. The main reason for this is that many portable art objects of jadeite and related greenstones have not been found in secure contexts, and hence cannot be directly linked to the bigger sites. There are, however, close iconographic parallels between these portable art objects and monumental art, to be discussed in section 7.4.2 and elsewhere, the latter of which is exclusively found at the larger sites.

In fact there is no evidence at all for either kingship or warfare at Chan. Both can be recognised in a basic sense at El Mirador, even if there are still many unresolved questions such as the makeup of the internal administrative structure of the state, the scope and character of its regional hegemony, as well as the possibility of captive-taking. As argued in the previous section, the site most likely acted as a hegemonic power within a network of city-states or *cacicazgos*. These state-related aspects of El Mirador show that, despite the many commonalities with Chan, it was a qualitatively different beast. That is, it was not merely a super-sized collection of many Chan communities cobbled together, but integrated many of the same elements together in a different framework. Yet at the same time, the elements in common between the two have some coherence as well. Elements like maize agriculture, lineage-based inequality, and a focus on civic-ceremonial centres can be seen as intersecting in the notion of the moral community, which can be extended to the ideological foundations of states. As such it forms an important key to the 'social world of knowledge' of the LPC lowland Maya, and the analysis of art provided in the next two chapter is, in the absence of ethnographic sources, the best available source to interpret it.

CHAPTER SEVEN: GENERAL CHARACTERISTICS OF LATE PRECLASSIC LOWLAND MAYA ART

7.1: Introduction

7.1.1: Chapter overview

In this chapter the general characteristics of LPC lowland Maya art will be discussed, though with extensive references to relevant information from later periods that help to put it in its proper context. The structure of the chapter in overall terms mirrors that of chapter four on the general characteristics of Mycenaean art. In the next section the available sources for interpreting LPC lowland Maya art will be discussed, while the next three main sections will deal with material forms (7.2), craft and conceptions of materiality (7.3), and iconography (7.4). However, compared to chapter four the content of many of the individual sections will be structured differently, given the specifics of the material and its interpretation in the LPC lowland Maya case. In the introductions of each of the three sections the basic points from the Mycenaean case on this topic will be listed, in order to remind the reader of the structure of that chapter in relation to the different sources available for the LPC lowland Maya. Through this the reader should be able to gain an appreciation of how the analysis presented here is structured according to the sources specific to the Maya case.

7.1.2: Sources for the interpretation of Late Preclassic lowland Maya art

The archaeological record of Maya art has been described as the richest and most complex of the pre-Columbian early civilisations of the Americas in terms of its size and complexity (Miller 1999, 11). Ever since the start of scientific exploration in the 19th century the record has expanded considerably, and this is true especially for the Late Classic period, for which dozens of larger sites with complex artistic and textual records are known. Yet there still exists the potential for single discoveries to overturn or at least greatly modify established interpretations, and this is especially true for the LPC period under consideration here. This point is easily understood when considering the rather contingent discovery of the San Bartolo wall-paintings (Saturno et al. 2007, 1-3). The understanding that there may still be many important discoveries to be made, makes an account of this period by definition of a tentative character. Indeed it seems as if the further one goes back in the trajectory of the Maya, the greater the potential of paradigm-shifting discoveries becomes, something corroborated by the recent finds from Ceibal (Inomata et al. 2013). Yet at the same time the number of sites and the amount of material available from them make it possible to sketch at least the broad parameters of art and its agency in the LPC Maya lowlands. This is the minimum requirement for the type of comparative research carried out in this thesis.

There are over a dozen sites with records of LPC period art in the Maya lowlands (see for a map figure 48), most of which are located in the Petén and Belize. In many of these sites the LPC phase is obscured later architectural construction in the Classic period. But this is not the case, or to a much lesser degree, at the important sites of Cerros, Cival, El Mirador, and San Bartolo, among a number of others. The implication of this is that at these sites it is easier to develop an overall interpretation of the artistic record in relation to its surroundings. In the sites with considerable Classic period construction the LPC period finds are more difficult to contextualise. Another characteristic of the record is the variability in the amount of evidence available for different material forms of LPC period art. Some material forms can be found at many different sites, especially the large stucco masks attached to architectural structures, while others cases such as the stelae or the wall-paintings are comparatively more rare. Hence for these material forms new discoveries are more likely to overturn established ideas. In some cases the existence of such

'unknowns' is already known in principle, as is the case for the wall-paintings from the site of Wakna in the Petén that are still to be fully documented (Estada-Belli 2011, 52).³³⁴

The application of scientific techniques to analyse the material record of Maya art is starting to be more fully developed. A good example of the usefulness of such methods can be seen in their application to new reconstructions of the Late Classic period wall-paintings from Bonampak (Miller & Brittenham 2013) and the analysis of the painting techniques used to create them (Magaloni-Kerpel 2004). Similar techniques are now being applied to the San Bartolo wall-paintings, which has allowed for the recognition of different 'hands' of individual painters (O'Grady & Hurst 2011). This also makes possible *chaîne opératoire* approaches for the further interpretation of these wall-paintings (Hurst 2009, 13-19), which are increasingly being used in Maya archaeology in general. A good example of this is the study of the craft-work involved with jadeite and other high-value materials at the Classic site of Cancuén (Kovacevich 2007). Such studies have not yet developed to their full potential, especially for the LPC period, but given the amount of jadeite, obsidian and other materials for this period the insights to be gained are likely to be highly significant. This approach will be discussed further in section 7.3.2.

The potential of the textual sources, the parameters of which were discussed in section 6.3, to shed more light on LPC art seems rather low, given the state of the presently available evidence (Houston & Taube 2008, 127-128). Not only are the available texts often illegible, in part due to the signs being small and not incised very deeply (Houston 2012a, 198), but when they are legible they are not as readily understandable as texts from the Classic period (Fahsen & Grube 2005, 75). Nevertheless, writing is known from a variety of LPC contexts, including both monumental and non-monumental art, and from the Loltun cave as well (Houston & Inomata 2009, 92). The discovery of the incorporation of glyphs in the wall-paintings at San Bartolo has already proven insightful, and indeed many other revelations may follow from this site. Their significance derives not so much from what is known from the decipherment of the limited texts in themselves, though these are by no means insignificant, but rather what they reveal about the relation between texts and images. In this case it is possible to draw parallels with the relation between texts and images in the Classic period, as will be outlined in section 7.4.3.

Turning now to the connection of LPC lowland Maya art to that of contemporary and preceding cultures in Mesoamerica, it is important to note how studies of Mesoamerican art tend to be able to trace cultural elements over long periods and broad geographical areas. In some cases these even extend beyond Mesoamerica itself (e.g. Taube 2000). Notable studies in this regard are Covarrubias' tracing of the development of the depictions of the rain and storm deities through different periods and regions of Mesoamerican history, and Taube's study of the afterlife of the Olmec maize god. Both have shown the ability to use the direct historical method to connect cases (Houston & Taube 2008, 134), see figure 49.³³⁵ The latter case has proven influential for the interpretation of the San Bartolo wall-paintings, to be discussed in detail in section 8.2.4 of the next chapter. Furthermore, as will be explored in section 7.3, such connections exist not only for iconography but for craft and conceptions of materiality as well. Indeed, the notion of memory-work may prove to be a useful way to explore in more detail how such continuities could possibly have existed for periods and geographical areas far extending beyond any individual Mesoamerican culture.

³³⁴ Here thousands of wall-painting fragments from San Bartolo also need to be included, which, contrary to the scenes that have remained *in situ*, have not yet been analysed and published (O'Grady & Hurst 2011, 879). Another case is that of the as yet unpublished sculptures showing war captives from El Mirador (Houston & Inomata 2009, 96).

³³⁵ The present work has also received much inspiration from the hermeneutics of interpreting of the Mixtec or Nuu Dzaui codices in the light of sources from contemporary descendant communities, as developed by the group of Leiden researchers on Mesoamerica (e.g. Jansen & Pérez Jiménez 2011, 181-215). Particular thanks go to the participants in two seminars on the San Bartolo wall-paintings in the Summer of 2014.

Naturally these contemporary and past connections of the LPC lowland Maya extended into the future Classic, Postclassic, colonial, and contemporary periods as well. This can be seen in the connection made between ethnographic studies of contemporary Ch'orti ritual and Classic period Copan (Looper 2009). Apart from similar challenges and opportunities with regard to the application of the direct historical approach, there exist the additional issues of linguistics. As noted in section 6.3 of the previous chapter, Maya texts are more than containers of information but have to be understood as 'literature' in the sense of being located in communities of performance. In his study of the history of Maya literature, Tedlock (2010, 25-30) notes how hard it is to trace this back to the LPC period, even for regions outside the Maya lowlands where better sources have been found. Hence efforts to trace back specific features of literary works such as the Popol Vuh have met with some controversy, despite the successes in this for the Classic period. ³³⁶ This shows that when considering the notion of memory-work broader cultural phenomena than only the transfer of symbols have to be taken into account, in particular the specifics of the contexts of art within specific cultural periods like the Preclassic.

7.2: The material forms of Late Preclassic lowland Maya art

7.2.1: Introduction

In this section the material forms of LPC lowland Maya art will be discussed, based on the same basic categories that were used in chapter four on Mycenaean art. It is useful therefore to briefly recollect those categories:

- 1. Monumental-scale containers, with art that is often embedded within fixed spatial contexts.
- 2. Non-monumental containers, often portable.
- 3. Instruments, rarely of monumental scale.
- 4. Potentially cross-cutting the different forms are recurring surface-patterns.

It should be reiterated once again that the purpose is not to give an encyclopedic overview of these material forms, much less of the entire LPC period archaeological record, but rather to highlight the main characteristics as well as details of special significance. Also, as has been pointed out in chapter four on the general characteristics of Mycenaean art, these divisions are used solely for the purposes of exploring the generic properties of specific material forms of art and the relations between them. They do not imply that this categorisation was shared by the Maya, instead it is necessary to consider the specifics of that record in detail. In this regard the LPC lowland Maya record presents different challenges than the Mycenaean one. For example, in both areas textiles have generally low survival rates and are usually only recovered in very small fragments. But the Mycenaean information on textiles from depictions on other art forms, also seen in contemporary Egyptian art, is much better than that of the Preclassic Maya. Conversely, the Maya record in some ways is more durable as for this period there exist no metal objects, and hence there was no chance of art objects being scrapped or melted down for reuse in other contexts. Such subtle differences should always be considered, and not only for addressing gaps in the record but also as providing an insight into the properties of the different material worlds of both early civilisations.

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³³⁶ A major contribution in this question was made by Coe (1989), who connected different iconographic themes from pre-Columbian Maya art to aspects of the Popol Vuh. These questions will be addressed specifically in the relevant sections on iconography in section 7.4 of this chapter, and in the next chapter for specific scenes at sites such as San Bartolo and Nakbé.

Table 7.1 below outlines the main material forms of the art of the LPC lowland Maya, according to the three main categories of monumental and non-monumental containers and instruments. It is important here to note also some of the basic materials that were used to make these forms. As outlined in (Miller 1999, 72-87), these include jadeite and related greenstones, 337 limestone and other kinds of stone used for architectural purposes, granite, obsidian, chert and flint, iron-ore (pyrite, haematite), cinnabar, and even mercury. 338 Also used were organic materials such as wood, unfortunately very susceptible to decay, human and animal bones, as well as marine-derived elements. With regard to fabricated materials ceramics and stucco were very important. The earliest metal objects were not found until the Late Classic period, and metallurgy as such seems to have been developed properly only in the Postclassic. Little is known about designs on textiles from the Preclassic period, nor about the bark-paper that may also have been used for clothing. Both materials have survived only in insignificant quantities that prevent substantial further analysis, and the information from LPC artistic depictions is much less informative than from the Classic period vases and wall-paintings. This also holds true for the quetzal feathers so well-represented in the Late Classic period wall-paintings from Bonampak (Miller & Brittenham 2013, 123-124). Because of the decipherment of the Maya script, some of the terms used for different materials are known, including different forms of ceramics, shell, obsidian, and chert (Houston 2014, 89).

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³³⁷ Although often referred to by the umbrella term jade, the more specific and correct term is jadeite and can be distinguished from the more common nephrite, which was the material used for Chinese jade (Taube & Ishihara-Brito 2012, 136). Strictly speaking some objects should be referred to as jadeitite (Taube 2004a, 20), but here jadeite will be used consistently to encompass all such materials, and to distinguish them from the nephrite variant. Although jade is sometimes used to describe a variety of green minerals (e.g. Mora-Marin 2001, note 106, p. 157), here these will be referred to by the more generic term greenstone, to avoid any conflation with the blue-coloured Olmec jadeite and other variants.

³³⁸ Mercury is usually extracted from cinnabar but also occurs naturally, and it has been argued that rather than extraction from cinnabar, the more labour-consuming collection of naturally-occurring mercury was used in the Maya area at this time (Pendergast 1982, 534). The material was already handled in the LPC period, as a cache from Caracol demonstrates (Chase & Chase 2006, 51).

Material form	Technique(s)
Monumental containers	
stucco façade masks	modelling
stucco friezes	modelling
wall-paintings	painting
stelae	carving
Non-monumental containers	
figurines	moulding, carving
pottery	moulding, incisions
textiles	weaving
jewellery	carving
bones	carving, incisions
mirrors	polishing
Instruments	
stingray spines	unworked
eccentrics	knapping, carving, painting

Table 7.1: Categories of the material forms of LPC lowland Maya art.

7.2.2: Monumental containers in Late Preclassic lowland Maya art

The first indications of the presence of monumental art in the Preclassic Maya lowlands came from the discovery of large stucco head-masks and panels on the LPC period façade of Structure E-sub VII at Uaxactún (Ricketson & Ricketson 1937). This early discovery has in the following decades been joined by many other Maya lowland sites with stucco head-masks and friezes on architectural facades (R. Hansen 1992, 27-29). 339 With the exception of those at El Mirador and Nakbé, most cases of stucco-adorned architectural façades were buried under later constructions. For some of them this was seemingly for preservation, but others were intentionally damaged as part of termination rituals. The technological development of the lime-plaster required to construct these material forms of LPC lowland Maya art has been traced at the site of Nakbé. By the end of the MPC period the repertoire of lime-plasters at this site was broadened from a rough version used to cover walls and floors to include more fine-grained, higher-quality ones that were used to make stucco masks and panels (E. Hansen 2000, 210-211). Different colours were applied to the stucco work: initially only red, black, and white or cream paints, but from the LPC period onwards

³³⁹ Stucco-work has also been found at the site of Chiapa de Corzo in Chiapas (Hansen 1992, 32-33), where there are a number of close architectural parallels with the Maya lowlands (Houston & Inomata 2009, 98).

including orange, yellow, brown, pink, and grey-green (Houston et al. 2009, 72, 75). The evidence from Nakbé suggests that the paint was of high quality and applied in a single effort (E. Hansen 2000, 229).

One distinguishing characteristic of the stucco masks and panels are their grandiosity. The normal size of the art-works was already larger than life-size, but one outsize mask of the so-called Principal Bird Deity from Nakbé measures 5 metres in height and 11 metres in width (R. Hansen 1998, 82). The technical possibility to create large stuccoed surfaces with complex iconography was also used to create larger friezes, as can be seen at Calakmul Structure II/Sub II c-1 where one with a length of 20 metres and height of 3.5 metres has been found (Rodriguez Campero 2008, 47-48). Apart from their great size, the stucco masks are also characterised by their placement. Quite often they were deployed flanking the central stairways of pyramids, see figure 50 for an example, resulting in a number of cases with a symmetrical arrangement. A good example of this are the four stucco masks on the opposite sides of the stairway of Cerros (Freidel & Schele 1988, fig. 4, p. 554). The number of stucco masks and panels on buildings could be quite numerous, as was the case for Structure E-sub VII at Uaxactún, for which as much as 18 masks are known (Hansen 1992, 33-34). As will be explored in section 7.4.3 below, there may have been some narrative potential in the deployment not just of the frieze panels but potentially for the stucco masks as well.

Another form of LPC monumental art was that of wall-painting. Ethnohistoric sources indicate that mural art was very common in contact-period Mesoamerica, and elements of it were adapted for the wall-paintings of early colonial monasteries (Hurst 2009, 1-2). This tradition dates back to the earliest known paintings from the cave of Oxtotitlan, located in the modern Mexican state of Guerrero, that are dated to 800-500 BC (Grove 2007). Although the environmental conditions in the Maya lowlands are not especially conducive to the survival of wall-paintings, the establishment of the craft required to make it can be traced back to 400 BC. This can be inferred on the basis of fragmentary evidence from the site of Holmul, with a handful of sites with material known from the LPC period proper (Hurst 2009, table 1, p. 7). LPC period wall-paintings seem to have used a combination of *secco* and *fresco* techniques, ³⁴⁰ as is known for the later mural art of the Maya and Teotihuacan as well (Hurst 2009, 176, 183, 186, 191). As already noted in section 7.1.2, much of the material has not been published or even studied, resulting in a reliance on the well-published insitu wall-paintings from San Bartolo (Saturno et al. 2007; Taube et al. 2010). Hence, perhaps to a much greater degree than for the larger corpus of stucco masks and panels, even the extant record of LPC period mural art might very well still harbour considerable surprises. ³⁴¹

Nevertheless, from what is known the basic properties of this material form can be established. The first of which concerns the fact that, as for later periods, murals were located both in external and internal settings (Hurst 2009, table 2, p. 22). In the later part of the LPC period cave paintings, as well as carvings, are also known from the cave site of Loltun in the northern Maya lowlands (Stone 1995, 56-61). The size of the paintings was variable, as can be seen for the San Bartolo case where both life-size figures (Hurst 2009, 64) and a frieze with a height of about 80 centimetres

³⁴⁰ See for a full explication of these terms section 4.2.2 of chapter four.

³⁴¹ A good example of this is the case of LPC structure 5C-01 from El Achiotal in the western part of the Petén, where, together with typical stucco masks, parts of multiple wall-paintings in an unusual style were found (Acuña 2011 figs. 3.13 & 3.18, pp. 58 & 61). The peculiarity of these murals is the way in which geometric and rectangular designs are used, in contrast to the usually more free-flowing calligraphy of Maya wall-paintings. According to the excavator, while it used Maya symbols it also contained direct references to Olmec conceptions of ancestry and its ideological implications (Acuña 2013, 344).

³⁴² At present Loltun stands isolated in the LPC period, although it was preceded by significant cases of Olmec cave art (Stone 1995, 46-51), and many of the major LPC lowland Maya sites do not have caves in their vicinity (Stone 1995, 235). This issue will discussed further in section 8.2, on contexts of art, of the next chapter.

(Taube et al. 2010, 4) were found. On the basis of the present-day evidence it seems that paints were initially rare, allowing only for small wall-paintings, but that after 100 BC there was an expansion of the colour palette used for creating murals (Hurst 2009, 163-165). Although so far no Maya blue has been found, the range of colours used at LPC San Bartolo rivals that of Bonampak, as documented by Magaloni-Kerpel (2004), in complexity and is more sophisticated than other later sites with wall-paintings like Palenque and Chichen Itza (Hurst 2009, 227). Although different in some ways, the LPC period techniques for making wall-paintings were therefore as developed as those of the succeeding Classic and Postclassic periods.

In contrast to the abundant Classic period record of stelae, the LPC evidence for them remains rather problematic. This is partially the result of the later relocation of a number of the Preclassic stelae (Hansen 2001, 57), which in many cases makes it impossible to determine their original context. Another potential distorting factor is that wood may have been used to make stelae as well, thereby obscuring part of the originally existed record through its decomposition, creating another potential distortion in the record (Miller 1999, 79-80). However, it has long been recognised that there did exist stelae in the LPC Maya lowlands with likely ritual functions (Hammond 1982; Justeson & Mathews 1983). Yet so far no Long Count dates have been found on the Maya lowland stelae, unlike on contemporary stelae from the southern Maya area, as noted in section 6.4.2. The use of Long Count dates and stylistic similarities to Classic period Maya stelae can be used to infer a relation between the stelae in the southern Maya area, like those at Izapa, and those of the Maya lowlands of the Classic period. However, internal developments in the Maya lowlands in the LPC are not insignificant, especially with the impact of the stucco masks on the LPC period stelae in this area (Awe et al. 2009, 184-186).

The lowland stelae that can be ascribed to the LPC period show considerable variation. There is a plain stela from Cuello that was found in situ and dated to around AD 100 (Hammond 1982, 402). 344 Other cases had more complex iconography, including evidence that seems to suggest a kingly figure, as can be seen for stelae from Cival (see figure 51) and El Mirador (Estrada-Belli 2006, fig. 6, p. 64; Houston & Inomata 2009, fig. 3.12, p. 91). The evidence from Cival is especially interesting, as the stela mentioned both seems to have been preceded by an uncarved one and is argued on stylistic grounds to have pre-dated the monumental architecture of Nakbé and El Mirador (Estrada-Belli 2006, 59, 63). It has been proposed that a stela from El Mirador carrying text was carved in the LPC period as well (Hansen 1991). Finally, it should be mentioned that there may have been a conceptual contiguity between stelae and naturally-occurring rock, with the former being akin to 'portable bedrock' placed in human-made analogues to natural features such as mountains, caves, and pools (Stuart 2010, 286-288). In this sense the carved relief of an entrance to the Loltun cave (Grube & Schele 1996), can be mentioned here as a parallel to the stelae.

7.2.3: Non-monumental containers in Late Preclassic lowland Maya art

The discussion of non-monumental containers in LPC lowland Maya art will start with ceramic-based forms. The role of typology and classification in Maya pottery studies has already been discussed in section 6.3 of the previous chapter. There it was stated that the LPC period is usually characterised by the so-called Chicanel ceramic sphere, with its many regional and site-based

³⁴³ It has recently been suggested that the San Bartolo stone block with writing dated to circa 300 BC may have contained an indirect reference to the use of the Long Count at this site even at this early date (Giron-Ábrego 2012). As the author notes, however, each step in his chain of reasoning has to be further substantiated. If ultimately proven, it would make for an interesting contrast with the calendrical information from the wall-paintings, to be discussed in section 8.2.4 of the next chapter, which do not seem to indicate the use of the Long Count.

³⁴⁴ There have been suggestions that some of the plain stelae may have had stucco on them for decoration rather than being carved (Awe et al. 2009, 185), but not everybody is convinced of this (Stuart 2010, 285).

complexes, although debates on typology and chronology continue. Here the focus lies not on types and the variation between them, but rather on the decorative and functional aspects of LPC lowland Maya pottery. First of all, however, it is important to consider basic techniques. Maya pottery in general was hand-made, involving a variety of techniques, and the initial shapes may have been derived from gourd-derived containers (Miller 1999, 190-192). Pots could also be shaped in distinct forms, such as zoomorphic ones, though these are not common in the LPC period (e.g. Powis 2002, 183). One interesting feature is that the use of volcanic ash as a tempering material for ceramics, well-known for the Late Classic period, appears already to have been present in pre-Mamom or Cunil pottery (Cheetham 2005, note 5, p. 38; Sunhara et al. 2006). As this material is lacking in the Maya lowlands itself, and thus had to be imported, its use is one more indication of long-distance trading even at this early phase (Cheetham 2005, 34).

Turning to decoration, painting Maya ceramics was done through clay slips (Miller 1999, 192), and another decorative technique was through incisions. Although a variety of regional and site-based complexes existed, the Chicanel sphere was dominated by the so-called Sierra Red group (Sharer & Traxler 2006, 244), named after the red slip applied to its surface. The monochrome focus of most LPC period pottery can be contrasted to the well-known polychrome shapes with their richly figurative iconography from the Classic period (e.g. Reents-Budet 1994). This is not to say, however, that LPC period ceramics are blanks in terms of meaning. First of all the aspect of surface colour and finish are of importance, as will be discussed further in section 7.3.3 below. Secondly, there are also cases of iconographic motifs on LPC period pottery, for example the cross on the interior base of a bowl from the site of K'axob in Belize (Berry et al. 2004, 244-245). More examples of very simple decorative designs on vessels come from caches and burials at Tikal, which include imported pots (Culbert 1993, figs. 4-13). But the repertoire is much simpler and less coherent than that of pre-Mamom or Cunil pottery (Cheetham 2005, figs. 3.5-3.6, p. 33), let alone the revolutionary contrast that can be inferred from even a cursory look at the Early Classic Tikal vessels illustrated in Culbert (1993).

Another aspect of LPC period ceramics are the different functions of pots. In section 6.4.2 the analysis of ceramics to study maize consumption and feasting with cacao-based beverages was noted. The key issue at hand here is whether or not certain vessels were used intrinsically as art objects, or whether artistic expressions were an inseparable aspect of a wider range of ceramic forms. From the limited evidence it seems that for LPC period pottery the prime distinction in decoration and form can be seen for those pots used for ritual purposes (Powis 2002, 484), as can be inferred from their occurrence in burials and caches (see the discussion in section 8.2.1). Another form often made from clay, but by no means exclusively so, was that of the figurines, which were fairly common in domestic contexts in the MPC period but go largely out of use thereafter (Ringle 1999, 190, 193). Although there are different interpretations about the early use of figurines, their disappearance has been linked to a shift from portable to monumental art at the start of the LPC period (Hammond 1989). The shift away from figurines parallels the disappearance of the decorative repertoire from pottery. Even so, there does not appear to have been a decisive cultural break, which can be seen neither in the archaeological record overall, nor in the basic constitutive concepts of art. Instead the shift from one kind of medium to another is more likely to have been due to socio-political changes.³⁴⁶ Finally, at a later stage of the LPC period new kinds of figurines

³⁴⁵ Later cases of painted gourd containers are known from the archaeological record, however (McAnany 2010, 242-243), see for example two possible cases from burial 167 from LPC Tikal (Coe 1990, 231). Rather than being limited to the origin of pottery, there seems to have been a continuous process of skeuomorphism between gourds and a variety of ceramic forms (Houston 2014, 40-41).

³⁴⁶ Just as with the early decorated pottery, figurines have been connected with emerging socio-political inequality in Formative period Mesoamerica (Lesure 1999). A tempting scenario would be to attribute the shift away from pottery and figurines to monumental art to the change from chiefdom-like polities to early states. But as will be discussed in

known as 'Charlie Chaplins' are increasingly found in cache deposits (Lomitola 2012).

Using lapidary techniques jadeite and related greenstones like serpentine and fuchsite were transformed into a variety of art objects, although celts as naturally-shaped forms were also included in this category (cf. Taube 2004a, 20). These include plaques, earspools, pendants, statuettes, figurines, carved heads, and beads, see the catalogue in Taube and Ishihara-Brito (2012). An outstanding case is the serpentine mask from burial 85 at Tikal (Coe 1990, 219), see figure 52. The most frequently found forms, however, are the celts. Almost all of these objects have been recovered from caches or burials. The presence of broken jadeite artefacts in abandoned architecture suggests that in some cases they may have been used in termination rituals as well, as at LPC Cerros (Garber 1993). Based on research on the Olmec uses of jadeite it has been suggested that aside from being art objects in their own right, polished jadeite celts were both an important means of exchange and could act as the 'blank' from which the art objects could be derived (Taube 2004a, 18). The relevance of these ideas has long been noted for the LPC lowland Maya as well (e.g. Freidel 1993). The impact of this for understanding value will be discussed in section 8.3.

Another important category of non-monumental containers were mirrors, which were made of jadeite, obsidian, and naturally occurring iron ores (pyrite, haematite). Tommon to all these materials was their potential to shine and reflect, brought out by polishing and related lapidary techniques. Such objects had important ritual functions and were associated with rulership as well, as can already be seen for the Olmec concave iron-ore mirrors (Carlson 1981). Another function may have been to start fires through focusing sunlight (Nelson et al. 2009, 2). The ontological implications of these objects will be discussed briefly in section 7.3.3 below. Mirrors first appear in the Maya lowlands in the MPC period, as can be inferred from a mirror backing from Cahal Pech dated to 600 BC (Awe 1992, 302-303). More material evidence for mirrors, made both of haematite and pyrite, is known from the LPC period, much of it deriving from caches (Blainey 2007, 59-61). Technically, it seems as if in contrast to the concave Olmec mirrors, most Maya cases were actually mosaics of small pieces, not necessarily from the same materials, on a flat surface (Blainey 2007, 41, 44). The same materials used for mirrors were also used in reflective mosaics from the MPC period onwards (Sharer & Traxler 2006, 180; Healy & Blainey 2011).

Organic materials were also used to make LPC period art objects, and in some cases they were simply used as such without substantial human modifications. Both human and animal bones were worked, including the elaborate carvings on a bundle of some 90 human bones from a royal tomb at Late Classic period Tikal (Miller 1999, 217-220). For the LPC period no bones with complex texts or iconography have been found, but the principle of carved bones did exist, as can be inferred from examples with mat motifs in a burial from Cuello (Hammond 1999, 64). Another important category is that of shell and other marine-derived organic materials. A variety of types of shell ornaments, ranging from intricately worked beads and similar objects to unworked or roughly worked detritus, are known for the LPC period (Hohmann 2002, 104-109). Finally, some non-monumental containers were made from the perishable materials of wood, textiles, and bark-paper, yet few of them have survived but for a few fragments. Nor can much information be gained from

sections 7.4.2 and 8.2, the situation for the LPC lowland Maya is more complicated than this.

³⁴⁷ Mercury, alongside water, has also been noted in association with the reflective properties of mirrors (Healy & Blainey 2011, 241). The material is very rarely found in LPC contexts, but one well-known find from a cache at Caracol presents a highly enigmatic and compelling case. In this cache a large amount of mercury was found as a pool, lying at the bottom of a small hollow stone that also had a jadeite pendant and beads, as well as shell beads and cinnabar: all likely wrapped up as a bundle (Chase & Chase 1995, 95-96).

³⁴⁸ Especially for textiles and wood this is highly unfortunate, although the former may have been less prevalent in the LPC period compared to clothing made from bark-paper and other materials (McAnany 2010, 121-123). Ethnohistoric sources suggest wood was a very important and widely used material for art objects, with high status attached to

other sources about such forms. For example, the depictions of textiles in the San Bartolo wall-paintings are sparse, though not completely absent (Taube et al. 2010, figs. 67-68, pp. 106-107), perhaps owing to their emphasis on mythological themes.

7.2.4: Instruments in Late Preclassic lowland Maya art

With regard to instruments in the art of the LPC Maya lowlands, the record is not very extensive and does not include monumental forms. Unsurprisingly, the most important materials to be used for fashioning instruments were chert and obsidian. In general terms, the objects made from these materials that qualify most obviously as art objects are the so-called 'eccentrics'. Best known from the Classic period, the objects in this category are shaped in a wide variety of forms that are not conducive for practical application in, say, agriculture or warfare, and are almost exclusively found in caches (Clark et al. 2012). However, the diversity characteristic of the Classic eccentrics cannot be seen in the limited LPC period record. Instead there existed a limited repertoire of sceptre and 'trident', found only at Colha and a few other sites, forms that seem to derive from the stemmed macroblade or 'dagger' form (Gibson 1989, 134). This latter form was of ritual significance as well, possibly through use in blood-letting rituals, and is more widely found in caches at LPC sites, like Cuello (Robin et al. 1991, 226, 229). The development of these objects at the site of Colha occurred in parallel to the large-scale production of utilitarian tools here (Hester & Shafer 1994, 50).

The evidence for other instrumental forms of LPC lowland Maya art is even more limited. Eccentrics made of obsidian do not appear to have already been made in the LPC period. Most studies focus on distribution patterns and questions of exchange of this material from distinct sources, with perhaps some kinds of obsidian being more commonly used in ritual contexts than other kinds (e.g. Brown et al. 2004, 235). Musical instruments are known, as can be seen for small ceramic whistles or ocarinas, in zoomorphic and anthropomorphic shapes, from K'axob and other sites (Bartlett 2004, 264-265). Ceremonial jadeite celts have also been found, as for example the ones made from blue-green jadeite found in a cache at Cival (Estrada-Belli 2006, 75). Finally, stingray spines are found relatively commonly in caches and burials, as at Cuello (Robin et al. 1991, 229) and at Tikal (Coe 1990, 240). In the iconography of the Classic period, stingray spines often occur in blood-letting rituals, 349 though their toxicity seems likely to have subsided too quickly to be of any significance in these kinds of ritual (Haines et al. 2008).

Finally, of special importance here are the instruments used to fashion LPC lowland Maya art. Recalling the different techniques listed in table 7.1 above, a number of different kinds of craft can be distinguished:

- 1. Reductive, especially in the knapping of chert and obsidian to obtain usable pieces from cores, but also the techniques used for the bore-holes that can be seen in different materials.
- 2. Additive, most importantly in the modelling of clay for pottery and figurines, as well as for shaping the monumental stucco masks and panels. Weaving is also included here.
- 3. Transformative, which can only be seen in a limited form in the pyrotechnics involved in making stucco, painted plaster, and pottery.
- 4. Surface treatment, employing a range of techniques, including polishing, incising, carving,

working it in Classic period elite contexts (McAnany 2010, 244). More isolated finds from the LPC period, like a stuccoed wooden bowl from the famous burial 85 at Tikal (Coe 1990, 219), point to its likely importance here too.

³⁴⁹ As with obsidian and chert blood-letting instruments, the stingray spines were used in rituals in which (royal) figures offered their blood to fulfil their debt to deities, thereby ensuring the continuation of the cycle of birth, death, and rebirth, especially of the maize sustaining human communities (Stone & Zender 2011, 75). Interesting in this regard is how stingray spines are one element of a quincunx motif, used in Classic period art in scenes that signify the creation of the world and the transfer of a deceased king from the realm of the living (Haines et al. 2008, 91-92).

painting, and writing.

Some additional points can be made on these different sorts of craft-work and the interrelations between them. The first is that the technology for transforming materials is limited to the use of pyrotechnology for additive craft-work. Until the development of Postclassic Maya metallurgy this kind of craft-work does not involve the transformation of raw materials into new ones like metal alloys. Secondly, the later terminology of craft also points to interesting distinctions between reductive and additive kinds of surface treatment, in that the term *lu-Bat* is used to describe carving while the term *ts'ib* is used for writing and brush-work (Coe & Van Stone 2001, 94-95). Insofar as it can be inferred from both the epigraphic and the ethnographic records, however, *ts'ib* refers more to making patterns or designs across a variety of different media, including weaving, than to a specific technique applied to a specific material (Herring 2005, 75; Tedlock & Tedlock 1985, 124). Finally, apart from additive and reductive procedures there are also those focused on treating surfaces in themselves, such as burnishing and polishing in general. The aesthetic importance of this should not be neglected (e.g. Stuart 2010, 297).

7.2.5: The material forms of Late Preclassic lowland Maya art

Having outlined the different forms of LPC lowland Maya art, the next question concerns the connections between them, in particular with regard to skeuomorphs and recurring kinds of surfacepatterns. From the variety of forms discussed and from the absence of reliable information on materials such as wood and textiles, it should be clear that it is not possible to provide a complete picture. Arguing from the Classic Maya record, Houston (2014, 32-48) notes that a variety of cases of skeuomorphism can be recognised, involving 'quotations' from one material form to another. One common strand in this would have been a concern with durability, to move designs from more perishable material forms to those less susceptible to it (Houston 2014, 131-132). This is an important observation, but it is also possible to observe skeuomorphism between forms both made from similarly durable materials. A key example of this, which has been recognised in a more general Mesoamerican context, is the link between celts and stelae. Based on the shape and iconography of a number of Olmec stelae, these have been plausibly related to celts, in particular the upright celts in caches at La Venta (Porter 1996). This creates a category of 'celtiform' stelae, of which quite a few are known in Mesoamerica. In general terms this form is closely related both to notions of cosmological centrality and to maize and its sacred connotations, in particular the ears of corn seen ubiquitously in iconography (Taube 2004a, 37).

All of this is of significance for the lowland Maya as well, since finds from Preclassic Cival include a MPC period cache of upright jadeite celts, while in the same area a celtiform stela was placed in the transition to the LPC period (Estrada-Belli 2006, 75). Though at least possessing some formal resemblance, this example also immediately points to more complex aspects, in this case the connection with maize that will be discussed more extensively in succeeding sections of this chapter and the next one. Also, it should be clear that the stelae are by no means exclusively associated with jadeite celts. In section 7.2.2 the contiguity between stelae and rock in natural formations was mentioned, and since celts are also a naturally-occurring form the relation may be seen as a particular variant of that connection. Another aspect of this might well be the use of burnishing and paint to create more reflective and shining surfaces of stelae, almost resembling in this way polished celts (Stuart 2010, 296). This focus on reflexivity as connecting different forms could also be seen

³⁵⁰ This can be seen in that while *ts'ib* is used, with different added syllables, for writing and 'colour decoration' or painting (Stone & Zender 2011, 115), at the same time the terms for written texts (*uooh*) and images (*uinba*) are distinct (Herring 2005, 76). The implication is that it is the (additive) act of creating patterns that is conceptually linked with *ts'ib*, not a specific medium such as writing.

³⁵¹ There may have been an infix that indicated a polished surface, irrespective of the specific material (Mora-Marin

for the inferred connection between mirrors and the pool of mercury in the Caracol cache discussed in section 7.2.3. At a more abstract level, it has been pointed out that surface-patterns, particularly those with writing but not exclusively so, can actually function as instruments of vision (Hamann 2008a, 58-62), instead of being mere containers of meaning.

What cuts through the different forms of LPC lowland Maya art, then, are not primarily repetitive forms or well-defined iconographic designs, though these are not absent, but rather ways of treating surfaces and the ontological connotations that come with it. This reinforces the focus on creating surface-patterns across different media that were identified in the previous section. This emphasis derives both from considering the LPC material forms of art and from the ethnographic record of recent Quiché Maya communities (Tedlock & Tedlock 1985), perhaps extending to Mesoamerica in general. It is clear that here we have already gone beyond the boundaries of formal analysis proper, but at the same time it is necessary here to outline the issue as it recurs in different guises across the rest of the analysis of LPC lowland Maya art. This will become clear in section 7.3 for craft and materiality, in particular for questions of ontology, in section 7.4 for the understanding of iconographic conventions and their meaning, and in section 8.2 of the next chapter with regard of the spatial contexts of different LPC art forms. In this sense the four different aspects of forms, craft and materiality, iconography, and contexts all partake in each other.

7.3: Craft and materiality of Late Preclassic lowland Maya art

7.3.1: Introduction

It can be argued that the best comparability between Mycenaean and LPC lowland Maya art lies in in the realm of craft and materiality. The LPC period record will be discussed in three sections, the first one dealing with craft-work in general, the second with the specific topic of Maya conceptions of materiality, and the third connects the two strands. In this, it is again useful to keep in mind the basic patterns encountered in section 4.3 of chapter four on the Mycenaean analysis of craft-work and conceptions of materiality:

- 1. Craft-work and the use of *chaîne opératoire* approaches.
- 2. The relation of craft-workers to their societal context.
- 3. The basic conception of materiality as it relates to craft-work.
- 4. Conceptions of colours as they relate both to the materials that constitute them and to their applications in art.

7.3.2: Craft-work and Late Preclassic lowland Maya art

The exploration of craft-work in LPC lowland Maya art has to begin by noting two main strands of approaches to this issue. The subject involves on the one hand the technical analysis of materials from the archaeological record, and on the other indigenous conceptions of craft-work as they

^{2001, 180).} These interconnections will be further discussed in section 7.3.3.

³⁵² A family resemblance can be observed, in a strictly generic sense, between the structural relations in design between different forms of cultural expression of the Quiché Maya and early colonial Nahua designs of carvings that have strong parallels in song (Lockhart 1992, 422). Common to both is a 'cellular-modular' form of organisation in which relatively self-contained parts are joined into a whole, which can be seen not only for Nahua song and visual images, but also for the structure of historical accounts, landholding, household organisation, up to the order of the *altepetl* state (Lockhart 1992, fig. 10.1, p. 437). The aspect of social organisation has not been brought up for the Quiché Maya case, nor is it suggested here that the Nahua cases provides a decisive argument that it was connected to the inter-media patterns found there. Instead, it points to the possibility that the replication of surfaces may be related to a broader set of ideas, which were actualised in other domains than art and material culture.

derive from textual and ethnographic sources. The analysis starts with the former approach, as it provides the physical basis within which to embed the interpretations that derive from ethnographic research and texts. Just as for the Mycenaean material, the best way to evaluate the technical aspects of craft-work is through the *chaîne opératoire* approach. To briefly recall the definition used in section 4.3.2, this approach traces the successive steps from raw materials to finished art objects, and for each of these steps also considers, if possible, the social context in which it takes place. As noted in section 7.1.2, in recent years the *chaîne opératoire* method has increasingly been applied to different categories of Maya art. Examples include the analysis of jadeite, pyrite, obsidian and chert (Kovacevich 2006, 2007), lime plaster (Hansen 2001), and wall-paintings (Hurst 2009; Magaloni-Kerpel 2001, 2004). Their most important findings will be briefly summarised here, taking into account also other relevant studies that do not explicitly use the *chaîne opératoire* approach.

In her doctoral dissertation on craft-work in Late Classical period Cancuén, Kovacevich (2006) analysed the data for the production of smaller artefacts made of different materials in residential areas associated with elites and commoners, partially summarised in Kovacevich (2007). Although the material belongs to a different period, there are important implications for the LPC period, for which a similar *chaîne opératoire* approach has so far not been carried out for these particular materials. The Cancuén data will be discussed first and then be contrasted with that available for the LPC period. The key finding was that different materials were treated differently in craft-work. Obsidian and chert occurred widely throughout both commoner and elite activity areas of the site, and this includes the eccentrics (Kovacevich 2006, 307-308, 377-378). The only distinction between the two kinds of contexts may be found in the quantity and quality of the material used. There is a difference, however, for jadeite. While this also occurs in raw form and as simple worked objects in commoner contexts, elaborate and ritually-charged jadeite objects such as ear flares only occur in elite structures and burials (Kovacevich 2006, 189-190).

The suggestion is that there may have been a two-stage production process, one in which the five stages of working jadeite, described by Taube and Ishihara-Brito (2012, 140-145), were split into two phases. As argued for in the study of Kovacevich (2007, 79-82), working jadeite through the final production stages (primarily incising and polishing) to make ritually-charged objects like earflares, plaques, and large beads may have involved esoteric knowledge due to the special qualities of the material. These special properties of jadeite will be discussed more in-depth in the next section. Such jadeite and related greenstone objects may have been subject to sumptuary laws, based on an analogy to the Aztec case. But at the same time it should be noted that jadeite objects of lesser quantity and artistic elaboration were also found in commoner households and burials, as well as in caches (Kovacevich 2006, 190). A similar distinction between the different phases of the *chaîne opératoire* of jadeite artefacts has been noted by Rochette (2009) for the surface survey evidence from the Middle Motagua valley, the only source for jadeite so far discovered in Mesoamerica (Taube & Ishihara-Brito 2012, 136). Here the conclusion was that production was widespread and did not involve specialised tools, but also that the more elaborate and valuable jadeite objects were not made at this location (Rochette 2009, 263-264).

This distinction in phases of the production process reinforces the hypothesis that while Maya elites in the Classic period did not control the entire production process of jadeite, the production of certain artefacts was part of a different realm. At the same time, it should be stressed that ritual in

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³⁵³ In general few models emphasise direct elite control over chert and obsidian exchange and production for the Classic period. An exception is the study by Aoyama (2001) of the chipped stone record at Copan, which suggests that the proximity of this site to the Ixtepeque obsidian source led to a more direct relation between the control of production and exchange and the formation of the Classic period Copan state. This interpretation is contested, however, by Clarke (2003, 50-54), who reviewed a range of studies from Copan and the larger area surrounding it and concluded that even for this data-rich region central or elite control over obsidian cannot be demonstrated.

itself is not a distinguishing factor in this, as other kinds of jadeite objects and eccentrics were found widely in both elite and commoner contexts at Cancuén. In fact, if both kinds of contexts are seen as points on a continuum, then it is easier to understand how these elite-focused artefacts functioned in their social context. Kovacevich (2006, 524) brings up the concept of authoritative and allocative sources of power as defined by Anthony Giddens to help to understand this. She argues that through the use of certain objects in community ritual, elites could gain and maintain authoritative sources of power based on ritual and special access to esoteric knowledge and use them for allocative purposes such as labour mobilisation and tribute. At the same time, the more ubiquitous distribution of raw materials and less elaborate artefacts suggests that other, more horizontal means of exchange between all kinds of households were present, perhaps including 'peripheral marketplaces' (Kovacevich 2006, 534-537).

As noted, the case of Late Classic Cancuén has been brought up in order to contrast it with the LPC period evidence, for studies with an explicit *chaîne opératoire* framework have so far not been carried out for portable objects of this period. Most of these finds derive from cache and burial contexts, with more circumscribed production data from household contexts. Unfortunately, this means that the potential for cross-craft or multi-crafting analyses, as done for other periods and regions of Mesoamerica (Hirth 2009, table 1, p. 22), is limited. However, craft-work has been studied more extensively in recent projects, especially at Belizean sites such as Cerros, Chan, Colha, Cuello, and K'axob, among others, reflecting a surge in archaeological research in that country since the 1970s (McKillop 2004, 51). With regard to chert, the site of Colha was located closely to an important source of high-quality material, which in the LPC period was worked in more than 35 workshop areas at the site (Hester & Shafer 1994, 50). This production clearly outstripped local demand, and the particulars of the material and the ways of working it are reflected in chert artefacts found not only in Belize itself, but as far away as El Mirador and Tikal in the Petén (Hester & Shafer 1994, 60).

Based on section 7.2.4, it can be stated that chert instruments had both utilitarian and ritual functions, the latter evident for the deposition of macro-blades in caches, for example at Cuello (Robin et al. 1991, 226, 229). This is also true for the few eccentrics from the LPC period, which are mainly recovered from ritual deposits as well (Gibson 1989, table 5, p. 130). In one case it appears that a LPC eccentric was 'curated' as a heirloom in an Early Classic context (Hester & Shafer 1994, 57). Households could acquire materials and artefacts not immediately available in their own hinterland through the exchange networks discussed in section 6.4.2 of the previous chapter. It is clear that even small sites like Chan had access to a wide variety of material, including obsidian from all four major sources in the LPC (Meierhoff et al. 2012, fig. 14.1, p. 278). Some sites have yielded lesser quantities of certain materials than others, as is the case for obsidian and greenstones at K'axob (McAnany 2004, 315). Even so, there is little evidence that suggests elite control of craft-work for chert and obsidian. Instead, it can be observed that materials were widely available, but that some of their uses may have been more restricted owing to the ritual contexts in which they were found.

The same pattern also seems to hold true for the working of shell ornaments, for which good LPC period data is available. The production of shell ornaments does not seem to have been controlled by a specific social group (Hohmann 2002, 219), but nevertheless was also used as an important ritually-charged category of objects that were found in caches and burials. At some sites shell ornaments were associated differentially with certain burials, as for example at K'axob (Isaza

³⁵⁴ Studies on Preclassic craft-work in domestic contexts is very rare, especially compared to the more copious data from later periods, but some work has been done, as for MPC period Uaxactún (Hendon 1999).

Aizpurúa 2004).³⁵⁵ With regard to production, just as with the case of chert at Colha the production of shell ornaments may have been part of community-level specialisation, for example at Cahal Pech and Pacbitun (Hohmann 2002, 194). In overall terms the evidence points to a LPC period situation that is broadly congruent with that of Cancuén. Objects made from obsidian, shell, and chert may have been more easily acquired by certain households, but intrinsic differences in access to and working of these materials does not fit the pattern encountered at LPC period sites. This raises the question as to whether the pattern for jadeite production that was observed for Cancuén can be recognised for the LPC period data as well.

The key obstacle for answering that question, however, is that even more so than for objects made from other kinds of materials, jadeite and related greenstone objects are found almost exclusively in caches and burials. Although there is good evidence for LPC period occupation in the Middle Motagua valley jadeite source area, it is often difficult to relate direct remains of jadeite working to specific contexts of this period due to limited data and post-depositional disturbances (Rochette 2009, 99, 114). This is also true for the earlier Olmec use of imported blue, more translucent jadeite from the mountains surrounding this valley, where so far only Late Classic remains have been found (Taube & Ishihara-Brito 2012, 140). The result is that inferences about working jadeite in the LPC period are dependent primarily on the properties of the objects themselves and the use or deposition contexts in which they were found, rather than on direct production-related evidence. The focus here lies on the specifics of jadeite and associated stone objects, as the contexts will be treated in section 8.2 of chapter eight. Even so, it is important to highlight the pattern that such objects are overwhelmingly found in ritually-charged areas like caches and burials, as well as in a few of the known termination deposits.

With regard to the characteristics of jadeite and related stone objects, it is important to stress that there is no overall pattern of these materials in any way being monopolised by elite groups (e.g. Freidel 1993, 158-159). Instead, the most profound change that occurred with working these materials in Late Formative Mesoamerica, including the Maya lowlands, was a concomitant elaboration of forms and of iconography, including writing (Rochette 2009, 64-65; Taube & Ishihara-Brito 2012, 145-146). Of particular interest in this are the objects that carry writing, which as noted earlier involved a variety of materials. Most of the portable objects with writing made from jadeite and related materials are without known provenance or found outside the Maya area, 357 but can be roughly dated from 300 BC onwards (Mora-Marin 2001, 241). Even lacking information on their provenance, a reasonable case can nevertheless be made on iconographic and linguistic grounds that the Maya lowlands participated in a broader sphere in which such objects were crafted (Mora-Marin 2001, 251-252). The implication is that we are dealing with specialists with intimate knowledge of iconographic and written signs, the designs these were employed within, and the broader meaning carried by them. It is also important in this regard to remember that what is being elaborated here is not a mere elite marker, but rather a complex ideology involving maize and the deity associated with it, cosmological centrality, and rulership (Rochette 2009, 61-63).

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³⁵⁵ Based on the presence of shell-working detritus in Preclassic burials at Chan, it has been argued that more important families engaged in working this material and distributed the finished artefacts to the rest of the community, though unfortunately direct evidence from household contexts is lacking (Keller 2012, 266-267).

³⁵⁶ Even if it is possible to trace the sources of selected materials with greater specificity (e.g. Jaime-Riveron 2010, 130). ³⁵⁷ Even when the specific site is known it can be difficult to relate the objects that carry writing and complex iconography very precisely to datable contexts, as can be seen for the case of the Pomona flare (Justeson et al. 1988, 98-100). For the jadeite objects from Mesoamerican origin, which include Olmec ones, found in Costa Rica, it has been hard to determine exactly how and when they were transferred. Rather than long-standing trade links, another scenario suggests that they were moved in greater quantities in a shorter period of time, possibly associated with Classic period geopolitical upheavals (Graham 1998, 56).

Turning from portable objects to monumental art, the first topic to consider are the technological styles of lime-burnt plaster studied by Eric Hansen (2000) for the Preclassic and Classic periods. Based on a number of different criteria, including processing, adding clay and colourants, and supports and layering, he argued a distinct technological style can be discerned for the LPC period as opposed to the Classic period (Hansen 2000, 230-232). Furthermore, these differences are not based primarily on the natural development of an increasingly sophisticated lime-burnt plaster technology, but on specific choices that need to be understood as part of their socio-cultural context. For the LPC period there was an emphasis on mobilising great amounts of labour on large-scale stucco masks and panels that were constructed and painted in a single event, in contrast to the Classic use of smaller stucco work that was composed of multiple layers. Considering the differences in iconography between more generic cosmological themes for the LPC period and recognisable and historical rulers in the Classic period, the implications for which will be discussed further below. Hansen (2000, 226-228) argues that the different technological choices can be understood through the dual-processual theory. Whereas the massive LPC period constructions would indicate a group-focused, corporate socio-political structure, the Classic period focus on smaller constructions in more restricted contexts and a concern with individual rulers and genealogy would point to an individually-focused network strategy.

While the stucco masks and panels provide clear contrasts between the LPC and Classic periods, for the wall-paintings finer distinctions can be made. As noted in section 7.2.2, the technology for creating complex wall-paintings was developed between 400 and 100 BC, parallel to the emergence of kingship and associated societal changes. Based on a chaîne opératoire analysis, Hurst has argued that the painters identified through a Morellian analysis of painter's 'hands' were involved in the collaborative effort of creating the murals (Hurst 2009, 230-231). This requires a degree of collective specialisation that transcends the household level, although it is unclear what kind of organisational framework this was embedded in.358 The study by Hurst incorporated both LPC and Classic period wall-paintings, allowing for comparison. She found that while the available resources and technology were roughly the same, the Classic period evidence showed a greater emphasis on naturalism, more regional variation in style, and for the first time murals were also located in elite residences. Taken together with a Classic period emphasis on historical subjects, the development of polychrome pottery, and artistic contacts with Teotihuacan, this points to the impact of a different socio-political framework on the mural artists (Hurst 2009, 229-233). As with the lime-burnt plaster, there is a fairly clear distinction in the LPC and Classic period technological styles of wallpainting, which can also be tentatively related to a more collective or corporate socio-political framework in the LPC period case.

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According to Hurst it is likely that craft-workers organised in groups to paint walls were also involved in forming stucco masks and panels, and perhaps stelae too (Hurst 2009, 231). However, direct evidence for this remains lacking.

	availability raw materials	working group(s)	
material			
chert	widely/exchanged	community/specialist	
obsidian	widely/exchanged community		
shell	widely/exchanged community/specialist		
jadeite and related stones	widely-circumscribed/exchanged	specialist/carver	
stucco	specialist production specialist/modeller		
wall-painting	specialist production	specialist/painter	

Table 7.2: Overview of production patterns selected LPC material forms.

This broad brush overview of the craft-work of different material forms of LPC art has been inspired by the *chaîne opératoire* approach, though undoubtedly not always being able to live up to the precision implied by it. It has sought to investigate the archaeological record for clues to the ways in which different kinds of materials were shaped into objects, and especially for the societal context in which these activities took place. Table 7.2 summarises the results for the different materials, discerning between the availability of raw materials and the means by which they were acquired, and the working group(s) that crafted them into specific forms. Again, it is important to remember here that important kinds of materials are missing entirely from the archaeological record, or otherwise are so under-represented that further analytic studies are impossible. Some interesting patterns may nevertheless be discerned from what is available. The first one to be noticed is that there does not seem to have been any discernible elite control over chert, obsidian, shell, and jadeite and related greenstones as raw materials. Rather, they seem to have been widely distributed, with even small communities like Chan being able to acquire them through exchange networks. The observation that certain communities seem to have specialised in specific materials highlights the enduring strength of these networks.

At the same time there are some indications that specialists worked these materials, in particular as can be inferred for the chert stemmed macro-blades and eccentrics, and the find contexts of certain shell ornaments. The relation between the specialist and community-wide working of materials is brought into sharper focus with jadeite and related greenstones. Although on the one hand there was a wide distribution of raw materials, but there are also the Olmec heirlooms that were very likely much more circumscribed in terms of access, even as their provenance remains unknown. The difference between the different forms and uses of jadeite and related greenstones can be understood by considering the additional kinds of specialisation required for iconography and writing. Style and subject matter would suggest a degree of overlap in this with stucco modelling and wall-painting, as suggested also by the smaller and less-deeply incised texts on stelae (Mora-Marin 2001, 300). The same time the raw material used for stucco-work and wall-painting differs from the others, as it involved the transformation of mostly local materials with the help of pyrotechnology. Hence what is important here is not access to raw materials through exchange networks, excepting certain pigment materials that depended on exchange, but rather the mobilisation of labour and resources within the immediate catchment areas of sites.

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³⁵⁹ According to some authors the portable objects with writing and complex iconography may well have played an important role in the spread of symbolic systems (Mora-Marin 1997). Here the lack of information on the provenance of these objects creates great problems, however, as their dating is based primarily on stylistic criteria from monumental art. Hence it is very hard to establish primacy, especially given the early date of 300 BC for writing at San Bartolo referred to earlier.

Having outlined these patterns, the next question is how they can be understood in societal terms. Of special importance in this is the interaction between individual sites and their macro-regional context, which in the LPC period was characterised by two paradoxes. Raw materials are worked throughout the community, yet their availability depends upon access to exchange networks, sometimes long-distance ones. Complex iconography and writing can be understood as part of a larger 'horizon' and history at the macro-regional level, yet also depend upon the local mobilisation of labour to create monumental structures. Considering these paradoxes, it is important to remember also the dichotomies between commoners and elites, and between great and little traditions, discussed in section 6.4 of the previous chapter. Here these issues will be tackled more specifically for craft-work. Earlier in this section some ideas had already been outlined concerning the societal implications of similar kinds of analysis based on Classic period evidence, but before considering the similarities and differences with the LPC period analysis it is useful to reflect on Maya craft in more general terms. In order to do so, it is useful to start with ethnographic and ethnohistoric sources for craft-work in colonial and contemporary Maya communities.

Based on the analysis of lexical information from colonial-era dictionaries of Yucatecan, it has been possible not only to identify crafts but also to interpret them in social terms (Clark & Houston 1998). The two most important findings in this were that different kinds of craft-work in Maya communities of the colonial period were widely shared and constituted a basic aspect of personhood, acquired through social learning, 360 and that there were divisions between different crafts based on gender. These ethnohistoric findings were connected to the broader Maya-area archaeological record by McAnany (2010). She argues that instead of positing a dichotomy between urban-based, full-time specialists and household-based, intermittent craft-workers, it is more useful to consider the centrality of Maya communities and the inter-dependencies between them (McAnany 2010, 210-211). Crucial in this is how the social dynamics of such groupings can influence the way crafts are practiced, as for example can be seen in the long-term persistence of certain pottery types or their decoration (McAnany 2010, 222-223). In this sense, the notion that craft-work is an important aspect of social identity is inseparably tied to memory, which itself depends partly on craft-work but also on other social practices such as feasting.

One useful concept to capture how craft and memory work together is through the notion of 'memory-work'. This considers memory more as an active process than as a fixed store of information, and fits into broader Maya notions of kinship and communal rhythms of life (Gillespie 2010, 404-406). Craft-work is only one aspect of this, but an important one. In sections 7.2.4 and 7.2.5 the connections between designs across different media had been discussed, involving different crafts, based on ethnographic work with the Quiché Maya. However, there is a dimension of memory-work to this argument as well. This can be seen in the way in which traditional narrative and poetic elements called the 'Ancient Word' are 'transplanted' into new texts and oral discourses, with analogies to weaving and planting a *milpa* field (Tedlock & Tedlock 1985, 126). For the Classic period, a connection between patterns in art and working the fields is linked specifically to the work of royal figures (Houston 2014, 72). The relevance of this for the LPC period is twofold. First of all it shows that in recent Maya communities craft-work was integrally connected with questions of social identity and communal memory-work. Secondly, the notion of memory-work allows for a more nuanced understanding of the relation between elites and commoners. This is true

³⁶⁰ This can also be seen in the close relation of work, including crafts, to changes in names and titles, and the status that was associated with them, as well as a number of different rituals related to craft-work (Clark & Houston 1998, 39-40).

³⁶¹ The specific example from which this is taken is the beginning of the Popol Vuh, which features quotations of the Ancient Word (Tedlock & Tedlock 1985, 71-72). It is also possible to refer here to a number of 'archaisms' in Classic Maya art and texts, making use of Preclassic stylistic elements (Houston 2011), although here we are not dealing with quotations as such. Rather, both phenomena can be seen as expressions of a different mode of conceiving of the relation between past and present (cf. Farriss 1987).

especially for the relation between different kinds of crafts, since in some ways it mediated between these different groups (Gillespie 2010, 406-407).

For this second aspect it is important to consider the question of how memory-work can be conceived of at the macro-regional level. For this three related strands of interpretation can be used, even if these have not been integrated into an overarching theory. The first of these is the Nahuatl concept of *Tollan* or 'place of reeds', although the alternative toponym 'place of the gourd' has been proposed (Van Akkeren 2006, 36), known in Classic Maya epigraphy as puh (Stone & Zender 2011, 221). This refers to a semi-mythical settlement, variously identified, that stood as the template for civilisation and the 'ancient arts' that constituted it. Because of this it was of key importance to Classic Maya nobility and likely closely controlled by them (Herring 2005, 103-105), something also known from the ethnohistoric record. 362 Another element that is of some importance is the use of heirlooms as the material basis of memory, sometimes involving working them over many centuries (Joyce 2000), and also reflected in the 'archaisms' adopted in the art of later periods discussed in section 7.1.2. Finally, it has been argued that recurrent patterns of memory-work can be related to narratives about the moral community of debt and sacrifice discussed in section 6.4.2, a pattern that, unsurprisingly, is best observed for the Mixtec Postclassic period (Hamann 2002, 358-363, 2008). As noted, these different aspects have not been tied together in an overarching theory. This may be just as well, since it allows us to investigate more precisely how they fit together specifically in the LPC lowland Maya case.

Generally, these general observations on the societal implications of Maya craft-work seem to cohere well with the evidence for the LPC period, as summarised earlier. In particular it allows for a better understanding of how crafts were organised at the level of communities, moving away from models that over-emphasise elite manipulation and control. Instead the wide availability of raw materials and their working in diverse contexts point to the primacy of both communities and the exchange networks that allowed them access to these materials. In this sense craft-work was to a large degree outside, at least in a direct sense, of what has been termed the political economy of the LPC lowland Maya polities, which as noted in section 6.4.2 was instead based on the mobilisation of labour for large-scale public works. But this general picture also points to an aspect of craft that very likely did involve elites: that of complex art and iconography as the arts of civilisation and their relation to a semi-mythical place of origin. Here the focus will lie on the notion of the 'ancient arts' and the concomitant use of heirlooms, the relation to the notion of the moral community will be discussed in the next chapter.

First of all, the monumental component of LPC period art did require mobilisation of labour at a considerable scale, both for producing its raw materials and for constructing the monumental contexts within which it was embedded. Secondly, as noted earlier the portable art objects made from jadeite and related stones point to mastery of a scribal and iconographic tradition, which goes back to the Olmec, including in the form of heirlooms (Mora-Marin 2001, 260-262). A very good example of this is provided by a winged plaque from the Dumbarton Oaks collection, an originally

³⁶² Important here is the so-called 'language of *Zuyua*' referred to in the Yucatecan book Chilam Balam of Chumayel as a language that served as a mark of leadership (Stross 1983). The concern here is not so much with this language itself, but with the fact that is is associated with *Zuyua*. In the early colonial period in Yucatan references to *Zuyua* were a central concept in the origin myths of some ruling lineages, crafted to suit their purposes (Restall 2001, 370-375). Also, in the Popol Vuh there is a constant linkage, often expressed in a parallelism or *difrasismo* (e.g. Christenson 2007, 198), between *Tulan* and *Zuyua* (Tedlock 1985, 366, 372). This place was conceived of as the place where the original lineages received their marks of rulership (Christenson 2007, 20). It also appears that 'writings' (likely codices) were derived from *Tulan* (Christenson 2007, 244). Finally, the markers of authority from *Tulan* were stored in the 'great houses' of the ruling lineages (Christenson 2007, note 721, p. 248), a situation presumably comparable to that of Yucatan, where the ownership of texts in effect constituted the legitimacy of elite courts (Restall 2001, 341-344).

Olmec object onto which Maya-style text and an anthropomorphic figure were carved in the LPC period (Fields & Tokovine 2012). Important references to this earlier iconography can also be found in monumental art, as can best be seen in the San Bartolo wall-paintings (e.g. Saturno et al. 2007, 25-28). It is noteworthy that both for the portable art objects with complex iconography and writing, and for the wall-paintings formal training and mastery of a cultural repertoire are inferred. There are interesting connections between these media as well, 363 and the scope could be broadened with the inclusion of the stelae and stucco masks and panels.

It seems, then, that the 'ancient arts' and the heirlooms materialising them were an important aspect of the craft-work of LPC lowland Maya art. Unfortunately, the gaps in the archaeological record make it hard to determine the precise societal dynamics of the emergence of this pattern. This pattern are this caveat, the overall picture points to a broad coherence with the view of LPC lowland Maya culture offered at the conclusion of section 6.4.3 of the previous chapter. This locates memory-work within both kin-ordered communities and larger-scale states. In particular ritual practices also involve memory-work, which bridges both those kinds of objects that did carry complex iconography and writing and those that did not. In this, it is important to emphasise that for the latter category there was also considerable interaction at the macro-regional level, as can be seen for the relative homogeneity of the Chichanel ceramic sphere and the wide availability of materials like obsidian from distant sources even at smaller sites. Hence it would be quite misleading to contrast this distinction between different kinds of objects as one counterpoising the 'inward-looking' communities to the 'cosmopolitan' elites.

Instead the main distinction of those artefacts with writing and elaborate iconography is that they are either inscribed on those kinds of materials that themselves carry high-value in exchange, or painted or modelled on architectural structures that required a considerable mobilisation of labour. As noted earlier, the broader cultural knowledge required for writing and making images was more closely tied to those holding office. However, as discussed for both the stucco-work and wall-paintings there seems to have been a more collective emphasis in the LPC period compared to the more individual-focused Classic period one. This can be seen for LPC period art both for the iconographic focus on generic themes rather than historical ones, and for the greater expenditure of labour on creating massive structures. Even if a few isolated indications for the link between the arts and those wielding power can be seen for the LPC period, they pale alongside the rich evidence from the Late Classic period of Maya elites as scribes and artists. ³⁶⁵ This elaboration during the Late Classic period may well derive from the flourishing and competition of the different courts and the lineages associated with them. ³⁶⁶ The social identities that existed within this context, then, seem

³⁶³ This can be seen especially well for the Jester God image used on headbands, which is seen in both monumental and non-monumental art, as will be further discussed in section 7.4.2 below.

³⁶⁴ One hypothesis put forward in this regard posits a separation between an elite gift-giving context for the portable objects with writing and a community-wide context for writing on monumental structures (Mora-Marin 1997, 160-162), preferring a primacy of the former. The uncertainty with dates and the provenance of objects make this a very hard to prove scenario. Furthermore, as a study of Mesoamerican writing systems by Marcus (1992, 437-440) makes clear, the relation between horizontal (inter-elite) and vertical (elite to commoner) propaganda could be quite variable. The implication is that any model on the social process of the adoption of writing in the Maya lowlands depends upon both more reliable chronological control and a better understanding of its precise functions.

³⁶⁵ Mora-Marin (2001, 301) argues that the inscribed bone from the Kichpanha burial was used as a stylus and indicates that scribe-artists already enjoyed elevated social status by AD 150, but the excavators had argued for an interpretation as a blood-letting instrument (Gibson et al. 1986, 12). From the Classic period it is possible to see a link between inscribed bones and writing, as well as to kingship (Herring 2005, 94-98), but this is based on iconography rather than on their purported use as instruments of writing.

³⁶⁶ This can be understood by the evidence of elite craft-work as not only being physically located in elite structures but also carried out by these elites (Houston & Inomata 2009, 257-278), which also extended to kings as well (Herring 2005, 79). As such, it can be argued that the elaboration and emphasis on such elite figures in general is what sets the Late Classic period apart, rather than craft-work as such. This would extend to notions of Late Classic elite craft-work

more of a specific iteration of Maya conceptions of craft-work, indicating no significant break in the overall trajectory (McAnany 2010, 213-216).

7.3.3: Conceptions of materiality in Late Preclassic lowland Maya art

Turning now to the conceptions of materiality within which Maya crafty-work was embedded, it is necessary first to address some of the general characteristics of this and then turn to the materiality of colours. It is useful to start the discussion by returning to the term *ts'ib*, which in Maya linguistic use has much broader connotations than the aspect of craft-work that was discussed in the previous section, as the following quotation will make clear:

"Ts'ib might refer to manifestations of linear signage clearly distinct from 'writing'. It gestured to an apparent presence of pattern, not to medium: Colonial-era lexica disclose that the term was used to indicate the striped pattern on the body of a snake or insect, an angry pattern of bug bites across a person's back, an abscess in tooth enamel, furrows in ploughed fields, a winding ritual procession. The figure described by a cat's paw as it claws the air, or what we recognise as 'tongues' or 'the dance' of fire: the Maya understood these too as ts'ib." (Herring 2005, 73)

This conception of *ts'ib* as a surface-pattern that can be seen in different phenomena can be linked with the use of the term in section 7.2.4, where it was noted that it was used by the Maya to describe different crafts for creating written and other kinds of patterns. Furthermore, it again focuses attention on the importance of surfaces for understanding the relations between the different material forms of LPC lowland Maya art, as was discussed in section 7.2.5. However, for exploring these interconnections it is necessary to move beyond a focus on calligraphy and consider other aspects as well (cf. Houston et al. 2006, 302). To understand these issues properly, it can instead be useful to briefly turn to more general Mesoamerican and Maya ontological ideas. In a basic sense it can be said that Mesoamerican ontological ideas are structured by a form of monism, in which everything is irrevocably part of the unity of all things and infused by a power known in Nahuatl as *teotl* (Monaghan 2000, 26-28). From his discussion of this term, it is clear that it implies that there is no dualism here between the natural and the supernatural, even if, at least for modern interpreters, the relation between overall unity and particular manifestations remains hard to grasp.³⁶⁸

The term equivalent to *teotl* in Maya is *k'uh*, with its adjective *k'uhul*, which means 'god' but can be extended to mean a more generic vital and animating power (Houston & Inomata 2009, 195-196; Sharer & Traxler 2006, 733). This power is associated with a variety of material aspects, especially with blood (the term for which, *ch'ulel*, is related linguistically to *k'uh*), not as identical with the

indicating the impersonification of deities, which seems an individually-focused elaboration of the strong ritual associations of craft known from ethnohistoric sources (McAnany 2010, 213-216; Tozzer 1941, 159-161).

³⁶⁷ This description may be seen as indulging in poetic license, but even if so, it is one that arguably derives from indigenous Mesoamerican conceptions of metaphor. As a comparative case, the interplay between different kinds of surfaces, even if here not connected to writing as such, can also be seen in the discussion of minerals in the 16 th century Florentine Codex (describing the indigenous cultures of central Mexico), especially with regard to colours (Saunders 2004, 142-143). An interesting case in point is that of opal, which is described in Book 11 as follows:

[&]quot;Its name comes from uitzitzilin [hummingbird] and tetl [stone], because its appearance is like the feathers of the humming bird, the one called tozcatleton. Its appearance is like many fireflies; it radiates, glows; it is as if it burns. Colors come constantly from it; they are constantly coming – chili-red, green, the color of the lovely cotinga, the color of the roseate spoonbill, purple, red, herb-green, etc. However, there is no black in it............It is glowing like a small firefly, or is burning like a small candle. If it appears just intermittently, it is the firefly. If, on the other hand, if it just continues burning, this is the opal. It is clear, transparent, translucent, very precious, esteemed, wonderful, marvelous. It glows, shines, appears beautiful; it appears clear; it is rare." (Sahagun 1950-1982, XI, 229-230)

³⁶⁸ One weaker interpretation of Mesoamerican monism deals with the contrast between unity and differences by positing the existence of different realms of being, each with one substance in them (Monaghan 2000, 29-30).

substance itself but in a flowing and watery state (Houston 2014, 81). The connection between water and blood is well-established in Maya thought, where the water in the earth is likened to the blood in one's veins, deriving from the ocean on which the earth floats (Taube 2010a, 209). 369 A key aspect of k'uh, then, is as a power of dynamism, energy and flow rather than as substance, and with human beings able to exert agency on this flow (Houston & Inomata 2009, 196). In terms of its social implications, the term also seems to undergo a certain flow. Whereas in the San Bartolo murals k'uh can be seen in the watery flow of blood from sacrificial offerings of humans and animals, in the Classic period there seems to be a shift towards royal control of such flows (Houston 2014, 83-87). For the latter period this can control be seen very well in one scene from Yaxchilan (see figure 53), which depicts the flowing of k'uh from human rulers, through blood-letting, relating their blood-letting to agricultural sustenance (Stuart 2005a, 275). From the diversity of these sources, it is still possible to draw a more generic conclusion about the meaning of k'uh throughout the different eras of the Maya area:

"If there is a conclusion to be drawn from contradictory evidence and competing claims – that k'uh could both centralize and exist everywhere – it is this: by such means the Maya explained the dynamism of the world and its variable ebb and flow. To use a thermal analogy, they lived in an universe with uneven heat. Some sectors were scalding hot, others cold, quiescent, dead, bloodless or, worse, bereft of k'uh. Energy came and went but could be persuaded to stay in certain places or bodies for a longer time. By the Classic period, however, rulers claim to have tightened their hold on this form of vitality." (Houston 2014, 87)

In terms of craft-work, it seems that the notion of an animating force was not relevant for all kinds of materials, being focused more on the subtractive working of materials, especially of different kinds of stone, rather than on the additive and transformative shaping of material forms (Houston 2014, 98). Furthermore, instead of a generic view of an animated built environment there is also a complex interplay between animacy and certain kinds of architecture, as can be observed especially well for the Classic period (Plank 2004). There is no space here to explore all the aspects of this interplay between monism and differentiated particularities. Instead this issue will be explored by looking specifically to surface-patterns and their replication. Two elements of this concern the depiction of (elements) of the human body, as they relate to ideas about personhood, and the use and conception of writing in art, which will be discussed respectively in sections 7.4.2 and 7.4.3. In this section the analysis is concerned primarily with the relation between *k'uh* as an animating force and the depiction and use of colours in LPC lowland Maya art. Looking at this relation also demands taking a broader view of the material ontologies of the pre-Columbian Americas.

In doing so it becomes clear that in a great variety of Amerindian societies there was a set of close associations between light, radiance, materials, and cosmologies, extending into the realm of morality and socio-political power as well, connected through 'analogical symbolic reasoning' (Saunders 2002, 212). A study of the interplay of colour and cosmological ideas in the art of pre-Columbian Panama, taking into account ethnographic sources, has emphasised especially the

³⁶⁹ Many of the myths relating to the primordial ocean also closely relate blood and water, including the notion of a red and bloody sea, together with battles with mythological sea creatures (Taube 2010a, 209-210). Indeed, one Early Classic image shows a deer-crocodile swimming through a sea of *k'uh* (Houston 2014, fig. 52, p. 86). Even so, the sea can have a variety of colours in Maya art (Taube 2010a, 212).

³⁷⁰ The notion of houses as beings that have to be 'fed' is widespread in Mesoamerica (Monaghan 2000, 30-31). The Maya term *otoot*, rendered as 'dwelling', has been distinguished from the term *naah* ('structure'), to signify that a certain structure is inhabited by an animate being (Plank 2004, 29-33). Hence the distinction lies not in the animacy of the buildings themselves, but in whether they are closely associated with other animate beings who can 'dwell' in them. The presence of deposits of ritual termination in buildings, indicate that in some cases such associations could have been terminated through human activity (Stanton et al. 2008).

relation between colour and energy (Helms 1993b, 242-247). These more generic views of Amerindian conceptions of materiality do provide an important indication that, in order to relate k'uh as force and energy to the material world, the study of the conception and use of colours in art can provide key insights. As in the Mycenaean case, which was discussed in section 4.3.3, there is an increasing recognition of the importance of metaphor for studying the role of colour in the Mesoamerican world (Engel 2012). In the Maya case there is also the possibility of connecting what ethnographic and ethnohistoric sources have to say about the conceptions of colours to the textual record, taking into account its embedding in imagery, of the Classic period. Recent research on this has stressed the role of extensions of the five basic colour terms to a variety of materials and artistic depictions of phenomena (Houston et al. 2009, 16-25; Tokovinine 2012, 283-286).

Very important in this is the relation between colours and materiality, which needs to be conceived of through a set of metaphors that relate the two to each other in different ways, given that more straightforward connections between specific colours and materials are often elusive (Houston et al. 2009, 99-100). For the LPC lowland Maya it is important to stress that, given the lack of a sizeable amount of deciphered texts, the emphasis has to lie on the uses of colours as they can be recognised in the archaeological record. Fortunately, the trajectory of the uses of different colours in Maya art can be traced quite well, with the LPC period showing considerable innovation from the early MPC focus of red, black, and white (Houston et al. 2009, 74-76). The combination of more naturalistic and more symbolic or abstract uses of colour, even if rarely entirely separable, can also be seen in the San Bartolo wall-paintings (Hurst 2009, 174). The preference for materials with certain colours, not only jadeite and greenstones but also a material like cinnabar, should also be considered alongside the fabricated colours. Here first a number of individual colours will be discussed, especially red and blue-green, and then the question of how they can be related to each other.

It is appropriate to start with red, a colour that generally seems to have been highly valued by the Maya (Houston et al. 2009, 42), especially given its association with *k'uh* discussed above. The colour term for red, encompassing in terms of hue also brown and purple, used by the Maya was *chak* (Stone & Zender 2011, 125). A number of extensional meanings have been recognised for this colour, which include the east as direction, blood (specifically in relation to the act of blood-letting), hotness and fire, including for characteristics of deities and extending to greatness (Houston et al. 2009, 30-31; Tokovinine 2012, 287-291). Of particular note is the use of bright red on certain day signs, relating them to blood and often painted as a red cartouche (Stone & Zender 2011, 53). This also indicates a connection with primordial sacrifice (Houston et al. 2009, 30), indeed it can be interpreted as linking sacrificial blood-letting to the emergence of time itself (Houston et al. 2006, 93). The question is to what degree such meanings can be recognised in LPC lowland Maya art. Early work had focused on the use of red and other colours in stucco-work, especially at Structure 5C-2nd at Cerros. One reading of colour-use here recognises the use of the colours of red and black for highlighting, as an oppositional pair, different states of 'volatile liquids' in sacrificial acts that mediate between humans and deities in their cosmic setting (Freidel 1985, 20-22).

Because of the new evidence from the San Bartolo wall-paintings, it is possible to carry the analysis of red much further. Based on this, a distinction can now be made between different uses of red. The first concerns the already discussed use of red as indicating flowing blood, which can be seen in the sacrificial scenes on the west wall, but also emanates in an explosive way from the gourd in the birth scene on the north wall (see figure 54), where it can also be seen as dripping from the mouth of a hunting jaguar (Saturno et al. 2007, fig. 5, pp. 8-9). Of some interest also is the day sign 3 $^{\prime\prime}$ in the west wall mural (see figure 55), being outlined by a red cartouche (Taube et al. 2010, fig. 62, p. 101). This recalls the relation between day signs, blood, and sacrifice noted for the Classical period, and the primordial and mythological setting of this scene, see also section 8.3.4, further reinforces

this connection. Another dimension to the relation between red and blood sacrifice may be in the deposition of red pigment (cinnabar or haematite) in burials, for example the cinnabar found in burial 85 at Tikal (Coe 1990, 219). The relation between these red pigments and sacrificial blood has been the preferred explanation for the Classic Maya burial record (Fitzsimmons 2009, 82).³⁷¹

The use of red in the San Bartolo wall-paintings to indicate blood, can be clearly distinguished from another use: to indicate breath volutes, sometimes accompanied by black accents (Saturno et al. 2007, 7-8), see figure 56. These volutes can be seen at other sites as well (Houston & Taube 2008, 136-137), and are also present at the exterior facade of the Pinturas Sub-1A building housing the San Bartolo murals (Taube et al. 2010, 8). Rather than the different states of a volatile liquid as inferred by Freidel, it seems that there are rather two manifestations of *k'uh* here: one of blood and the other of 'breath' (Houston 2014, 84, 86). Breath is identified with the soul in a diverse set of Mesoamerican cultures (Houston et al. 2006, 142-143), but it is improbable that the soul is primarily referred to by the red volutes. More likely is that this aspect can be seen more specifically in the small, round elements that hover close to the mouths of some of the human figures, as in the case of the three sacrificing youths that have been sufficiently preserved (Taube et al. 2010, figs. 58-60, pp. 97-99). The swirling red volutes, by contrast, are found in a wide diversity of cases, though all emanating from something. The phenomena from which they emerge range from a tree (Taube et al. 2010, fig. 68, p. 107), to a variety of serpents (Saturno et al. 2007, fig. 7, p. 11).

Significantly, in each of the four sacrificial scenes in front of a tree, red volutes, often accentuated with black, rise up from the offerings, one of which consists of a flower (Taube et al. 2010, figs. 57-60, pp. 96-99). In the cases of the sacrificed deer and turkey the rising volutes are paralleled by a downpour of blood, while in the gourd birth-scene on the north wall both the volutes and blood are pushed upwards by the explosion (Saturno et al. 2007, 58). Hence in some cases the association between blood and smoke as variant of a 'generic substance' (Freidel 1985, 20) still retains some plausibility. In overall terms, the San Bartolo wall-paintings do indeed point to a 'primal landscape of animating essence' (Houston 2014, 86), with streams of blood and rising volutes indicating the flow of forces. But even if this all can be understood within the context of the earlier discussion of *k'uh*, it is important to reiterate the point that colour is by no means identical with substance, as red is quite ubiquitously used in the wall-paintings. For example, some of the four sacrificial youths have red marks on their face, which do not likely refer to blood, but can instead better be interpreted as glistening sweat (Taube et al. 2010, 26-27).

Another association between k'uh and colour terms can be found in the k'an (yellow) and yax (bluegreen) combination (Houston 2014, 81). The colour terms can be seen in the Yaxchilan bloodletting scene referred to earlier, which relates these terms to blood-letting and agriculture (Stuart 2005a, 275). Rather than referring primarily to colour, however, the yax/k'an pairing likely refers here more to the maize cycle (unripe green to ripe yellow), and more generally to notions of abundance (Houston et al. 2009, 28-30; Tokovinine 2012, 294), 373 although based on a sacrificial scene it may also suggest a ritual state of purity (Stone & Zender 2011, 157). The combination of

³⁷¹ For the Classic period it is explicitly connected to the notion of rebirth, as known from the iconography of the period (Fitzsimmons 2009, 82-83). Haematite and cinnabar have been found in burials and caches in Mesoamerican cultures ranging from the Olmec to Postclassic Aztecs, and for the latter case it is also possible to see cinnabar being deposited on cache objects rather than human remains, arguably symbolically positing a parallel between blood-letting and the sacrificial offering of the objects in the cache (Nagao 1985, 60-61).

³⁷² The same breath element can also be found in many other Mesoamerican art styles, ranging from Olmec to the Classic and Postclassic Maya (Taube 2005, fig. 9, p. 23).

³⁷³ This is based on the pairing of the two colour terms in a context that suggests completion, thereby together signifying an overarching notion of abundance (Stuart 2005b, 99-100). A fuller set of metaphoric associations based on the theme of abundance can be seen in the combination of yax and k'an as a kenning or diffrasismo in Maya ethnohistoric and ethnographic sources (Hull 2012, 100-103).

these colours does not occur in the San Bartolo wall-paintings, which may be at least partially due to the fact that the blues and greens used here were of a low quality (Houston et al. 2009, 75). The only possibly concurrent use of green and yellow can be seen in rounded features on a stucco mask at Cerros (Freidel 1985, 23), but this is not sufficient to recognise the metaphoric extensions that can be seen for the Classic period. The use of k'an/yellow can be seen as important iconographic elements in the San Bartolo murals,³⁷⁴ but in a way that is less directly relevant to the discussion of the relation between colour, materiality, and energy.

But while *yax*/blue-green cannot be recognised very well yet in LPC lowland Maya monumental art, it is possible to note a connection with jadeite, which is widely found, as the colour term has been closely connected to this material, but not in an identitarian sense (Houston et al. 2009, 40). Analysis of the *yax* sign has revealed two basic logographs denoting it, one associated with celts and shine and another with water, both of which can be potentially related in metaphoric terms (Tokovinine 2012, 291). Shine and moisture are also qualities of the sign for jadeite celts (Stone & Zender 2011, 71). Therefore, even if *yax* and jadeite are not exactly identical, a broad metaphoric overlap in terms of moisture and shine can be discerned.³⁷⁵ Bearing this in mind, it is possible to turn to Maya conceptions of the materiality of jadeite, which as noted in the previous section was a material especially valued in Maya and Mesoamerican cultures. Analysing the conception of jadeite for the Classic Maya, Taube concluded that, apart from its esteemed beauty, the material can be seen as being related to 'life essences' in three ways (Taube 2005, 47):

- 1. Primary is an association with maize, which can be traced back to the Middle Formative Olmec (Taube 2004a, 25-29).³⁷⁶ Another aspect of this is the notion of centrality, as can be seen very well in the deposition patterns of jadeite objects, as will be shown in section 8.2. This centrality of jadeite is paralleled by the central position of *yax* in the arrangement of colours in the quincunx outline of the cosmos (Houston et al. 2009, 13). In the Classic period the linked elements of maize and centrality occupied a central role in the ideology of kingship (Taube 2005, 28-30).
- 2. Another connection is to water, not only as moisture but also, to highlight just one example, as it can be seen on the wet, shiny skin of sharks (Stone & Zender 2011, 71).
- 3. Extending from moisture is the relation between jadeite and 'breath', another life-essence, which can be seen in other Mesoamerican cases as well.³⁷⁷ The clearest expression of this can be seen in the placement of a jadeite bead in the mouth of a deceased person, so as to capture the breath-soul of that individual (Houston et al. 2006, 142). But it extends to a much wider set of metaphoric associations, which also incorporate the special acoustic qualities of polished jadeite (Taube 2005, 32).

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³⁷⁴ Here it was used for flowers and at the entrance of Flower Mountain, likely indicating preciousness (Saturno et al. 2007, 14). Another use of k'an in these paintings can be seen in the latticework of the ajaw or kingly accession scene on the west wall, which follows a pattern that can also be seen in later Maya art and ethnohistoric sources and is related to the establishment of dynasties (Taube et al. 2010, 60-61).

³⁷⁵ With regard to shine, a more direct relation with k'uh may be discerned, as the sign for this has some overlap with the sign for highly polished stone, if more in an adjectival way (Houston 2014, 92). Once again, it is possible to note the limited and sparse expressions of k'uh as a monistic principle in comparison to the very rich array of particularities and associations that derive from its uneven distribution.

³⁷⁶ Also important in this regard are the quetzal feathers, which are closely linked already in the Olmec case with maize and the notion of wealth, of which jadeite also functioned as an index (Taube 2000, 303-311). This 'complex' can also be recognised for the Classic Maya, with even the same colours being used both for jadeite objects and quetzal feathers in the Bonampak wall-paintings (Magaloni-Kerpel 2006).

³⁷⁷ As noted by Taube (2005, 30-31), a very clear example can be found in the Florentine Codex, which discusses jadeite as part of a wider set of precious stones. This can be seen in Book 11, where the 'mother of green stone' is described as emanating vapour, as in breathing, from its deposit underneath the earth's surface, and also causing the herbs growing in this area to turn green as a result of its presence (Sahagun 1950-1982, XI, 221-222).

Another way in which colour, material and power or energy were related for jadeite can be seen in the association between celts made of this material and lightning, seen in various Mesoamerican cultures including the Classic Maya (Houston 2014, note 23, p. 153; Taube 2000, 313). However, lightning can be related to a variety of stones in Mesoamerica (Staller & Stross 2013, 173-176), including chert and obsidian in the Maya area (Kovacevich 2006, 274, 345-346). As such, we are dealing here with a general animacy of stone, one aspect of which is a relation between lightning and shine (Stuart 2010, 288-289). Unsurprisingly, therefore, other colours can also be associated with lightning, especially red (Staller & Stross 2013, 186-189). Here we have come full-circle in terms of colour, from yax/blue-green back to chak/red. This should not be very surprising given the monistic worldview in which a single power, k'uh, is concentrated in different ways, expressed by different surface-patterns. Colours are a primary example of how the associations between different phenomena, based on different temporal concentrations of substance and energy, are represented according to Maya thought and praxis. Of course, much more can be said about the use of colours and light in the Maya area, including the intriguing notion of light being absorbed by surfaces (Houston et al. 2009, 20). But the focus of the remaining discussion here will lie rather on the artistic drive to create an aesthetic of durability in Maya art, also seen in colour conception and use:

"Color for the ancient Maya – and, indeed, most other peoples – concerned things, the surface or intrinsic property of an object as well as the play of shifting light and various degrees of saturation and intensity, and the brighter the color the better. The Maya understood separable and categorical color, as witnessed by color-directional symbolism. But the primary focus tended to target overall relations between such hues and the plurisensation of color as part of a chromatic, iridescent, and fragrant paradise. Shiny, reflecting polish represented a key aesthetic value, alongside an almost philosophical musing about the relation between permanent colors on shell and stone and the ephemeral ones of fragile substances like feathers and fabrics." (Houston et al. 2009, 99)

The notion of a 'paradise' as connected to colours is based on the concept of Flower World in Mesoamerica and the south-western US (Houston et al. 2009, 13). This concept encapsulates a diverse set of elements, one of which is the so-called Flower Mountain widely found in Maya art (Taube 2004b, 79-86), including on the San Bartolo north wall (Saturno et al. 2007, 14-21). Another aspect of Flower World is the breath-soul, the essence of which, as noted noted earlier, is closely connected to jadeite objects (Taube 2004b, 72-73). Looking at this set from a material standpoint, it is possible again to point to the importance of durability in patterns of skeuomorphism and the replication of surface-patterns noted in section 7.2.5. Particularly notable in this is the valuation of jadeite and its close association to a variety of essential life-sustaining forces, especially maize, water, and breath. It may be possible in this to recognise an 'aesthetics of durability' that highlights the relative permanence of jadeite objects in relation to these forces (Houston 2014, 126-130). 378 Within a cosmos shaped by a distribution of k'uh that is uneven and subject to constant flow, the creation of durable artefactual elements would provide a basic ideological template for human material agency. It is precisely in this regard that these basic Maya conceptions of materiality can be related to the analysis of craft-work that was outlined in the previous section.

³⁷⁸ In the Postclassic period there seems to have occurred a shift in the valuation of shining surfaces from jadeite to metallic objects (Houston 2014, 127). This can be seen in the discontinuation of the lapidary craft tradition for working jadeite in the Early Postclassic, even if some elements of the symbolism associated with it, especially the placing of a bead in the mouth of a deceased person, still flourished (Taube & Ishihara-Brito 2012, 142, 152-153). Saunders (2002, 218-219) has argued that metallurgy in the pre-Columbian Americas should be seen as an extension of pre-existing ontologies, including with regard to colour. The description of gold in Book 11 of the Florentine Codex fits this pattern, its name deriving both from teotl and excrement (Sahagun 1950-1982, XI, 233). Some of the implications of this will be explored in the comparison of Mediterranean and Mesoamerican art in chapter nine.

7.3.4: Craft and materiality of Late Preclassic lowland Maya art

In the previous section it was briefly noted that the relation between k'uh and craft-work was fairly complex, applying not, or to a lesser degree, to certain materials and architectural features. The issue becomes even more complicated when considering the role of ritual in crafting, which is pervasive and ranges from the activities of potters and weavers known from ethnographic sources to Classic period elite craft-workers impersonating deities (McAnany 2010, 214-215). But considering the role of k'uh, in none of the context it seems to be created or increased through ritual craft-work, instead being a force to handle and control.³⁷⁹ Turning to the results of the *chaîne opératoire* analyses discussed in section 7.3.2, the difference noted for k'uh between reductive and additive processes in crafting artefacts (Houston 2014, 98), cannot be transposed to different kinds of working contexts. Most materials, including jadeite and related greenstones, were widely available and some of them were produced as part of community-wide specialisation. To understand these patterns as part of their material ontology, it is necessary to take a step back from concrete cases of materiality and materials, and consider how they intersect at the level of the organisation of production. The analysis of *chaîne opératoire* patterns in the crafting of LPC lowland Maya art, as summarised in table 7.2, points to a distinction in terms of different kinds of labour as being primary, rather than the specific craft-work associated with different kinds of material.

On the one hand there are various forms of bulk labour, which can vary between the household-based production of chert tools to the mass mobilisation of labour for the construction of monumental-scale public works. In contrast to this there is the more intricate labour involved in the fine crafting of objects and monuments, sometimes involving iconography and writing as well. In some ways these two forms of labour form part of a continuum, and the notion of memory-work is attached to both. But the memory-work that uses texts and complex iconography belongs to a different context, one that involves contacts with other parts of Mesoamerica and can be more closely related to socio-political hierarchies. Furthermore, the materials on which writing and complex iconography were crafted can be related to the 'aesthetics of durability' discussed in the previous section. If this durability is grasped in its proper context, as related to life-sustaining processes rather than to other more perishable materials, then the connection between craft and conceptions of materiality becomes clearer. In crafting a jadeite object a Maya worker would not create or increase *k'uh*, but rather use and shape the intrinsic power of the material, including through texts and images, to give a more permanent expression to an embodied ideology.

7.4: The iconography of Late Preclassic lowland Maya art art

7.4.1: Introduction

In this section the iconography of the art of the LPC Maya lowlands will be discussed. Just as in section 4.4 on Mycenaean iconography there will be two separate sections. The first will consider the conventional rendering of iconographic elements as part of a cultural 'way of seeing', while the

³⁷⁹ It has been argued that the esoteric knowledge required for intricate craft-work involving text and iconography made such work akin to the creative activities of deities (Inomata 2007, 132). But even if it would be possible to take this hypothesis another step further to suggest deity impersonification in craft-work, this would only involve interacting with such powerful forces, not imply the ability to master and change them by the craft-worker. It is more likely that craft-related ritual followed the template of offerings, reciprocity and 'work' noted for Mesoamerican ritual in general (Monaghan 2000, 30-32). In this regard, the description in Diego de Landa's work of the offering of blood through self-sacrifice and also incense smoke in a ritual related to the making of 'idols' (Tozzer 1941, 160), may provide an example of this for such craft-work.

³⁸⁰ But not necessarily tied to state polities, as the phenomenon can already be observed for the decorative motifs of pre-Mamom ceramics (Estrada-Belli 2012a, 202-205), and as will be explored for the smaller LPC lowland Maya sites of K'axob and Chan in sections 8.2.5 and 8.2.6.

second will focus on the interplay of these elements in narrative structures. A final section will consider the relation between these two strands of analysis. Based on the Mycenaean case particular attention will be given to the following elements of iconographic analysis:

- 1. Overall interpretations of the concept of naturalism as well as the rendering of the spatiotemporal environment in art.
- 2. The depiction of anthropomorphic beings in art and the connection with notions of personhood, as well as the rendering of related elements.
- 3. The relation between images and words, in particular as they relate to broader issues of narrative and poetic performance.

7.4.2: Iconographic conventions in Late Preclassic lowland Maya art

One of the most vexed issues in Mesoamerican iconographic studies concerns the question of naturalism, which is problematic for many non-Western cultures and the various Amerindian art styles are certainly no exceptions to this (cf. Knight 2013, 28-30). Reception studies have shown that Maya art, and particularly that from the Late Classic period, has often been greatly appreciated by Western critics and audiences for its naturalistic style, in contrast to the more art from Teotihuacan and other cases that seems more schematic and hard to understand (Pasztory 2005, 191-194). The question of naturalism is often closely connected with valuation in Western terms, of which Morley's desire to seek the Maya equivalents of Classical Greek artists Phidias and Praxiteles (Herring 2005, 16) is only an exaggerated example. Clearly, then, the term naturalism needs to be unpacked and put into its proper cultural context in order to do away with such misleading analogies, however seductive they may appear. To do so it can be useful to connect the iconographic conventions of LPC lowland Maya art to the specific ontology within which it was embedded, ³⁸¹ which was already discussed for materiality in section 7.3.3.

It is possible to see the importance of this when considering the depiction of various features of the environment. Even if the overall effect appears naturalistic rather than schematic, the various plants and animal species in Maya art do not necessarily correspond literally to those that would have been physically present. Instead, in some cases the natural environment seems to have been conceived of according to mythological templates. A good example of this is the conflation of cacao and maize as 'te, the term for wood that is also connected to a mythical world-tree, while the ceiba, another tree with mythological connotations is called yaxte' or 'first tree' (Houston 2014, 13-15). There are also a number of glyphs of natural phenomena, mostly of wild creatures such as the jaguar, the snake and the sky-eagle, that have logographs that show the mythological, and often primordial, templates of these creatures (Houston & Martin 2012). Clearly, even if Maya art intuitively appears pleasingly naturalistic, it also demands a good grasp of the underlying worldview and ontology. The focus here lies on exploring two key elements of this: the rendering of the spatio-temporal environment as it relates to cosmology, and the depiction of (parts of) anthropomorphic beings and the implications of this for conceptions of personhood.

Starting with the spatio-temporal environment in LPC period art, it is best to start with the more technical question of projection. A number of recent Mesoamerican studies have made good use of the work by Margaret Hagen (1986) on systems of projection in two-dimensional art forms. In this work she developed a psychological theory of vision based on the work of James Gibson, in order to investigate the properties of a fairly large set of cases of representative art from past and present

³⁸¹ To reiterate the point made in section 4.4.2 for Mycenaean art: the discussion of iconographic conventions here is inseparably tied to Panofsky's third level of intrinsic meaning, involving broader cultural considerations.

cultures.³⁸² The theory was used to formulate four stable types of representative systems, listed in table 7.3 below, see also figure 57. These systems were based on criteria such as the number and optimal viewing distance for station-points, whether or not the viewer and image plane are parallel or intersect, and whether projection lines converge or not. To this can further be added an emphasis either on two-dimensional or three-dimensional material forms. These different styles can be recognised in the diverse set of cases treated in the cross-cultural study, in which most cases of early civilisations listed seem to fall into the metric projective system category (Hagen 1986, table 9.1, pp. 254-255). The potential reasons behind this pattern in the comparative analysis in chapter nine. Finally, it is also important to remember that styles can sometimes employ multiple systems or variants of them, even if one of them usually prevails.

	planes	projection lines	historical example
projection mode			
affine	intersecting	parallel	Early Modern Japan
projective	intersecting	converging	post-Renaissance West
metric	parallel	parallel	Pharaonic Egypt
similarity	parallel	converging	n/a

Table 7.3: Overview of projection modes, adapted from (Hagen 1986, fig. 9.1, p. 241).

In temporal terms it is not valid to posit that the projective system with its three-dimensional focus, so highly appreciated in the post-Renaissance West, should be seen as the pinnacle of artistic development. Furthermore, experiments have shown that there is no clear development, and even less an 'end-point' in the artistic capacities of unskilled children and adults (Hagen 1986, 271-280). Rather those skilled at making artistic representations develop their craft with the ideas, techniques, and materials of their specific cultural context. The usefulness of the method developed by Hagen is that it makes it potentially possible for the researcher to relate iconographic conventions of different traditions to the worldviews of those traditions. In this the invariant properties of projection as derived from optics and human vision provide a key bridging role. Of course, the worldviews of early civilisations revolve around more than systems of projection, but at least they provide a basic starting point that can be nuanced by using more detailed information. Although the system developed by Hagen has never been used directly for LPC lowland Maya art, it has been used to interpret the mural art of Teotihuacan (Pasztory 1997, 2005), and to compare two-dimensional Classic and Postclassic lowland Maya art (Gillespie 2007).

Both authors note that the metric projective system predominates in Mesoamerican art, ³⁸³ but from this explore how it can be interpreted in more detail in specific cases. Most relevant to the present concern is the study by Gillespie, who uses Hagen's system to understand the connection between pictorial conventions and concepts of time, cosmology, and socio-political structures of the Classic and Postclassic Maya. In doing so, she provides three important points on the relation between the basic elements of Mesoamerican cosmologies and modes of projection (Gillespie 2007, 114-116):

³⁸² Gibson's theory was based on an 'ecological optics' relating observer and spatial environment, paying special attention to the structuring roles of light and vision (Hagen 1986, 11-13). Here the focus will lie less on this theory and more on its applications to Mesoamerican art. The theoretical perspective of Gibson and Hagen can be related to newer work that seeks to understand the neurological connections between environment and observers (e.g. Onians 2002).

³⁸³ As an example of the earlier observation on other modes being employed in more limited ways within a dominant mode, Pasztory has show how in some of the wall-paintings at Teotihuacan the affine projective mode was used in combination with the metric one to suggest depth (Pasztory 2005, 138). This points to the necessity for using the overall scheme developed by Hagen only as a starting point, to be elaborated by taking into account the specifics of individual styles, such as the use of borders at Teotihuacan (Pasztory 1997, 187-190).

- 1. An overall emphasis on two-dimensional surfaces, which is related to a basic sense of place that includes a centre and the horizontal and vertical planes that intersect it. The horizontal plane in this case being the surface of the earth defined by the quincunx pattern of four directions and a centre, and the vertical plane by the distinction between the three levels of underworld, earth, and the sky.
- 2. The distinction between centre and periphery as related to the observation of celestial movements. Basic to this is the daily path of the Sun as it defines an east-west line. The north-south line can be defined by the solar ecliptic, or alternatively as the zenith and nadir points of the daily path of the Sun (Coggins 1980, 731). These two options need not be seen as mutually exclusive (Houston & Inomata 2009, 27), as in both the centre is defined by its relation to these movements of the Sun.
- 3. The relation between centre and periphery can be represented vertically, with the earth's surface as the main iconographic space, flanked by the underworld below and the sky above. But it can also be represented horizontally, with the quincunx pattern of the four directions and a centre defining the iconographic space.

With regard to the third point, Gillespie (2007, 133-135) has contrasted a focus on verticality for the Classic Maya to one on horizontality for Postclassic central Mexico, which she links to different conceptions of relations between centre and periphery in both regions. These derive from the Classic Maya focus on autonomous city-states, with a system of kingship closely tied to the Long Count calendrics, as compared to the overarching polities that incorporate different ethnic and political groups, from which in some cases tribute is drawn, in Postclassic central Mexico. Quite clearly, these broad conclusions are nuanced, as she herself admits (Gillespie 2007, 134), by some similarities in the socio-political landscapes of both cases. Here it is possible to refer to evidence of Classic Maya hegemonic polities that overruled the autonomy of individual city-states in some ways (Grube 2000, 550), and evidence that even within the Aztec empire the previously autonomous city-states retained something of their independence (Smith 2000). However, an important distinguishing feature of the Classic Maya compared to the Postclassic period is the use of the Long Count, closely connected with the stela as art form (Gillespie 2007, 117), and it is here that the relation between verticality and the centrality of kingship can be observed best. See

The next question concerns the relevance of this discussion for LPC lowland Maya art. Gillespie (2007, 116) had noted that the emphasis on verticality seems to date back to the Preclassic, for which the Izapa evidence seems to offer interesting insights into the relation between cosmology and rulership (Guernsey 2006, 119-141). Unfortunately, the only known LPC stelae with Long Count dates are found outside the Maya lowlands, but there is considerable other evidence that is of interest here. First of all it is important to note that, as discussed in section 6.4.2, the basic elements

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³⁸⁴ Another interesting case is that of the Postclassic lowland Maya, which also seems to shift from a vertical emphasis to one that stresses horizontality (Gillespie 2007, 135), even as general Maya conceptions of landscape show considerable continuity over time (Taube 2003b). An interesting exploration of the Chichen Itza wall-paintings as a 'way of seeing', not using Hagen's framework, has emphasised as one of the key changes here the use of a bird's eye view on large landscapes and groups of people (Hutson 2005, 229). This focus on diverse landscapes is related to the farreaching trading network of the site, but the location and bird's eye perspective are also related to an elite perspective (Hutson 2005, 232). However, some of these developments may be seen in the Classic period, as for the shift away from kings to larger groups at Bonampak (Miller & Brittenham 2013, 171-174), and the quotidian scenes of what seems to be a marketplace at Calakmul (Carrasco Vargas & Cordeiro Baqueiro 2012; Martin 2012). For the Postclassic Yucatan, there is also a need to take into account the insights in cosmology provided by the architectural layout (Pugh 2001) and wall-paintings (Milbrath et al. 2010) at Mayapan.

³⁸⁵ An aspect connected to this concerns the relation between the names of structures, together with their iconographic programmes and dates, as part of the layout of civic-ceremonial centres and their embedding in cosmological landscapes, as explored for the Classic period by Tremblay (2007).

of the Calendar Round can be found in the LPC lowland Maya area. Secondly, as will be shown in section 8.2 of chapter eight, evidence from the layout of caches at different sites strongly points to a cosmology based on the quincunx pattern of four cardinal directions and a centre. Based on sources from periods other than the LPC, another strong pattern in Maya cosmological thought can be discerned in the notion of the sky as akin to a bowl:

"Rather than an ethereal element gently allowing the flow of celestial elements through the air, the sky in native Maya thought is a giant solid bowl atop the earth at the edge of the sea. Thus, in contemporary Yukatek belief, the rain-bringing Chahks first emerge through a small hole in the wall of the eastern sky. In a contemporary Achi Maya version of the Sipak myth, Sipak escapes certain death by escaping through the horizon 'crack' between earth and sky. Formed of a bowl with another inverted on top, ancient Maya 'lip to lip' cache vessels are graphic models of the sky bowl on top of the circular earth. Such caches frequently contain jade and shells oriented to the cardinal or inter-cardinal points." (Taube 2010a, 213)

In a number of LPC lowland Maya caches the relation between bowls and the outline of the cosmos can be readily observed, often together with small objects with colours suggestive of the cardinal directions, as at K'axob (Harrison-Buck 2004, 73-75). At this site a number of bowls have also been found with a *k'an* cross painted on the inside (e.g. Berry et al. 2004, 244-245), see figure 58, which are relevant to the issues discussed here. The context of these bowls will be discussed further in section 8.2.5, here the concern is more with their iconography. Taken at face value, the *k'an* crosses in these bowls seem to suggest a horizontal outline of the four directions and a centre: a quincunx figure.³⁸⁶ But a connection has also been made between these vessels and the so-called Humboldt celt from the Olmec area, which, among other things, shows a bowl in profile immediately beneath a horizontal rendering of a quincunx figure with a *k'an* cross in the middle (Headrick 2004, 370-371).³⁸⁷ Here, then, it is possible to see an extension of the K'axob bowls, combining an overall vertical/profile view of the bowl and the quincunx figure (as well as the rest of the iconography on the celt), with a horizontal/bird's eye view of the quincunx outline itself. Furthermore, a close association between bowls, centrality, and world-trees can be seen in many different artistic renderings from the Preclassic through to the Postclassic period (Astor-Aguilera 2010, 45-49).

The K'axob bowls are discussed here for two reasons, the first of which is to emphasise the relation between LPC lowland Maya iconography and that of other periods of the Maya trajectory, as well as with other regions of Mesoamerica. Even more important, however, is the suggestion that horizontal and vertical viewpoints can be combined. This can also be seen in the main body of evidence for the rendering of space in LPC lowland Maya art: the San Bartolo wall-paintings. As noted by Hurst (2005, 623), there are two important elements of these paintings that are significant in terms of the quincunx ordering of the cosmos, these being the gourd birth-scene and the four trees with sacrificing youths. Before turning to these scenes, however, it is important to note the rendering of skybands (see figure 59), which are also known from external façades. For all the

³⁸⁶ Of course this covers only the horizontal aspect of the cosmos, not taking into account the layers of the underworld and the sky. These were present in Preclassic lowland Maya art, notably in the layered cache from MPC Cival and the LPC quatrefoil scene from the San Bartolo west wall. Such quatrefoil shapes have been connected with the presence of a cave, as a portal to the underworld, and can be widely seen in the art of this period (Guernsey 2010), and even in recent Guatemalan ethnography (Christenson 2001, fig. 4.17, p. 99). However, the focus here lies on the quincunx pattern as it is both better known and more relevant to other aspects of LPC art.

³⁸⁷ This reading is partially based on the work of Reilly (1995, 32-33), who noted the use of multiple viewpoints in Olmec art as consistent with broader Mesoamerican ideas in this regard, in particular for the delineation of a centre and the four cardinal directions that mark the edges. This aspect of Reilly's analysis can be used without necessarily agreeing with his ideas on shamanism, a notion briefly discussed in section 6.4.2.

³⁸⁸ For the identification and outline of specific features of these wall-paintings, the reader is referred to the appendix on the narrative micro-structures in the San Bartolo paintings.

interior San Bartolo murals, the skybands are located below the main pictorial space, suggesting that we are dealing here with a location different from that of ordinary, earth-based existence (Taube et al. 2010, 4). This can be contrasted with the use of skybands and astronomical phenomena in Classic Maya art, which are usually located above depictions of earthly terrain. A good example of this can be seen in the Late Classic wall-paintings of Bonampak, where there seems to be an intimate relation between the concrete and historical events in the main pictorial space and the representation of the constellations above them (Miller & Brittenham 2013, 105-106).

The contrast between the historical events at Bonampak, though of course inseparable from the calendar-based worldview, and the more generic, mythology-influenced setting of the San Bartolo paintings is clear. But the situation is even more complex at the latter site, as in one scene of the west wall a deity descends into the central pictorial space from a skyband located above it (Taube et al. 2010, fig. 62, p. 101), see figure $60.^{390}$ Hence in this section of the San Bartolo murals skybands are present both below and above the space in which the main action takes place. This cannot be easily explained, although it may be less problematic if we are dealing with a setting that is primarily mythological rather than historical. One clue to a more specific determination may be found in the wide occurrence of an U-shaped motif in the skybands of both the north and west walls (Saturno et al. 2007, 66; Taube et al. 2010, figs. 57-68, pp. 96-107). Unfortunately, in the little that is preserved *in situ* of the upper skyband on the west wall it is impossible to recognise any sign, although the edges would suggest that they might well have been present. However, the cloud and rain elements that emanate from this upper skyband at San Bartolo have close parallels to skybands in contemporary art from outside the lowlands, one of which, Izapa Stela 26, combines the cloud and rain elements with an U-shape in the skyband above them (Taube et al. 2010, fig. 31, p. 47).

Significantly, the U-shape can be recognised in contemporary skybands from Izapa, but not in those depicted in Classic and Postclassic Maya art (Lang 2004, 27, 29). For the site of Izapa, one interpretation of the U-shape is that of a womb or in broader terms a place of emergence (Tate 2012, 223-224). Based on this it has been argued that its use within these skybands can be related to the accounts of cosmogony and anthropogony in the Popol Vuh. But the U-shape in fact occurs in a wide range of contexts, including associated with the head and clothing of the figures in the San Bartolo paintings, which may give them a celestial significance (Lang 2004, 70). Hence it would be wise not to limit the interpretation of the U-shape to a womb, and rather consider it as part of a broader set of related metaphors. Nevertheless, parallels between a variety of cases from different areas and periods of Mesoamerica show that the association of U-shapes and wombs is a recurrent and fairly strong one (Tate 2012, 286-287). Hence it can be useful to explore the connection between the Izapa skybands and the Popol Vuh further. In the preamble of the part of the Popol Vuh relating the origins of the Quiché people, there is an especially interesting passage that connects the laying out of the four directions of the cosmos to wombs and giving birth:

This does not imply a broad contrast in the location of skybands in Preclassic and Classic lowland Maya art, however, as there are multiple Preclassic cases of skybands located above the main pictorial space, as can be seen in wall-painting fragments from Tikal Structure 5D-Sub 10 - 1st (Lang 2004, fig. 41).

³⁹⁰ In her senior thesis on the San Bartolo skybands, Rebecca Lang (2004, 67) interprets this skyband above the main pictorial space as a celestial serpent, which can be seen both in the lower skyband and the rest of the mural as well. Hence there is little question that for this particular scene the space in which it occurs is bounded both below and above by skybands with iconographic significance.

³⁹¹ The association between the U-shape and the womb has parallels in other Mesoamerican cultures and can be seen as fairly straightforward for the skybands. More problematic is that this sign also occurs within cartouches attached to the Principal Bird Deity at Izapa, where an alternative interpretation relates them to flowers, and to a broader set of associations related to breath and soul (Guernsey 2006, 107). However, the relation between the U-shape and flowers seems not very strong. The depictions of the floral breath elements in Maya and Olmec art lack them altogether (Taube 2010b, fig. 9, p. 158). The association between U-shapes and wombs and birth is much stronger, as can be inferred from parallels from a variety of Mesoamerican cases (Tate 2012, 286-287).

"Great is its performance and its account of the completion and germination of all the sky and earth – its four corners and four sides. All then was measured and staked out into four divisions, doubling over and stretching the measuring cords of the womb of sky and womb of earth. Thus were established the four corners, the four sides, as it is said by the Framer and the Shaper, the Mother and the Father of life and all creation, the giver of breath and the giver of heart, they who give birth and give heart to the light everlasting, the child of light born of woman and the son of light born of man, they who are compassionate and wise in all things – all that exists in the sky and on the earth, in the lakes and in the sea." (Christenson 2007, 56-57)

The fact that an U-shape is present on the gourd from which the five figures emerge (see figure 55), with another sign explicitly referring to a process of giving birth (Saturno et al. 2007, 9), makes the association between skyband and womb even stronger in this case. Through this it is possible to tentatively point to a generic relation, if not yet a specific one, ³⁹² between the San Bartolo skybands and the womb of sky and/or earth mentioned in the Popol Vuh and other sources from the colonial period. It is likely that we are dealing here with a primordial landscape, one of mythological creation rather than a historical setting. This proposition is reinforced when considering the gourd birth-scene itself in more detail. In the original interpretation by the project team the uniqueness of this scene in Maya iconography is noted, while at the same time the quincunx outline of the five figures that emerge from the gourd is emphasised as being consistent with Mesoamerican cosmology (Saturno et al. 2007, 12-13). Since this study, others have related the scene to evidence from different Maya and Mesoamerican periods and regions to interpret it in more detail.

One study by Ruud van Akkeren (2006) discussed the gourd birth-scene as part of his discussion of Zuyua (rendered by him as Tzuwya), which as noted in section 7.4.2 was interpreted by him as the toponym for 'place of the gourd'. Based on an extensive discussion of colonial-era sources, he interprets the figures emerging from the exploding womb-gourd as the Sons of Sunrise: the first people made of maize, who will witness the first sunrise of the newly created world (Van Akkeren 2006, 48). Basing herself on a wider set of Mesoamerican parallels, Tate (2012, 290-291) also relates the gourd birth-scene to similar accounts of the emergence of humankind. Yet in both studies the quincunx pattern of the figures being birthed is less than fully accounted for. However, it is possible to point to the close relation between the birth of the Sons of Sunrise and the emergence of agriculture (Van Akkeren 2006, 42). Another clue comes from the close association between the life-cycle of maize and humans, especially for seeds and embryos (Tate 2012, 58-61). An umber of ethnographic studies also describe Maya farmers planting maize in a quincunx pattern, a parallel for which may be seen in the spatial arrangement of pre-Columbian caches (Tate 2012, 186-187).

Based on these clues, the following hypothesis can be posited: the gourd birth-scene shows the birth of the current version of humankind based on maize, also indicated by the spatial arrangement of the basic quincunx pattern of the *milpa* field. Here it is necessary to recall the parallels between the

³⁹² Given the occurrence of the U-shape in different forms, and alongside other elements, there may be more interpretive potential to the San Bartolo skybands. This would include the placement of motifs in the skyband as related to the specific scenes in the main pictorial space, as tentatively explored in (Lang 2004).

³⁹³ Recalling the discussion of k'uh in section 7.3.3 and noting the explosive force with which blood and red and black volutes are blown from the womb-gourd, it is revealing that a conclusion based on ethnographic research on the relation between maize and humans stresses the connective link of a common energetic force:

[&]quot;The lives of humans and maize are so intertwined that it is hard to say which is the more fundamental ordering principle. It is becoming increasingly apparent that throughout Mesoamerica, concepts of and observations about the human body formed the basis for metaphors that shaped conceptions of much of the world. Humans sprout like corn, in the wet and cool environments of the womb and earth. And both maize and humans contain a spark of divine energy, or heat, that fluctuates according to the conditions of life." (Tate 2012, 59)

laying out of the cosmos, *milpa* field, and house in Quiché Maya ethnography (Tedlock & Tedlock 1985, 127-128). In section 8.2 the implications for the interpretation of caches laid out according to a quincunx pattern will be addressed. Turning now to the other aspect of the four directional trees, it is important to mention first that here only their interpretation in terms of spatial convention and cosmology will be treated. The rest, including the relation with the gourd birth-scene, will be discussed in section 8.2.4. First of all, it is important to stress the recurrence of the relation between directional trees, sacrifice, and the creation of the cosmos in other periods, as can be seen especially well for the Postclassic codices from the Maya area and central Mexico (Taube et al. 2010, 13-15; Taube 2012, 744-745). Based on the iconographic analysis by the project team, the following associations can be made for each of the four scenes of sacrificing youth, offering, tree and Principal Bird Deity, based on (Saturno 2009, 124), moving from left to right:

- 1. West, a watery realm associated with the underworld, with an offering of fish. 394
- 2. North, associated with the land, and with an offering of a deer.
- 3. South, associated with the sky and an avian aspect, with an offering of a turkey.
- 4. East, associated with a flower-based paradise, and with an offering of flowers as sustenance for the gods and ancestors.

In addition to these identifications,³⁹⁵ the four sacrificing youths in front of each of the four trees have been associated with the so-called 'Year Bearers' (Taube et al. 2010, 19-22), the role of which in the Calendar Round was briefly discussed in section 6.4.2. These figures relate the San Bartolo paintings to more general Maya conceptions of order, as expressed at a basic level in the outline of a *milpa* field or a house. For the more complex scene of the four directional trees, it instead signals the spatial order established by the polity and office of kingship centred at San Bartolo, expressed in cosmological terms (Saturno 2009, 124; Taube et al. 2010, 84). Finally, another tree depicted in the west wall murals might hypothetically represent the central axis mundi, appearing without Principal Bird Deity or sacrificing youth, but instead with an avian maize deity and birds (Taube et al. 2010, 84). Having outlined these different scenes from San Bartolo, it now is time to return to the K'axob vessels that formed the starting point of the discussion. Bearing in mind the small sample, it is nevertheless possible to recognise a fairly coherent pattern in qualitative terms. Basic to this is the observation that the horizontal rendering of the *k'an* cross on the bottom of the K'axob bowls can, based on the comparison with the Humboldt celt and other cases, be extended to a vertical/profile view of the quincunx outline of the cosmos.

This can be seen very clearly in the San Bartolo wall-paintings. Even if we are dealing with a mythological and primordial landscape here, based on the analysis of the skybands and the content of the main pictorial space, it is still one that conforms to the basic outlines of the Maya cosmos. While the gourd birth-scene shows this in a horizontal/bird's-eye view, the four directional trees depict it in a profile view. As in the interpretation of the K'axob vessels, this shows that the two viewpoints are far from mutually exclusive. This pattern should not be interpreted as a stage in an evolutionary scheme of lowland Maya art, moving from Preclassic mythology to Classic kingship to Postclassic human landscapes. Given that these reconstruction are based on only a few cases, and also considering the close connection between the San Bartolo murals and the Postclassic codices, this would be a highly tenuous model. Instead it is possible to see in LPC lowland Maya art templates, which were articulated in different ways in later periods, based on different demands placed on artists, but sharing the same cosmological views. Thus it is possible to recognise here

³⁹⁴ The scenes with offerings on tripods have hearthstones on them from which smoke volutes arise, a reference to offering that is also closely related to the raising of the world-trees (Saturno et al. 2007, 23-25).

³⁹⁵ In its basic elements this outline is strikingly similar to that of the Dresden Codex, except that in this case the sequence ends with the deer rather than with the fish, as in the San Bartolo scene (Taube et al. 2010, 28).

what may be termed a 'way of seeing', which could be represented flexibly in a number of depictions using techniques for rendering space captured by Hagen's metric mode of projection. It could also be extended from the order represented by the layout of the house and the *milpa* field of the farmer, to the ordering of the territories of powerful kingdoms.

If maize cultivation played an important role in the discussion so far, it arguably occupies an even more important one in the other element treated in this section: the rendering of anthropomorphic beings in LPC lowland Maya art and its implications for understanding personhood. It was already noted in the discussion of the gourd birth-scene the set of close associations between the creation of human beings and maize, but in broader terms this relation extended to the entire life-cycle of both kinds of organisms, including to death (Fitzsimmons 2009, 22-24). The prevalence of metaphors involving maize and humans can be grasped as part of a broader notion of a 'botanical substrate' for the current human race and those that preceded it (Houston 2014, 11). It extends to other kinds of vegetation as well, as can be seen in the ancestral figures sprouting from different orchard trees in the Late Classic sarcophagus of king Pakal from Palenque (McAnany 1995, 75-77; Fitzsimmons 2009, 127). As such, the notion of Maya personhood is bound up within the overall monistic worldview, and individual persons can be viewed as aspects of it.

The discussion here will focus on providing a more generic outline of personhood in LPC lowland Maya art, without going into the extensions of it in various social roles. The reason for this is that the evidence for such social roles in LPC period is simply too limited, in contrast to that from the Classic and Postclassic periods. For the Classic period in particular, it is possible to recognise social roles in terms of courtly life, for example at Bonampak (Miller & Brittenham 2013), the position of women in the Maya state (Reese-Taylor et al. 2009), and occupational roles in the Calakmul 'market' murals (Carrasco Vargas & Cordeiro Baqueiro 2012; Martin 2012). Such social roles cannot be recognised in the LPC evidence as it exists now, but once again the contingent character of that sample should be emphasised. Before the discovery of the Calakmul paintings, quotidian scenes were unknown in Classic Maya monumental art as well. Hence it would be unwise to state that social roles were absent by the original intention of the creators in LPC lowland Maya art, as one single discovery could easily overturn such a necessarily tentative statement.

By focusing instead on the more generic question of personhood as it relates to the representation of anthropomorphic beings in art, the most can be made of the evidence available. A number of different terms are relevant for the interpretation of Maya personhood. Most problematic is the *way*, which seems to have acted as a co-essence to humans and of which a considerable variety existed (Grube & Nahm 1994). Yet even for the Classic period the precise meaning and role of the *wahy* beings remains difficult to determine with great precision, although a close association with disease and sorcery has been put forward by different scholars (Fitzsimmons 2009, 44-47; Helmke & Nielsen 2009; Houston & Inomata 2009, 208-210). Given the lack of clear depictions of *wahy* in LPC lowland Maya art, ³⁹⁷ this topic here will not be elaborated upon further. Another term is *winik*, referring primarily to a human or person and widely found in the textual record of the Classic period (Houston et al. 2006, 58-59). Another connotation of *winik* was the 20-day month, based on the relation between the human body and the vigesimal count, and there is some evidence that this was already the case in the LPC period (Coggins 2007, 225).

³⁹⁶ In a different way, metaphoric extensions relating to human beings can be observed for the artefactual realm as well. This can be inferred from the practice of adding specific materials to different Classic Maya court functions, as in 'head wood', with human beings in this way functioning as 'tools of statecraft' (Houston 2014, 28). The same terminology that uses material terms to describe persons occupying positions at court can be seen in a recently discovered wall-painting from the Classic period site of Xultun

³⁹⁷ One reading of the scene on the LPC stela from Cahal Pech, of a human figure in the mouth of a jaguar, might plausibly be interpreted as indicating an animal co-essence of a human being (Awe et al. 2009, 185).

However, the most important term for the discussion of Maya personhood in relation to art is that of *baah*. Ubiquitous in Classic period texts, its translation is to 'body' but also with a close association with 'head', both in a literal and a metaphoric sense (Houston et al. 2006, 59-61). A variety of uses were made of *baah*, but for the present purposes the most significant one lies in its use for denoting images (Houston et al. 2006, 67). The connection between surfaces, especially faces, heads, and masks, but also skin, and divine power can be observed throughout Mesoamerica (Monaghan 2000, 29). For the Classic Maya this relation can be seen in the notion that an artefactual representation can share a vital energy with what is represented, not through an occult transfer of essences but as part of a shared monistic ontology (Houston et al. 2006, 74-76). As can be seen especially well for stone, the permanence of such images makes them more durable than the flesh of the person represented, even if this permanence was often negated through intentional acts of mutilation and defacement of images (Houston 2014, 99-100). In this way, the relation between *baah* and images points to the extension of personhood in Maya art.³⁹⁸

This basic outline of terminology only sketches the bare bones of how personhood is related to the depiction of anthropomorphic beings in Maya art. For the Classic period much more information is available that allows insights into practices that involved artistic images. This includes rituals that involved the impersonification of deities, known not only from depictions in art but also from finds of masks used in such rituals (Houston & Inomata 2009, 203-205). Another example of praxis is the vision or *-ichnal* emanating from a powerful figure, or the artistic image thereof, that structured the perception of certain architectural spaces (Houston et al. 2006, 173-175). Unfortunately, the artistic record of the LPC lowland Maya lacks both direct textual evidence for the terminology of personhood discussed here, and also provides no unambiguous clues to practices such as deity impersonification. In order to remedy this problem, first a broad outline for various depictions of anthropomorphic beings in LPC period art will be provided, followed by a return to the generic picture outlined before. As such, the investigation is very much dependent on the direct historical method, in this case connecting the material to the Classic record (the interpretation of which is partially dependent on later sources), but in a way that is structured by the LPC period evidence.

The discussion of the evidence starts, however, not with positive evidence but rather with an absence: the lack of figurine-making in the LPC period. As discussed in section 7.2.3, in the MPC period, figurines had been present in the archaeological record of the lowland Maya area, and the shift away from them was attributed rather generally to socio-political changes. The key question here is whether such changes can be related to changed conceptions of personhood as well. Here one obstacle is presented by the fact that, as far as this author has been able to ascertain, the record of Preclassic lowland Maya figurines has not yet received an exhaustive analysis of key characteristics such as physical properties, gender, attributes, and find contexts. Some basic features can be noted, including that they can be associated with household ritual (Hendon 1999, 111; Ringle 1999, 190, 193), and that there is some overlap with whistles or *ocinaras*, a type of flute (Bartlett 2004, 264-265; Hendon 1999, table 2, p. 104). More uncertain are theories that they were portraits of ancestors, as will be discussed in section 8.2.6 for the site of Chan, or even of rulers (Hammond 1989, 113), the latter hypothesis clashing with the household contexts (Ringle 1999, 193).

One systematic survey of figurines from Formative period Oaxaca offers more insights for the shift away from figurines in relation to socio-political changes and personhood. Using a combination of

³⁹⁸ Based on a similar focus on heads, surfaces, and extensible personhood, *baah* has been related, if with some caution, to the Nahuatl term *tonalli*, which denotes an important aspect of the soul in central Mexico (Houston et al. 2006, 79-81). Reservations have been expressed, however, as these similarities really imply an equation of physical images with souls, even if the *tonalli*, like the *ch'ulel* of the Tzotzil Maya, could become detached from the human body (Fitzsimmons 2009, 39-42). As with the *way*, more research still seems to be required to resolve the issue satisfactorily.

Zapotec ethnohistory and comparative ethnography, Marcus (1998b, 25-29) locates the early use of figurines in a nexus of women, divination and ancestors, in a society based on corporate kin groups.³⁹⁹ With the development of socio-political stratification and the state, these 'little tradition' figurines went out of use and were eventually replaced by mould-made 'great tradition' figurines of nobles and kings (Marcus 1998b, 301-306). Even if the analysis of the Oaxaca material should not be readily transplanted to the early figurines of the Maya lowlands, the shift in socio-political structures follows a similar trajectory. While there are other aspects of figurines, such as embodiment and ornamentation (Joyce 2003; Lesure 1999), the realignment of household and ritual within a context of stratification and state formation seems to provide a good explanation for the temporary cessation of figurine-making. As will be shown in section 8.2.6, in LPC period Chan figurines from the MPC period were still curated, hence the break was not complete in ritual.

Given that both the figurines and the monumental-scale stucco masks are not understood in very precise terms with regard to what they represent, it is hard to accept the theory that the shift away from the figurines would be to the monumental masks (Hammond 1989, 113). While the stuccowork, as noted in section 7.2.2, is increasingly well-understood in terms of its material properties and identification of iconographic features, this is less the case for more abstract notions such as personhood. Whereas the Classic stelae have received much attention in this regard (Christie 2005; Newsome 1998), the uniqueness of the Preclassic monumental masks relative to other periods makes it harder to interpret this aspect of them. Nevertheless, some broad features can be noted. One is that the masks become more complex in iconographic terms as the LPC period progresses, including the expanded colour palette noted in section 7.2.2, with an initial zoomorphic focus being supplemented by anthropomorphic elements (Reese-Taylor & Walker 2002, 95). This allowed for more narrative complexity, as will be discussed in the next section, but in a basic sense the significance of the masks remains obscure.

One potential avenue may be sought in taking the term 'mask' beyond its common-sense use, to consider broader questions of masquerading and facial attributes in LPC lowland Maya art. Leaving aside the notion that the masks refer to actual masks worn in rituals, 401 the development of Maya art throughout the Preclassic offers interesting clues on these issues. One key element in this is the so-

³⁹⁹ Marcus' use of comparative ethnography derives from her nuanced position on social evolution (Marcus 2006), which she has used together with Flannery to outline a detailed trajectory of state formation in Oaxaca that does not depend on typology (Marcus & Flannery 1996). This perspective enables her to compare the social use and meaning of figurines from different areas of the world with 'village societies' (Marcus 1998b, 17-23). A recent comparative study by Lesure (2011, 213-217) of early figurines on a global scale has stressed the distinct art-historical properties of such figurines. Focusing more on the distinctiveness of regions or 'macro-units', the female focus of these artefactual representations is still related to ideological concerns too, even if their societal contexts are not discussed in-depth. Combining the social focus of Marcus and the art-historical rigour of Lesure would be highly useful, especially for considering changing gender roles in the emergence and development of early civilisations (*Understanding*, 194).

⁴⁰⁰ According to Marcus (1998b, 306), the 'little tradition' would still have been carried on in more archaeologically invisible ways in household contexts. The Classic Maya case provides a different perspective on the relation between elites and commoners. Although many figurines are of kings and nobles, there are also many others, including those that seem to have fulfilled a role in ritual humour in the sense of Bakhtin's carnival (Taube & Taube 2009, 255), acting as a counter-weight to socio-political hierarchy through ritual humour. One study of the ceramic paste types used to make them, suggests that some of the Classic period figurines were exchanged in festival fairs (Halperin et al. 2009). More detailed sources on Postclassic markets from central Mexico suggest that Bakhtin's notion of carnival can be successfully used in a Mesoamerican setting (Hutson 2000). This would be one way to provide an alternative to the notion of top-down dominance by elites, and allow for a different view of the relation between households and states.

⁴⁰¹ Based on an initial suggestion by Proskouriakoff, it has been proposed be that the large zoomorphic masks were 'composite signs' that derived from masks worn in ritual and dramatic performances, as they are known from the Postclassic through ethnographic records (Bachand & Bachand 2005, 45-46). Unfortunately, given the available evidence it is far from clear how this hypothesis could be further substantiated. Another possibility is that in some cases the masks could function as platforms for ritual performance viewed from below, as has been proposed for the site of El Achiotal (Acuña 2013, 345-346).

called 'Jester God' (named so because of the 3-pointed cap on this image), 402 an image attached to a headdress closely associated with rulers. This iconographic element derived from maize-related imagery in Olmec art, as can also be seen in close parallels spread out from the Olmec Gulf coast heartland such as an early axe found at El Sitio, Guatemala (Fields 1991, fig. 2, p. 168). It can still be seen in the art of Chichen Itza, even if the iconography and its societal implications have changed over time (Freidel 1990, 78). For the LPC lowland Maya, the Jester God can be found both in monumental and non-monumental art. It can be recognised on stucco-work dating to the later part of the LPC at Uaxactún and, more uncertainly, at Cerros (Freidel 1990, 71), while it may also be recognised at El Mirador (Hansen 1992, 50).

The Jester God image can also be seen on the headband of the right protagonist on Nakbé Stela 1 (Hansen 1992, 140-149, fig. 113, p. 343), see figure 61, which will be further discussed in section 8.2.2. It is important to note here, however, that its dating to the later part of the MPC period is far from uncontroversial (Houston & Inomata 2009, 82). Much more securely dated, as noted earlier in this section, to 100 BC, are the San Bartolo wall-paintings. Here the Jester God image can be seen on the headdress of one of the sacrificing youths (Taube et al. 2010, fig. 9, p. 15). It is also present on the headdress given to a seated figure of authority on the west wall (Taube et al. 2010, fig. 68, p. 107), see figure 62, which can possibly be interpreted as a royal figure. Close parallels can be found between this depiction of the Jester God element and that of the fuchsite mask from Burial 85 at Tikal (see figure 52), and to an even greater degree the quartzite or serpentinite Dumbarton Oaks plaque without provenance (Taube et al. 2010, 68), see figure 63. Based on the very close iconographic parallels between the depictions of the Jester God and the seated figure of authority in the San Bartolo painting and the Dumbarton Oaks plaque, it is possible to relate the latter object more securely to the LPC lowland Maya (Fields & Tokovinine 2012, 158). Ultimately, however, this will depend on further work on deciphering the text on the plaque, which, like all LPC lowland Maya texts, is as yet poorly understood.

Recent discoveries keep adding to the corpus of Jester God images, for example in the murals from Cival that are dated to 200 BC, where it is used in the headband of a maize deity (Estrada-Belli 2011, fig. 5.24, p. 108), see figure 64. The find of wall-paintings in a peculiar style at El Achiotal have also helped to clarify a more enigmatic use of the Jester God. This concerns the use of this motif on masks put on bundles, as can be inferred for the mask of Burial 85 at Tikal and is shown on the two bundles that are carried in procession on the north wall mural from San Bartolo (Saturno et al. 2007, 65). A similar kind of bundle can be recognised in a vertical, stacked position in the El Achiotal wall-paintings (Acuña 2013, fig. 6.7, p. 260), see figure 65. This notion of bundling is also connected to architecture here, and refers not just to the remains of ancestors but the precious materials and royal regalia as well (Acuña 2013, 351). As such, it is now possible to understand the extension of the Jester God image to the bundles as extending the same meaning of the royal insignia to these important ritual objects, which are also closely connected with kingship.

All these examples of the Jester God, 404 with the possible exception of Nakbé Stela 1, date from the later part of the LPC period. The temporal distance with depictions of the Jester God in Olmec art, had given rise to the notion that there was a significant disjunction in the use of the symbol between

⁴⁰² There are two versions of the Jester God motif, one showing a face with trefoil on a headband, as in the Dumbarton Oaks plaque (Fields & Tokovinine 2012, fig. 86, p. 156), while the other depicts only the trefoil on the headband, as can be seen for the El Achiotal wall-painting (Acuña 2013, fig. 6.7, p. 260).

⁴⁰³ The idea that the Burial 85 mask was part of a bundle is reinforced not only through iconographic parallels, but also by the find context that indicates the remains were bundled (Coe 1990, 218).

⁴⁰⁴ To this it is also possible to add the case of a small jadeite greenstone pendant from Cerros (Freidel 1990, 71). One view of this kind of object, which was found together with three others in a cache that also contained *spondylus* shells, is that they can be interpreted as 'stones of prophecy' (Freidel & Schele 1988, 559).

its Olmec and LPC lowland Maya uses. In particular, a shift in symbolic terms from a focus on maize to bright, polished surfaces and royalty was noted (Freidel 1990, 73). The discovery of the San Bartolo wall-paintings, on the contrary, showed that there was considerably more continuity in the symbolism and style of maize-related imagery with the Olmec than previously known (Taube & Saturno 2008). Another recent discovery at the site of K'o has further undermined the notion of a significant disjunction. Here a vessel with a Jester God image on it was found in a burial, which may well have been a royal one, dated to 350-300 BC (Tomasic & Bozarth 2011). Even if this post-dates the decline of the major Olmec site of La Venta, there is also presence of Olmec-style bluegreen jadeite in a cache dated to the 8th century BC at the nearby site of Cival, to be discussed in section 8.2.3. Both finds corroborate the possibility of more continuity between the Olmec and LPC lowland Maya culture, including for the Jester God image.

The finds from K'o and Cival have a significant impact on the understanding of shifts in ideology over time. One scenario had posited what is in essence a two-step development from the MPC to the Early Classic period (Bachand & Bachand 2005, 63-64). The first of these would consist of a shift from an emphasis on masking and ritual performance in open areas in the early part of the LPC, to an articulation of 'crowns' in iconography and more secluded spaces for ritual in the later part of this period. The shift away from masks to head ornamentation is connected respectively with concealing and highlighting individuality (Bachand & Bachand 2005, 56). The other transition was that of the Early Classic, with the emergence of elaborate burials of rulers on the summits of pyramids, as well as an end to 'austerity' in material culture, as can be seen in the new polychrome pottery (Bachand & Bachand 2005, 62). In overall terms this trajectory of a shift to more secluded ritual spaces and an emphasis on individuality is clear (McAnany 2010, 153-154), even if there are important continuities as well. But the find of the Jester God image from K'o, as dated to 350-300 BC, throws into question the idea of a shift from masquerading to highlighting individuality during the early to later parts of the LPC period.

Based also on the recognition of greater iconographic continuity in maize imagery with the Olmec, as can be seen very clearly for San Bartolo, a different kind of pattern can be inferred for the Jester God motif. In particular, its occurrence can be noted on a wide range of media, both monumental and non-monumental, and in depicted roles as part of headbands and bundles. Although caution should be exercised in attributing the Jester God image exclusively to the office of kingship, as it also occurs with the maize god, its use on royal insignia and bundles is broadly congruent with this connection, referring respectively to the 'crown' and 'burden' of the ruler. There are implications of this for the understanding of LPC lowland Maya kingship, but these will be discussed in section 8.3.2. Here the focus will lie on conceptualisations of personhood, starting with the shift away from figurine-making at the transition from the MPC to LPC period. Rather than indicating a change in size, from figurines to large stucco masks, this involved a qualitative shift in image and ritual, even if, as noted earlier, it was not a complete break. The development of the office of kingship would reorient ritual activity, and the concurrent disappearance of figurines and emergence of Jester God images can be understood as part of this shift.

It was argued earlier in this section that the term *baah* in the Classic period could be interpreted as evidence for the extension of personhood to artistic media. Given the limited decipherment of the LPC lowland Maya textual record, it is not possible to recognise a similar use of *baah* in the texts of this period. But even using only iconographic evidence, it is possible to see extension in the

⁴⁰⁵ One of the clearest examples of this concerns the mask of the maize god in the Flower Mountain and procession scene, which has strong Olmecoid features (Taube & Saturno 2008, fig. 4, p. 297).

⁴⁰⁶ In particular it is necessary to mention here the continuity in the use of plazas for mass rituals involving a sizeable portion of the population of Classic polities (Inomata 2006; Lucero 2007). In this regard, it is also important to remember the case of the Late Classic Maya figurines in relation to ritual.

replication of the Jester God motif in media such as wall-paintings, stucco masks, portable art objects, and bundles. This can be compared, in general terms, with the Classic period replication of ruler images and insignia across different forms of art as indicating the extension of a ruler by artistic means (Houston et al. 2006, 99-101). Even so, there were clear differences between LPC and Classic Maya kingship, as noted for the burials in section 6.4.2, and in the former period the office was emphasised over the person occupying it. Nevertheless, some form of extension is plausible. Another case, related to the Jester God image, concerns the mask of the maize god depicted on the San Bartolo north wall, which can be closely linked with certain Olmec images of this deity, described as 'the living face of corn' (Saturno et al. 2007, 25). Here it is possible to return both to the notion of a 'botanical substrate' of humans at the beginning of the present discussion, as well as that of an aesthetics of durability discussed in section 7.3.4. LPC lowland Maya personhood as extended in the artistic record would depend on both of these notions, especially for imagery related to the office of kingship, which constitutes the main evidence for this aspect of lowland Maya art in the LPC period.

7.4.3: Images, words and narratives in Late Preclassic lowland Maya art

Unfortunately, the record of lowland Maya writing in the LPC period is much less understood compared to the voluminous one of the Classic period. But this does not mean that nothing can be said about the relation between images and words in art, nor that it is impossible to deal with questions about narrative and performance. It does imply, however, that what can be said will, by the necessity of the more limited evidence, be much more generic than the detailed accounts that can be given for later periods. In order to focus the discussion will move from the outside inwards, starting with ideas about pre-Columbian semiotic systems in general. 409 The notion that the various Amerindian writing systems should be interpreted in their own terms and not according to the European standard of the alphabet was already developed by Vico and Boturini in the 18th century, as discussed in section 2.2.3. Today, the study of these writing systems has developed up to such a point that the relation between words and images can be compared between many different Amerindian cultures. An insightful study by Simon Martin (2006) specifically explores the range of different modes of representation across different pre-Columbian cultures, ranging from iconographic (pictorial) to a glottographic (textual) modes. Another mode, the semasiographic one that is characteristic of the Postclassic central Mexican highlands, is wedged in between these two.

Of course, it is very much possible that such modes coexist with each other and are even deployed together in the same setting (Martin 2006, 64), as can be seen in Maya art which combined an iconographic and a glottographic mode in a way that makes it very hard to separate them. The relation between these two modes has received much analysis, especially since the decipherment of the Maya script, as can be seen in the early notion of 'conjoined' texts and images (Berlo 1983, 13). Some have argued against conflating iconography and epigraphy in the interpretation of Maya art, owing to their different modes of organisation. Arthur Miller (1989, 186), for example, has contrasted the multivariate meanings of images to the linear organisation of textual messages.

⁴⁰⁷ The limited evidence for the intentional preservation, through burial, or mutilation of stucco masks in this regard should be considered as well (Hansen 1992, 29), even if in this case there is no relation between what was depicted, being mostly deities, and historical individuals.

⁴⁰⁸ The personification of plants, as well as of artefacts, in either anthropomorphic or zoomorphic form can already be seen in Olmec art, including for celts and stelae depicting the maize god (Taube 2004a, 37).

⁴⁰⁹ Knight (2013) provides a programmatic overview of methodological points on iconographic analysis in studying the art of the pre-Columbian Americas. Unlike in the work of Martin and Pasztory, however, he does not apply these methods for outlining a general framework for Amerindian art. Pasztory (1998) treats the art from Mesoamerica and the Andean area based on distinct naturalistic and abstract styles, which carry socio-political implications, but does not connect different kinds of writing to this.

However, it has been observed that while few syllabographs are incorporated in Maya images, except for names, many logographs are embedded in pictorial contexts. Furthermore, some pictorial elements are rendered in such a way that it is possible to view them as what has been termed as 'extended logographs' (Stone & Zender 2011, 12).

One of the key reasons for the difficulty in understanding the relation between words and images in Maya art may lie in its intrinsic differences, the invocations of Praxiteles notwithstanding, with the art of the Western tradition. Contrasts have been drawn between Maya art and that of Mesopotamia (Reents-Budet 1989, 192) and Egypt (Stone & Zender 2011, 17). Whereas in the two Near Eastern cases texts were 'autonomous' or 'disarticulated' from visual imagery, in the Maya case a constant 'overlap' and 'blending' between the two can be seen. The implication of this is that the relation between texts and images in Maya art is best understood not in terms of basic sign usage, but rather in the interrelations between different kinds of signs within overall (narrative) settings, which can also include oral performance. The concept of a 'textscape' as developed by Simon Martin (2006, 57-61) is a good way to relate all these elements to what he terms 'interpretive communities'. As discussed earlier in section 7.3.2, in the LPC lowland Maya area the creation of both visual imagery and texts can both be ascribed to the same circumscribed group of workers.

Turning to the LPC lowland Maya textual record specifically, it was already noted in sections 6.3 and 7.1.2 that it is limited in the number and length of texts, which furthermore are not understood very well. As a result, these texts have played no significant role in the interpretation of the meaning of specific images (Houston & Taube 2008, 132). However, even the limited record available can point in a more generic way to understanding the relation between texts and images, thereby providing a better insight into the art of this period as a whole. A good example that this is possible can be seen in the use of property qualifiers, well-known in Classic Maya art (Stone & Zender 2011, 13-15), which can be seen in the San Bartolo murals (Houston 2014, 16). In more general terms, three main uses of writing, apart from tattoos and graffiti, were made in the Classic period: as glyph blocks, as dedicatory texts, and as captions (Grube 2012, 850). Leaving aside the question of the dedicatory texts, which is problematic, 412 the other two forms of text blocks and captions can now be recognised in LPC lowland Maya art, mainly because of the discovery of texts in the San Bartolo wall-paintings (Saturno et al. 2007, 41-48).

Of particular interest in the paintings from this site is the use of captions, for example the one that is associated with one of the sacrificing youths, see figure 66, and which originally may have accompanied all four of these figures (Taube et al. 2010, 12-13). Such captions are common in Classic Maya art, as can be seen in their ubiquitous use in the wall-paintings from Bonampak (Houston 2012b, 158-159; Miller & Brittenham 2013, 72-77). The use of captions in visual imagery is varied, specifying different phenomena, creating an overall effect in which naturalism blends almost seamlessly with the conceptual (Stone & Zender 2011, 28). Clearly, this would also involve ontological issues, and here it is possible to again return to the discussion of surface-patterns started in section 7.2.5. In particular, the relation between texts and images in Maya art can be grasped as

⁴¹⁰ Such 'blending' can even to some degree be recognised in the intermixing of alphabetic writing and images on Quiché scarves, often pulled out by Western collectors in a peculiar form of culture shock (Tedlock & Tedlock 1985, 124).

⁴¹¹ It may be noted that while in the Near East and eastern Mediterranean in the Bronze Age scribes and artists were different occupations, even if not hermetically sealed off as discussed in section 4.4.3, this was generally not the case in Mesoamerica. Instead, there seem to have been distinctions between the different kinds of books that could be made and used by different kinds of specialists (Herring 2005, 73).

⁴¹² Most of the dedicatory texts from the Classic period derive from the elaborately painted polychrome vases, which have not been found for the LPC lowland Maya. However, it has been argued that the texts on many of the portable objects of this period were dedicatory (Mora-Marin 2001, 242). As the main concern here is with monumental art, there is no need to treat this question here further.

an extension of the discussion of *baah* and personhood in the previous section. There is a close parallel between personification in writing and in visual imagery:

"Jewelry, thrones and clothing are frequently personified with the attachment of a conventional zoomorphic face. Ritual paraphernalia, such as eccentric flints, obsidian blades and stingray spines, are also given faces. Nearly all plants had personified versions, whether an ear of corn, a leaf, a flower or a tree. The monstrous, chimerical personification of trees – involving a jaguar ear, missing lower jaw and streams of blood – was frequently stuck into the base of trees in art, and regularly appeared in the script as the head variant of the logograph TE' 'tree' or 'wood'. Underlying the extensive personifications in Maya art and writing is the view that all things in the universe are living and vitally interconnected." (Stone & Zender 2011, 22)

More specifically there is also a category of glyphs that are depicted in ways that make them closely resemble corporal entities, either more generically, for example through a head, or in a full-body mode (Houston 2014, 106). Such glyphs carry both linguistic and pictorial meaning within a single, bounded element. One example of this are fully-figured birds that signify both *muut* (the term for 'sound') and pictorial birds, and which are deployed in textual settings, as can be seen in the San Bartolo murals (Houston 2014, 108), see figure 67. The presence of such corporal, animate glyphs only occurs in very distinct settings, and still follows the basic syntax of writing (Houston et al. 2006, 76). Rather than obfuscating the boundary between image and text, the embodied glyphs seem rather to point to the dynamic, living qualities of words themselves. Here a further connection can be made to oral performance, and the power and unpredictability inherent in it, which is especially relevant for the ritual contexts in which many of these kinds of glyphs occur (Houston 2014, 118). Maya writing, then, was also animate, and sometimes there was a concern to highlight this in an explicit way. This can also help to explain why the blending of naturalism and the conceptual is less remarkable than it seems, as the conceptual itself forms an intrinsic part of a natural world defined by monism.

Once again it should be stressed that this does not mean that the glottographic and iconographic modes were fused together in the Maya case, as the syntax of writing and imagery was not the same. Rather, the interpretation of words and pictures together would take place at the level of Martin's 'interpretive community', where the relations between different modes could be grasped. Very important in this is the notion of synaesthesia, or 'cross-modal experience', as between colours and taste but also between script and speech (Houston et al. 2006, 136-138). Of particular concern for the understanding of Mesoamerican writing is the relation between reading and seeing in this macro-region, the latter also involving knowledge in general and sometimes specifically divination (Hamann 2008a, 58-61). Writing as such would function as an 'instrument of seeing', 413 as noted in section 7.2.5 for surface-patterns. Based on the extension from eyes to surfaces in general, this notion of seeing by means of patterned surfaces has been related to monism as well (Hamann 2008a, 66). The instability of surfaces is noted here, especially in relation to divinatory vision, but not the more durable character of surfaces with texts and images on them. This durability could potentially play a key role in the nexus of different modes of perception: not only visual and auditory, but also in a very broad sense involving smell, taste, and touch to some degree (Houston et al 2006, 141-152, 175-176), as part of overall perception in interpretive communities.

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⁴¹³ This derives from the use of the term *ilb'al* for the Popol Vuh as a book, a term that literally refers to an 'instrument of seeing', and which in an ethnographic context can be related to divination (Christenson 2007, 25). The relation between 'seeing' and 'reading' has also been noted for the Classic Maya textual record, if only in a very generic way, and with many texts located in such a position that actual reading would be impractical (Stuart 1995, 85).

Having outlined the main characteristics of the relation between words and images in Maya art in general, one additional question concerns the implications of this for the interpretation of narratives. Unfortunately, here the limits of the available data are more imposing. Whereas the basic presence of texts in the San Bartolo wall-paintings indicated a coherence in broad terms to overall interpretations of Maya art as a semiotic system, the amount of information required to grasp narrative structure is much greater. Certainly what is available is insufficient to reconstruct in any form the concept of Maya literature for the LPC period, even as it is now actively being explored in terms of poetic techniques for the Classic Maya, as was discussed in section 6.3. 414 Yet the data is, in a very basic way, sufficient to address questions about narrative syntax, at least in a pictorial sense, using the same structuralist models deployed in section 4.4.3. This approach has already been tried in other cases of pre-Columbian art, in particular for the narratives on Moche vessels from Peru (Martin 2006, 68-75; Quilter 1997). Here this model will also be used, not to reconstruct the complete narrative structure of LPC lowland Maya art, for the evidence does not permit this, but rather to elucidate some significant patterns.

One characteristic feature of LPC lowland Maya art, at least for the record discovered and published up till now, is the predominance of mythological themes. It is necessary recall here the analysis of Greek narrative in section 4.4.3. One distinction noted there was that between *Lebensbilder* (from human settings) and *Sagenbilder* (drawn from mythology), with the narrative scope of the latter less clear, but nevertheless interpretable through structural analysis (Stansbury-O'Donnell 1999, 31-33). It was noted in the previous section that the stucco masks are not understood very securely beyond the identification of basic traits and identity. Without understanding their iconographic function, for example as emblematic representation or as index for masquerading in ritual performance, it is very hard to grasp the role of these masks in narrative contexts. This does not mean that there have been no attempts to infer meaning of broader iconographic programmes, as can be seen for El Mirador (Hansen 1992, 48-52) and Cerros (Reese 1996, 118-120). In both cases these interpretations involve further interpretations of the cosmological significance of these masks, which structure the outline of the iconographic programme and purported narrative.

As such, the interpretations of narratives in these studies are based on specific views of what is represented by the masks, not on a basic structuralist reading of narrative elements in relation to each other. This is not to say that the narrative-based interpretations of the El Mirador and Cerros stucco-work may not be accurate. Rather, it is the case that for the purposes of grasping narrative structure at a basic level they are less suitable, as these interpretations are based primarily on their relation to general cultural ideas. As with many other aspects of LPC lowland Maya art, the analysis here will rely very much on the San Bartolo wall-paintings. For in this case there are enough iconographic elements that can be related to each other in a coherent pictorial space. Once again, for the identifications of these elements, the reader is referred to the outline in the appendix on the narrative micro-structures of the San Bartolo wall-paintings. Here the basic structural features of the narratives in these wall-paintings will be treated, which can be seen as complementary to the

⁴¹⁴ Tedlock's (2010, 25-30) survey of the presently available evidence makes clear the very limited potential for recognising literature in early Maya texts. The use of parallelisms as a poetic technique has been proposed for the outlay of the LPC stucco masks at Cerros (Reese 1996, 183-184), as well as outside the lowland Maya area for the Cascajal block from San Lorenzo dated to 1000-800 BC (Anderson 2012, 168-171). In both cases these reconstructions are much less secure than the interpretation of poetic techniques in the Classic period, which are still being developed.

⁴¹⁵ A particular notable case is the use of a structuralist model to provide a sophisticated analysis of the so-called 'revolt of the objects' scene as part of wider themes in Moche vase-painting (Quilter 1997, 123-128). The conception of materiality in this scene and related ones can be situated within overarching Andean ontological ideas (Allen 1998), and its theme has also been related to the Popol Vuh (Houston 2014, n. 11, p. 151; Quilter 1990, 60). Despite the differences of ancient Mediterranean and Andean ontologies, it still proved useful to use structuralist models for the Moche. Hence as an analytic technique this model can prove useful in the LPC lowland Maya case as well, even if, to emphasise it once again, it should be used only to elucidate structures in narratives, not impose a structuralist view of humanity.

discussion of their broader cultural meaning in section 8.2.4. As the San Bartolo murals are the best case for grasping narrative structure in LPC lowland Maya art, they may also provide some insights into other forms of art for which this is less clear.

In terms of overall structure, the division of the San Bartolo wall-paintings into coherent thematic sections, characterised by different artistic 'hands', has been likened to the pages of a screenfold codex (Taube et al. 2010, 11). As such a linearly organisation of the murals might be expected, but it has also been argued that it is possible to recognise concentric forms of pictorial organisation within this overall setting (Saturno 2009, 119). Before considering such broader issues, the focus will here first lie on the micro-structures of individual scenes, 416 of which thirteen can be recognised for the west and north walls, as outlined in the appendix table. Starting with pictorial nuclei, most of them show relatively little complexity. They consist either of anthropomorphic figures facing each other or facing trees, or dynamic events such as the gourd birth-scene and the infant and dying maize gods. All are in effect monoscenic, involving only one event that takes place at one particular place. The only exception to this may be the Flower Mountain and procession scene, which does show movement from two directions that converge on the nucleus. This is also the only scene in which a significant number of catalysts can be observed, in the form of six humanoid figures, one of which may be the wife of the maize god shown in the nucleus (Saturno et al. 2007, 34-37).

Moving on to the third element, that of the informants, it is possible to see the use of texts for this in different ways.417 One of them is the identification and description of iconographic elements, as with the four sacrificing youths discussed earlier, but which also can be seen for the two figures carrying bundles in the Flower Mountain and procession scene (Saturno et al. 2007, 38). Another important use of text can be seen in the date 3 'Ik already discussed in section 6.4.2. This basic use of a temporal reference would be carried much further in the Classic period, as can be seen in the fairly ubiquitous use of Long Count dates in that art. Not all texts in the San Bartolo paintings necessarily functioned as informants, however, as can be seen for the text in the centre of the west wall (Taube et al. 2010, fig. 62, p. 101), which may have been more self-contained in an iconographic sense. Many pictorial informants are used to provide locational contexts, as can be seen in the Flower Mountain and great serpent with footprints on the north wall. In the west wall murals it is possible to note scaffolds, a quatrefoil, water areas, a floral area, a list not nearly exhaustive but indicative of a great variety in landscapes. Other signs provide qualitative information, such as the k'an and ak'bal signs in Flower Mountain (Saturno et al. 2007, 14-15). The skybands also provide an overall locational framing, as noted in the previous section. Finally, although there are a few indications, there is little that is conclusive with regard to the use of indices in specific scenes. 418

The next question to consider is whether, and if so how, the different scenes can be related to each other. As noted earlier, the overall structure may be seen as consisting both of screenfold pages and as having cyclical aspects based on a common theme. Recalling the models of narrative extension used in section 4.4.3, both the syntagmatic and paradigmatic forms, based on sequential and

⁴¹⁶ As a brief refresher of the terms used first in section 4.4.3, there are four terms used to investigate these microstructures: a) the nucleus, the essential and central focus of the narrative, b) the catalysts, providing specific clues to explicate the nucleus, c) informants, placing the narrative in a spatio-temporal context and adding key information, and finally d) indices that refer to relevant elements not shown directly in pictorial space.

⁴¹⁷ Three birds with song scrolls emanating from their mouths act as catalysts in one of the west wall scenes (Taube et al. 2010, fig. 62, p. 101). Even if they closely parallel the fully-figured birds used in a text from the same site, discussed earlier for the notion of animated glyphs, they should not be seen as glyphs in this context. Rather, it seems that closely related signs, as well as the meanings associated with them, can be used both in textual and pictorial syntax.

⁴¹⁸ One possible case is the small serpent emerging out of a hole in the lower left corner of the Flower Mountain on the north wall, which may refer to a broader conception of transition between realms (Saturno et al. 2007, 48).

metaphoric connections respectively, seem to have been present in the San Bartolo wall-paintings. A form of syntagmatic narrative organisation may be recognised in the four scenes of a sacrificing youth in front of a tree, with the Principal Bird Deity perched atop it. As these belong to the same temporal moment, the erection of the four directional world-trees, but shown in different frames, this constitutes an unified syntagmatic narrative (cf. Stansbury-O'Donnell 1999, 137-139). There is also the symmetrical arrangement around the quatrefoil containing the maize god, the details of which will be discussed in section 8.2.4, which has been related to a common theme (Saturno 2009, 124-125). It may therefore be seen as a paradigmatic narrative cycle, based on the metaphoric relations between the maize cycle, the maize god and rulership. Whether such paradigmatic linkages can be extended to the overall mural programme of the Pinturas Sub-1A building has to remain an open question, based on its incomplete reconstruction.

To return now to the general issue of the relation between words and images in the narratives of LPC lowland Maya art, two key observations can be made. The first is that the combination of the glottographic and iconographic modes, 'conjoined' as it were, has to be understood as part of a process of synaesthesia that is culturally specific. Within the broader 'textscape' of interpretive Maya communities, images could function as 'instruments of seeing', a notion that can be extended to other kinds of surface-patterns as well. The presence of animated glyphs shows how what in Western eyes is the conceptual world of language, was intertwined with image-based naturalism in a monistic worldview. The second observation concerns the specifics of narrative settings. Here it is possible to see a crossover not only from the pictorial to texts, as in the animated glyphs, but also the other way around with the use of captions to identify figures and provide temporal markers. Yet at the same time there appears to be no violation of the syntax specific to textual and pictorial representations, as narrative micro-structures and extensions can be recognised for the latter. As with the case of the Moche referred to earlier, the structuralist reading of images can coexist with very different ontologies. Finally, even if most of the San Bartolo texts remain undeciphered for now, the aspects of the relation between words and images that can be recognised here do point to some coherence with the much better understood textual and artistic record of the Classic period.

7.4.4: The iconography of Late Preclassic lowland Maya art

Summarising the analysis of the iconography of LPC lowland Maya art, it can be useful not only to briefly recall the three aspects covered in the preceding sections, but also their interconnections. Starting with the artistic rendering of the spatio-temporal environment, it was shown how crosscultural models of pictorial projection could be adapted to the worldview specific to the Maya and Mesoamerican cultures. In particular it is possible to note the importance of the quincunx pattern of a centre and the four cardinal directions, as can be seen in both vertical/profile and horizontal/bird's eye depictions in LPC lowland Maya art. As a basic template the quincunx pattern is closely embedded within an ontology focused on maize cultivation, as can be seen both in accounts of cosmogony and anthropogony, as well as in conceptualisations of Maya houses and *milpa* fields. It could be extended more broadly to demarcate the boundaries of states as well, based on the relation between the centre and the peripheral areas. Turning from this to the second aspect of iconography and personhood, it was shown that here maize-based agriculture was of key importance as well, especially in the notion of a 'botanical substrate' of humankind. The extension of personhood to

⁴¹⁹ It is important also to note here features that can be seen as connecting different parts of the mural programme, as with the two gourds on the north wall, or the fifth tree with maize god situated between the four scenes of directional trees with sacrificial scenes and the scenes involving the maize god. But these connections can only be made at the level of the further cultural interpretation of these paintings, and as such has to wait for section 8.2.4. One aspect that can be noted here, however, is the presence of certain elaborate motifs in the underlying skybands (Saturno et al. 2007, 66; Taube et al. 2010, fig. 57, p. 96, fig. 68, p. 107). Located at the edges of parts of the programme, these might signal shifts in the overall narrative and/or the transfer to different locations.

artistic images cannot be observed as closely in the LPC period as it can for the Classic period, where relevant terms such as *baah* frequently occur in the textual record, but in a more basic sense it can be recognised in the replication of certain motifs.

The most important of these was the Jester God image, which can be seen across a wide spectrum of different artistic media, but there are others as well, including the more enigmatic U-shape. The Jester God motif has close connotations with masquerading and highlighting identity, as part of iconographic contexts closely related to kingship and the maize deity. Having summarised the analysis of the iconographic rendering of the spatio-temporal environment and anthropomorphic beings, including its relation to personhood, the question of their connections arises. Basic to both was the conception of the role of maize, figuring prominently in conceptualisations of the quincunx outline of the cosmos and of the human body as part of natural cycles. In this way macrocosm and microcosm are closely related to each other, which also can be seen as a temporal way in the term winik, relating a human being and 20-day month through the vigesimal count based on the sum of fingers and toes. An elaboration of this connection can be seen in the relation between the quincunx pattern and the centre-periphery structure of the state, and the use of the Jester God motif to express kingship in a position of centrality. But if such patterns are becoming clearer, it should be admitted that others remain unresolved for the LPC period, such as the broader set of metaphors related to the U-shape and the calendrical aspects relating individuals to the cosmos.

Finally, the relation between pictorial and textual elements was investigated, especially for narrative contexts. The notion of 'conjoined' images and words was dealt with through a discussion of the properties of different representational modes, in this case the iconographic and glottographic ones. It was shown that there was overlap in an ontological sense, with the use of personification and animation in glyphs, even if pictorial and textual syntax remained distinct and internally consistent. The use of images and words together can best be grasped within the context of a 'textscape' and its interpretive community. Here a culturally-specific 'way of seeing' would be actualised, especially in the ritual contexts conducive to synaesthesia of the senses. 421 Yet at the same time it is possible to recognise the working together of texts and pictures through the analysis of narrative microstructures. In this sense basic representational modes can be adapted to highly distinct 'textscapes', without losing their intrinsic properties. With regard to the interconnections with the two aspects covered earlier, first of all the use of temporal markers in narrative contexts relating text to spatiotemporal settings can be noted, even if this was only done in a rudimentary way in the LPC period. 422 Secondly, it is possible to discern an underlying ontological basis for both the extension of personhood onto different artefactual surfaces, and the animacy and personification of certain textual signs. However, beyond the observation that both reflect a similar worldview, this has no obvious implications for connecting these textual signs to notions of personhood.

⁴²⁰ For the U-shape in particular the potential is clear from the San Bartolo wall-paintings, where it recurs both in the skyband and related to the head and costume of different individuals, as well as to other objects. From ethnographic sources the relation between days and faces also seems highly significant (Tedlock 1992, 2).

⁴²¹ Of course the implication of such synaesthesia is that we are dealing here not only with a way of seeing, but also ways of hearing, smelling, and touching.

With the use of Long Count dates in the Classic period important new avenues were opened up for iconography and narratives in this sense. The contrast with Mycenaean art and its counterparts and successors in the Mediterranean is very significant with regard to the rendering of the spatio-temporal environment, as will be discussed in chapter nine.

CHAPTER EIGHT: CONTEXTS AND AGENCY OF LATE PRECLASSIC LOWLAND MAYA ART

8.1: Introduction

As with the Mycenaean case in chapter five, the aim of this chapter is twofold. First of all the contexts of LPC lowland Maya art will be discussed, starting with an overview of architectural forms and conceptions of the built environment. This will be followed by a number of case studies focusing on the contexts of art of individual sites, taking into account the regional surroundings as well, while a synthesis will consider the overall patterns that emerge from these case-based analyses. Having thus concluded the four aspects of the analysis of LPC lowland Maya art, it becomes possible to consider the second major element of the chapter: the agency of this art within its broader societal context. This demands first of all a reiteration of the main interpretive points and how they work together to enable and constrain the agency of art according to the general categories of metaphor, semiotics, and practice. Based upon this, it is possible to consider LPC lowland Maya art as one of the ten elements of this early civilisation, thereby making it possible to relate it to the other nine elements. In this the *longue durée* framework of the Preclassic lowland Maya that was outlined in section 6.4.3 is also of interpretive importance.

8.2: Contexts of Late Preclassic lowland Maya art

8.2.1: Introduction

In this part of the analysis of LPC lowland Maya art, the diverse contexts within which it was embedded will be further analysed.⁴²³ As in part 5.2 on the contexts of Mycenaean monumental art, the analysis will be divided into two main parts:

- 1. A brief overview of the diverse contexts of LPC lowland Maya art, focusing especially on different kinds of architectural forms and the deposition of valuable art objects, as well as on conceptions of the built environment.
- 2. More in-depth exploration of selected sites that allow for some inferences with regard to the role played by monumental and non-monumental art there.

The rest of this section will address the first issue, while the second one will be discussed in five successive sections on the LPC sites of Nakbé and others the Mirador basin, Cival, San Bartolo, K'axob, and Chan. It is argued that these sites represent a sufficiently wide range in terms of regions and sub-periods of the LPC lowland Maya area, while at the same time satisfying the selection criteria. When considering the full range of the different contexts of art of this period, what emerges is a somewhat eclectic picture of site-based idiosyncrasies and recurrent architectural features. Whereas monumental art has been found in the palaces of the Classic Maya lowlands, as well as in elite residential complexes such as the House of Bacabs at Copan (Webster 1989), this is not the case for the LPC period. Such structures, insofar as they can be recognised, at most yield burials and/or caches. Instead the focus of artistic expression lies, even more heavily than in the

⁴²³ Although the main focus will lie on the LPC period, in many of the individual cases evidence from the preceding MPC period will also be considered, as this is often very useful for the interpretation of the art of the former period, in the sense that it embeds this within its *longue durée* framework.

⁴²⁴ These include as in the Mycenaean case the amount of material and its context, and whether it is coherent enough for interpretation. Added here, as Maya archaeology is a secondary specialisation of this author, is the factor of the level of interpretation by period and area specialists, and the contribution the site has made to the more general understanding of LPC lowland Maya early civilisation. Other important sites such as Calakmul, Cerros, Tikal, and Uaxactún will only be referred to in general or as comparative material for the selected cases.

Classic period, on the civic-ceremonial centre. The importance of this element of LPC lowland Maya urbanism was already discussed in section 6.4.2. Here this discussion is expanded by listing the key elements that define (if in varying combinations) civic-ceremonial cores:

- 1. The plaza is one of the most important elements. It can be variously defined through the artificial levelling of the terrain, the caches and burials deposited within it, and the architectural features flanking it. One key aspect of plazas was that they acted as places for rituals involving large numbers of people, as can be seen in Classic period art (Inomata 2006, 810-811), and this would have been true for the Preclassic period too (McAnany 2010, 153). At the same time, the Preclassic plazas in general seem to have been less elaborate than those from the Olmec area (Houston & Inomata 2009, 85-86).
- 2. The significance of the E-group in relation to ritual and archaeoastronomy has already been noted in section 6.4.2. Variations have been discovered for the basic outline of a western pyramid and an elongated eastern platform with 1-3 small structures on it. The centrality of the E-group can both be understood by its central position in civic-ceremonial centres, and by the evidence that it was the first monumental structure to emerge in the Preclassic Maya lowlands, as can be inferred from the evidence of Seibal (Inomata et al. 2013).
- 3. Triadic groups emerged only at the transition from the MPC to LPC periods, as can be seen at sites like Nakbé and Cival (see the discussion in sections 8.2.2 and 8.2.3 below). The basic outline is of a central pyramid flanked by two smaller ones, with the entire complex facing west (Estrada-Belli 2011, 67).
- 4. The definition of palatial structures has proven difficult in Maya archaeology, giving rise to alternative terms such as 'range-structures', while the relation of depictions of courtly activities to palatial architecture also remains difficult (Plank 2004, 77-79). From what evidence there is available for the LPC lowland Maya, it does appear that what have been referred to as palaces for the Classic period can be recognised at different sites, even if their function is not well-defined (Runggaldier 2009, 51-52). As noted in section 6.4.2, one clear feature of even the meagre LPC period evidence suggests that these structures were qualitatively different from 'chiefly houses'.
- 5. Not much systematic information is available for residential complexes, but at least some of them were associated with civic-ceremonial centres, as can be seen both for small sites such as K'axob and Chan, as well as the larger site of San Bartolo.
- 6. More evidence is now accumulating for the existence of Preclassic ballcourts. Two are known from different locations at San Bartolo (Runggaldier 2009, 88, 90). Two ballcourts from the same period are also known from Cerros, where they have been related to mythological themes as part of the site layout (Reese 1996, 132-137). Ballcourts were already known for the MPC period and may even date further backwards to the Early Preclassic (Anderson 2010).
- 7. As noted in section 6.4.2, a number of causeways or *sacbeob* are known for the LPC lowland Maya, both around the large site of El Mirador and at smaller centres such as Cerros, Komchen, and San Bartolo.

Other features that can often be found in civic-ceremonial complexes, but not exclusively so, are burials and caches. In the lowland Maya area it can be difficult to distinguish between the two, as the archaeological record of Tikal shows. Here it proved very difficult, even with a dataset of over 300 burials, to develop a well-defined typology that went beyond the rough field classifications

⁴²⁵ The questions of ancestors and socio-political distinctions were already discussed in section 6.4.2. The data from Tikal give some indication as to what happened with the remains of those not established as revered ancestors, with human bones found widely scattered throughout the site, likely through the reuse of material from middens (Becker 1992, 187). The deposition of corpses in middens can hardly be seen as problematic in a society where, as discussed in section 7.4.2, the life-cycle of maize was closely associated with that of humans.

(Becker 1992, 185-186). Although burials and caches are by no means identical in the Maya case, it is possible to consider some general characteristics of them both. One of these is that they acted as receptacles of valuable objects, sometimes laid out in elaborate ways within them, and often show signs of secondary ritual after the initial deposition. This can be seen very clearly in the re-entering of Classic period royal tombs (Fitzsimmons 2009, 143-145). Caches and burials may be considered more generically as 'earth offerings', used to 'feed' the earth and deities (Becker 1992, 193). For burials in particular, such offerings would likely focus on a specific ancestor, as can be seen for the incense 'fed' to a female royal ancestor on Piedras Negras Stela 40 (Houston & Inomata 2009, 213). Rituals of 'feeding' seem to have been quite common in Mesoamerica, however, and where not only limited to caches and burials (Monaghan 2000, 30-31). This demands taking into account the specifics of ritual in each cache and burial, in particular the complex secondary ritual treatment of materials, including body parts (Fitzsimmons 2012, 779-781).

Considering the overall layouts of LPC lowland Maya sites, there exists as of yet little in the way of systematic analysis, but what there is suggests a broad coherence with other periods based on a common pattern of low-density urbanism, as discussed in section 6.4.2. Isendahl has proposed an 'ideal type' for lowland Maya cities (see figure 68), around which many particular cases coalesced over a 2,000 year period, consisting of the following three elements (Isendahl 2012, 1112-1116):

- 1. Civic-ceremonial cores, connected by causeways and consisting of elite residences, as well as structures for ritual, administrative, and public functions.
- 2. A scattering of household groups around these cores, often themselves clustered into neighbourhoods with smaller civic-ceremonial foci.
- 3. The household groups themselves, consisting of a raised platform and structures on top of it, often clustered around a patio area.

Apart from the elements of the civic-ceremonial centres, as already discussed, the LPC period also shows the emergence of household groups in the areas surrounding them, some of which have small civic-ceremonial structures (Ringle 1999, 189-190, 195-198). These elements seem to cohere to some degree with Isendahl's ideal type. Another element of Mesoamerican urbanism is the notion of the city as a moral community (Blanton 2012, 715-716), which is related but not identical to the concept of the moral community discussed in section 6.4.2. In terms of space, this can either be seen in the layout of sites according to a cosmogram, 427 or in the notion of a ritual circuit. Such a circuit can take a variety of forms, one of which leads through civic-ceremonial cores and can be closely related to the monumental art visible there, as is the case for Classic period Naachtun (Reese-Taylor 2012, 757, 759). If less conclusively, a similar kind of ritual circuit can also be seen at LPC Cerros (Reese-Taylor 2001, 155-156). Ritual movement has also been proposed for the causeways that can be dated to the LPC period, especially those connecting major architectural groups (Ringle 1999, 204-209). In sum, even if the evidence remains circumscribed, it is nevertheless possible to see a coherence in general terms between LPC lowland Maya urbanism and both Isendahl's ideal type and the notion of the city as a moral community bound together by ritual.

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⁴²⁶ The close associations between human beings and maize was discussed in section 7.4. In terms of the maize lifecycle, the deposition of human remains could be literally seen as a process of eating these remains by the earth (Fitzsimmons 2012, 778). The notion of 'earth offerings' can be seen in many Mesoamerican cultures, perhaps unsurprisingly given the prevalence of maize cultivation. Yet as a template it could also be tied to very specific state ideologies, as can be seen in the Aztec case (Nagao 1985, 83-87).

⁴²⁷ The notion that Maya cities were laid out according to a cosmogram has faced criticism even for the better-known Classic and Postclassic periods (Smith 2005). Although there is clear evidence for astronomical alignments in the LPC period, as discussed in section 6.4.2, no systematic argument has yet been outlined that a cosmogram can in fact be recognised in the layout of LPC lowland Maya cities.

Finally, there is the question of the Maya conceptualisation of the built environment as part of the broader landscape around it. As already noted in section 7.2.2 there was the idea of Stuart of the contiguity between stelae and natural bedrock, but even more relevant for the LPC period is the witz. This term could refer both to existing and mythological mountains, as well as to the personification of the glyph for a monster (Stone & Zender 2011, 139). Witz masks in the Classic period can be identified with different kinds of mountains, including Flower Mountain. They also occurred in different variants in LPC stucco masks at different lowland Maya sites, starting with the site of Holmul at 400 BC (Estrada-Belli 2011, 91-92). One important function of the witz masks seems to have been to recreate the sacred landscape within the city, something which can be seen especially well at Calakmul in the LPC period (Carrasco Vargas 2005). It is important to emphasise in this that as the landscape itself was seen in animate, bodily terms and with special locations acting as receiving places for offerings (McAnany 2010, 64-66), any rigid distinction between the built environment and the landscape surrounding it is bound to be misleading.

8.2.2: Preclassic art at Nakbé and the Mirador Basin

An extensive research project has been ongoing at Nakbé, El Mirador, and other important sites in the Mirador Basin since the 1980s, currently under the direction of Richard Hansen. The area is notable both for the density and scale of Preclassic sites and the great extent of (seasonal) swamps or bajos. 428 The complexity of the archaeological record under investigation, as well as the demands of heritage preservation, is such that the very detailed studies known from Belizean sites are so far mostly lacking (at least in publications accessible to this author). Nevertheless, the broad outlines of the different sites in the region and their overall trajectory are sufficiently clear to discuss the general parameters of the contexts of art here. Starting with the early trajectory of Nakbé, some evidence suggests the site was already occupied by 1000 BC, although some uncertainty surrounds the precise date (Hansen 2012, 144). A clearer picture emerges for the early part of the MPC period (800-600 BC), when the occupied area of the centre of the site extended to circa 50 hectares, and also a number of indications of social complexity can be noted (Hansen 1998, 57-58). These include not only stone architecture, but also imported materials such as shell, obsidian, jadeite, coral, and basalt, as well as cranial deformation and dental inlays in burials, and pottery with incised decorations such as the mat motif (Hansen 2012, 145-146). These elements are suggestive, but not yet conclusive, for the existence of some form of socio-political distinction.

The later part of the MPC period (600-400 BC) offers more information in this regard. First of all it is possible to note the emergence at multiple sites in the Mirador Basin of monumental architecture, such as pyramids, including in E-group settings as at Nakbé, where a ballcourt was also constructed (Hansen 2001, figs. 70-71, p. 55). 429 Of particular importance in this is the development of a more sophisticated form of stone masonry, involving the use of more standardised blocks, on average taking 34 working hours to quarry and work (Hansen 1998, 71). This indicates some potential for labour mobilisation in collective works, which can be seen in the construction of the first *sacbeob* or causeway at Nakbé in this period (Hansen 1998, 75), and also in extensive water works (Hansen 1992, 176). The causeways were likely necessary for dry-land transportation because of the obstacle to mass movement presented by the *bajos* (Hansen 1992, 177). Even more intriguing are the indications for labour mobilisation in agricultural activities. The survey evidence and the analysis of phytoliths together point to intensive, garden-like cultivation using terraces near the centre of

⁴²⁸ The great attractiveness of the *bajos* in the Preclassic period may have been that they were perennial rather than seasonal in this period, which seems to have changed in the Classic period (Houston & Inomata 2009, 74-75). It is notable that their greatest density was in the area of El Mirador, Nakbé, Tintal, and Wakna (Hansen 1992, 171). There is some speculation that the *bajos* may have facilitated canoe-based transportation, which would allow for the movement of bulk goods, at least for part of the year (Acuña 2013, 48-52).

⁴²⁹ See figure 69 for a map of Preclassic period Nakbé.

Nakbé, with nutrient-rich mud brought in from outlying areas (Hansen et al. 2002, 283-287). Hence we are dealing with many different kinds of labour mobilisation: to construct monuments, to create infrastructure, to ensure the water supply, and for agricultural intensification.

A key question in this is how this labour was coordinated and by whom. Limiting the discussion to the last part of this question, there is a need to focus at the evidence for rulership at Nakbé in this period. First of all, it should be noted that there are no indications for clearly recognisable royal burials in monumental settings at the site, nor do these appear in great numbers in the succeeding LPC period. More interesting are a number of larger compounds at the site that have been compared both to contemporary palatial buildings outside the Maya lowlands and to the royal courts of the Classic Maya. A number of such compounds were present at Nakbé, the best-known being Groups 18 and 66 (Clark & Hansen 2001, 16-18). However, the main distinction between these compounds and other structures lies in the size and elaboration of the architecture, as there is no clear distinction in terms of domestic refuse relative to less elaborate residential structures. The lack of evidence for food preparation within these compounds suggests that it was brought in from other locations (Clark & Hansen 2001, 17), ⁴³¹ a situation that can also be observed for the royal courts of the Classic period lowland Maya (Houston & Inomata 2009, 156).

It is important to remember that much of the information about the Classic period Maya courts comes from the texts and iconography of polychrome pottery and wall-paintings from the palaces themselves, both of which are lacking for the Preclassic. Instead, it is a different kind of art that emerges at Nakbé in the MPC period. A number of carved stone monuments, both altars and stelae, have been found at different sites in the Mirador Basin that date to this period (Hansen 2001, 56-57). Of most interest here is Stela 1 from Nakbé (Hansen 1992, fig. 113, p. 343), see figure 61, measuring as high as 3.4 metres, and dated to 500-200 BC (Hansen 2001, 56). But as noted in section 7.4.2 this date is controversial. It was found in a fragmented state on a Late Classic platform in the old E-group of Nakbé, which seems to have been used as a gathering place for Preclassic art for ritual purposes (Hansen et al. 2008, 48-49). The stela depicts two anthropomorphic figures in ritual dress facing each other, with a disembodied head floating above them. Parallels can be drawn with the hero twins (Hunahpu and Xbalangue) of the Popol Vuh, either represented as such or impersonated by historical human figures, and the decapitated head of their father Hun Hunahpu (Hansen 1992, 141). Wider associations can be drawn to the ballgame, based on the belts of the figures, as well as to the maize deity and Jester God motif (Hansen 1992, 141-144), the former being identical to the father of the hero twins Hun Hunahpu (Sharer & Traxler 2006, 741-742).

The transition from the MPC to the LPC period was accompanied by the introduction of the Triadic complex, four of which were constructed at Nakbé, among many others at sites in the Mirador Basin (Hansen 1998, 78, 80). These four structures at the site varied in height from 20 to 45 metres, and the available data suggests they were initially constructed in a single, sustained building effort (Hansen 1992, 63-64). From three of the Triadic groups a total of nine stucco masks and panels

⁴³⁰ As always there are exceptions, such as the formally laid out LPC burials in the Triadic complex at Wakna (also known as Guiro), which seem to conform more to Classic period funerary monuments (Hansen 1998, 89-94). The elaboration of these tombs is indeed notable, and a relation with rulers plausible, but at the same time no decorative program was present, as it was in many Early Classic burials of kings.

⁴³¹ At the same time, Group 18 is closely associated with the terrace-based intensive gardening system (Hansen et al. 2002, 283). Even so, an association is not necessarily evidence for managerial control. More evidence for the relation between elites and water-management may come from El Mirador, where recently monumental stucco-work was found in a context suggestive of a reservoir. Still to be fully published and interpreted, one part of these friezes may show the impersonification of the rain god Chakh, in this way relating the kings of this site to the control of rain and water in general (Doyle & Houston 2012), also realised practically in the water-management infrastructure.

⁴³² For the biggest Triadic complex, that of Structure 1, an earlier phase of the platform has been dated to the earlier part of the MPC period or 800-600 BC (Hansen 1992, 179-180).

have been recovered (Hansen 1992, 117). The conditions of these stucco-works as recovered by the project varies, with some evidence both for possible intentional 'defacement' (Hansen 1992, 66-67) and 'preservation' (Hansen et al. 2008, 35-36) in the LPC remodelling work. The best preserved stucco mask from Nakbé is from Structure 1, where it was placed placed in a central position of a larger panel, and has been identified as the Principal Bird Deity or PBD (Estrada-Belli 2011, 87-90; Hansen 1992, 94), see figure 70. This deity is a very important one in the LPC, and has also been identified for this period in Stela 2 from El Mirador (Hansen 1992, fig. 96, p. 326), see figure 71, a monument that also carries a yet to be fully understood textual message (Hansen 1991).

Hansen locates the PBD to a broader set of images from contemporary LPC sites such as Izapa and Kaminaljuyu, as well as from the Classic Maya record, and also draws parallels between the PBD and the character Seven Macaw (Vucub Caquix) from the Popol Vuh (Hansen 1992, 122-140). As an iconographic phenomenon, the PBD is fairly well-understood for Late Formative Mesoamerica (Cortez 2005), and the parallels drawn by Hansen fit into the broader research history of the PBD imagery (Guernsey 2006, 95-102). The question, then, concerns the significance of the PBD as related to kingship. When considering the relation between the PBD and Seven Macaw from the Popol Vuh, it is important to remember that the latter was a powerful but negative figure who ruled the pre-dawn Earth with his sons, and was defeated by the Hero Twins (Christenson 2007, 78-88). For Hansen this defeat can be understood as the transfer of (hereditary) power and greatness from Seven Macaw to the Hero Twins, which provided a template for royal accession rituals (Hansen 1992, 137). In this way an 'organic solidarity', in the Durkheimian sense of complementary social functions existing in a condition of mutual dependence, is achieved based on the relation between (sacred or mythical) ancestry and a royal heir (Hansen 1992, 183-184).

The connection between the PBD and Seven Macaw and the role in accession rituals has also been explored for the LPC site of Izapa, ⁴³³ but here there is a relation of the PBD to the deity Itzamnaaj as well (Guernsey 2006, 109-111). This is not surprising as the PBD is later interpreted as the celestial aspect of Itzamnaaj (Sharer & Traxler 2006, 738). Guernsey takes these different elements together to suggest that the PBD imagery at Izapa relates royal ritual to a 'mythical vocabulary' of kingship, including through the impersonification of the PBD (Guernsey 2006, 115-116). The notion that the PBD specifically could be impersonated is based on the find of a mask in a LPC royal burial from Kaminaljuyu (Guernsey 2006, 105-106). While the information from Izapa, Kaminaljuyu, and other sites should not be used to over-interpret the PBC stucco mask from Structure 1 at Nakbé, the more generic mythology-based template connecting royal ritual and the PBD as outlined by Hansen seems to hold true in light of this comparative and contemporary evidence. More specific inferences with regard to ritual and mythological narratives remain speculative, however.

Many of the elements present at Nakbé in the later part of the MPC and early part of the LPC periods can also be seen in an elaborated and scaled-up way at El Mirador, the site which eclipsed Nakbé during the LPC period. The properties of El Mirador have already been discussed in section 6.4, including the mobilisation of labour at a very large scale to build the Danta complex and other features of its civic-ceremonial core. But the nexus between labour mobilisation, rulership, and ideology was already present at Nakbé and can be seen as something of a template for the later developments in the Mirador Basin. Of course the chronological resolution is too coarse to determine the precise sequence of historical causation, but the systemic interconnections are clear.

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⁴³³ The interesting phenomenon of Seven Macaw as both powerful deity and victim has been noted for Izapa as well, and may be connected not only with accession rituals but also with sacrificial ones, as known also from the Quiche Maya drama Rab'inal Achi (Guernsey 2006, 113-114). This is an interesting parallel, but in the Rab'inal Achi the sacrificial subject only is suggestive of Seven Macaw and is not explicitly identified as him (Van Akkeren 1999, 294).

This is especially true for the stucco mask of the PBD of Nakbé Structure 1, in which the three factors come together in the initial construction of the building through the mobilisation of labour. Subsequently, the relation between the PBD and the ideology of rulership would be continually reiterated, especially through ritual activity. The permanence of monumental architecture can in this way mitigate challenges to the established power structures (McAnany 2010, 150-153).

8.2.3: Preclassic art at Cival

The site of Cival is located in the north-eastern part of the Petén, and was discovered by the Holmul Archaeological Project (HAP), which currently continues under the direction of Francisco Estrada-Belli. Other sites with important LPC remains covered by the project are Dos Aguadas, Hamontun, Holmul, K'o, and T'ot. This makes it an area with a fairly dense LPC period occupancy, recalling that of the Mirador basin, even if precise population estimates remain elusive. The main analysis will remain limited to Cival, however, and the results from the other sites will be referred to in a supplementary way. The region in which Cival is located is a roughly 100 km² karstic basin through which the Holmul river cross-cuts, with about two-thirds occupied by seasonally flooded swamps (Estrada-Belli & Wahl 2010, 4). The civic-ceremonial centre of the site (see figure 72) was built in the MPC period, starting with a levelling of the hilltop and the construction of an E-group that can be dated between 840/800 - 790/760 BC (Estrada-Belli 2012a, 207). Fine ceramics with incised decoration were also found in this area, as in the central area of nearby Holmul, and have been connected to ritual activity in the Cival civic-ceremonial area (Estrada-Belli 2012a, 203-205). Interestingly enough, the survey data suggests that the laying out of the first ceremonial centre was not accompanied by nucleation, with the population being dispersed in hill-based farms in a 3.7 kilometre radius around the core of the site (Estrada-Belli & Wahl 2010, 25).

This dispersed settlement pattern is all the more remarkable considering the large amount of labour that went into the development of the civic-ceremonial centre. For this an estimated 1,304,026 cubic metres of material were moved, seemingly much of them boulders that were beyond the capacity of individuals to move (Estrada-Belli 2012a, 207). As all this took place in a period of 40-50 years, it represented an enormous investment of labour for the community. 434 Another significant element is that the E-group at Cival seems to have been aligned specifically with the two zenith points that can be associated with important phases of the agricultural season (Estrada-Belli 2006, 62-63), as also discussed in section 6.4.2. Another E-group from nearby Dos Aguadas seems to have had the same orientation (Estrada-Belli 2012b, 4-5). The location of cache 4 just before the eastern platform on the central east-west axis connecting the west and east structures, is also highly significant in this. This cache consisted of a 'layered k'an cross shaped cosmogram', see figure 73, and can be dated to the 8th century BC (Estrada-Belli 2012a, 214). The finds include, among many other artefacts, a quincunx pattern of five jars, as well as five standing jadeite axes, one of which is of the blue-green variant characteristic of the Olmec area, 435 with a central pole erected over it (Estrada-Belli 2006, 59-62). The overall interpretation of this cache is that it highlights the connections between water or rain and maize, the quincunx outline of the cosmos and its calendrical aspects, as well as the creation of the world and the raising of the central world-tree or axis mundi.

⁴³⁴ It may have been the case that some of the labour to create the civic-ceremonial centre of Cival came from more distant villages and hamlets in a range of a half-day walking distance (Estrada-Belli 2011, 77). The overall record of MPC period E-groups does yield some preliminary clues to their broader social, and possibly even economic, functions, in broader regional settings (Doyle 2012, 370-374). More research is required to ascertain this, however.

⁴³⁵ In the same cache as much as thirty blue-green jadeite pebbles were also found (Estrada-Belli 2006, 59). Taking into account also the presence of blue-green jadeite in a MPC period cache at Seibal, this suggests that some kind of interaction took place between these sites and the Olmec area (Estrada-Belli 2006, 75). The find of a blue-green bead at MPC period Nakbé (Clark & Hansen 2001, 15), further points to the extensiveness of this interaction.

In the LPC period, Cival's population grew to at least 2,000-5,000 persons and perhaps as much as 10,000 (Estrada-Belli 2012a, 211), concurrent with ideological changes. The connection between the agricultural cycle of maize and cosmology was related in the LPC period to more articulated expressions of kingship. The clearest expression of this is Stela 2, see figure 51, which on the basis of its style and association with ceramics is dated to 300-200 BC (Estrada-Belli 2006, 61). Its location very near cache 4, and on the same east-west axis, relates it to the ideological expressions of the MPC period, while it was also roughly contemporary with the erection of the Triadic Group 1 immediately behind the east structure and parallel to it (Estrada-Belli 2012a, 215). The part of the celtiform stela that survives shows a human figure in a striding position wearing a bird-head pectoral with three plaques, which can be related to broader iconographic features in LPC art, including the maize deity and the PBD, that are related to kingship (Estrada-Belli 2011, 84-85). Placed relative to the east-west axis of the E-group and cache 4, Stela 2 signals both a change in ideological terms toward an emphasis on the centrality of a kingly figure, and at the same time closely embeds it within the cosmological framework established in the MPC period.

However, with the establishment of Triadic Group 1, the observational viewing line from the western structure of the E-group was now obstructed. This structure as well as several other pyramids underwent a number of remodelling phases between 350 BC and AD 100, which involved a much lower combined construction volume of 555,721 cubic metres (Estrada-Belli 2012a, fig. 8.8, p. 211). Given that the labour requirement was divided between different phases and drew on a larger population, it cannot compare to the initial effort to establish the civic-ceremonial centre in the MPC period. Hence the significance of these structures is less for labour mobilisation than for other aspects. What these were can be partially inferred from what is known about the iconographic programme of Triadic Group 1. Two large, anthropomorphic stucco masks have been discovered on the structure, flanking the central stairway, which can be dated to c. 200-100 BC (Estrada-Belli 2006, 64-65). Although the lack of a copious textual record for the LPC period makes very precise interpretations of such masks more problematic, as noted before, a reasonable case can be made in more general terms. Taking into account the wall-painting fragments from the upper temple as well, the theme of Triadic Group 1 intersected celestial objects, the birth of the maize god, and the creation of the quincunx shaped cosmos (Estrada-Belli 2006, 73).

The case of Cival offers another opportunity to consider the relation between social transformation and art, in particular with regard to the emergence of an ideology focused on kingship at the transition to the LPC period. Turning to the MPC period evidence, there is a need to recall that the ceramics already indicated some kind of social distinction, related also to ritual and feasting, much as in other parts of Mesoamerica (Estrada-Belli 2011, 42-44). Yet at the same time the population of Cival remained dispersed, and there are no clear indications of the presence of kingship as a sociopolitical institution. Instead, the record of this period shows a large-scale mobilisation of labour, as well as the deposition of valuable materials in an elaborate cache, to establish the Cival plaza as the civic-ceremonial and cosmological centre of the community. This should in itself not be seen as proof of the existence of state institutions, as in many non-state societies of the pre-Columbian Americas labour was mobilised to create large-scale monuments (Estrada-Belli 2012a, 219-222).

⁴³⁶ One interesting find of the HAP team has been an elaborate burial from another site in the Holmul region: K'o. This burial is dated to the transition from the MPC to the LPC period, and contains the vessel with a Jester God headdress that was discussed in section 7.4.2.

⁴³⁷ Based on the work of Coggins on the relation between the Maya term *uinic* to denote a human being and the 20-day *uinal* month, as discussed in section 7.4.2 for the term *winik* (an alternative term encompassing both), the striding figure in Stela 2 can be interpreted as closely related to a specific time period (Coggins 2007, 225; Estrada-Belli 2006, 64). Two other aspects are important to this as well. The first is that there is a relation between the stela form itself and time periods, especially their ending (Justeson & Mathews 1983). The other concerns the conception of a time period in Maya thought as a 'burden' (Coggins 2007, 221).

This initial development may rather have acted as a crucible for the emergence of kingly authority later on. When this was established at the transition from the MPC to the LPC period, the new order adapted the pre-existing ideological framework for its purposes.

This can be seen in the placement of Stela 2 and Triadic Group 1 relative to the E-group and cache 4 of the MPC period, as well as in the content of their iconography. Yet the political power of the office of kingship did not translate into an increased mobilisation of labour. On the contrary, as noted earlier, the labour expended for the construction of LPC monuments was less than for the MPC period and spread out over different construction phases as well. Instead, it is possible to see an articulation of a new kind of ideology related to kingship and deities, not only at Cival but at a host of nearby centres like Dos Aguadas, Holmul, K'o and T'ot. At the site of Holmul in particular, two *witz* stucco masks concerned with themes of creation and kingship were found at Building B that can be dated to 400 BC (Estrada-Belli 2011, 92-96). The same building has also yielded fragments of mural painting dated to 370 BC (Hurst 2009, 62). As more evidence becomes available, it seems that there emerged a peer-polity network of sites with elaborate monumental architecture at the transition from the MPC to LPC period in the Holmul region. At the same time this is the period in which population shifts to Cival. It is this process of site-based centralisation and regional competition, rather than labour mobilisation in itself, that seems to have played a crucial role in the development of a new ideology focused on kingship.

8.2.4: Preclassic art at San Bartolo

The site of San Bartolo was discovered by archaeologists in 2001, and subsequent research has proven to be highly important for generating new insights into the LPC lowland Maya. The study of the site is part of a larger set of investigations in the 430 km² region known as the San Bartolo-Xultun territory (Garrison & Dunning 2009, 525), under the direction of William Saturno. Because of the primary importance of the wall-paintings, the general outline of the site's characteristics will only be sketched briefly. In terms of regional context San Bartolo seems to have functioned as the capital centre of the region, given that at no other site significant monumental-scale architecture from the LPC period has been found so far (Garrison & Dunning 2009, 539). The site itself extended over an area of some 4 km², with monumental structures concentrated in four main groups (Runggaldier 2009, 88). Occupation at the site dates back to the MPC period, but most construction took place in the LPC, which also saw a shift in the orientation of the site from an east-west to north-south axis (Garrison & Dunning 2009, 538). The most important of the four groups was the Las Ventanas group, with an extensive raised plaza area, the highest pyramid, the Tigrillo palace complex, as well as residential structures and a small ballcourt (Runggaldier 2009, 89-90).

The wall-paintings are located in a structure called Pinturas Sub-1A at the back of the triadic group Las Pinturas, located to the east of the Las Ventanas group (Saturno et al. 2007, fig. 3, p. 4), see figure 74. In terms of their dating this structure is estimated to have been in use roughly for a century after its initial construction in 100 BC (Taube et al. 2010, 5). More monumental art is known from this complex, which seems focused on the Ixim temple complex on top of the central pyramid of this triadic group. Two stucco masks were found on opposite sides of the central stairway leading to this temple (Román et al. 2009, fig. 10, p. 1370). A large number of wall-painting fragments have been found in a cache in front of the pyramid, but more came from the interior of the Ixim temple itself (Saturno 2009, 129-130). More refined in terms of execution and colour palette, and also with more and longer texts, the roughly 8,000 fragments are presently still undergoing study. This means that any interpretation of the overall meaning of the Las Ventanas

⁴³⁸ Including the first known LPC period stucco mask of the Maya rain deity Chakh, which was recently discovered at Dos Aguadas (Estrada-Belli 2012b, 10).

complex has to remain tentative, even as the notion of the artificial *witz* mountain has been connected to the structure (Román et al. 2009, 1360-1361). Here this matter will not be considered further, and instead the focus will lie exclusively on the Pinturas Sub-1A wall-paintings.

Turning now to the outline of the Pinturas Sub-1A structure, it is a relatively small (4.5 by 9.5 metres) rectangular building consisting of a single room and placed on a small platform, see figure 75, quite similar to later Maya buildings containing wall-painting programmes (Miller & Brittenham 2013, 169). Next to it another building has been found, called Pinturas Sub-1B, and a third one may have existed as well (Saturno 2009, 118). Although no remains of internal wall-paintings have been found at Pinturas Sub-1B, it did have external mural decoration and two stucco masks (Taube et al. 2010, 8). These exterior paintings, which can also be found on Pinturas Sub-1A, are not as sophisticated as the interior ones, however. Pinturas Sub-1A could be accessed through a number of different entrances (Taube et al. 2010, fig. 2, p. 5), and the interior paintings would be partially visible through the doorways. Unfortunately, the wall-paintings from the eastern and southern walls have not been well-preserved, and hence the discussion here will focus instead on those from the northern and western walls of the building, both of which have been published in detail (Saturno et al. 2007; Taube et al. 2010).

Various aspects of the San Bartolo wall-paintings were discussed in chapter seven, especially in section 7.4 on various aspects of LPC lowland Maya iconography. Of particular interest here is the discussion of narrative micro-structure in section 7.4.3, based upon the overview presented in the appendix. Here the analytic skeleton for the interpretation of the San Bartolo murals, provided in the aforesaid writings, will be fleshed out in terms of their broader cultural meaning. The sequence in which the different scenes will be discussed follows that of the appendix, moving from the right to the left and starting with the two scenes of the north wall (see figure 76). The reasons for this are based both upon the interpretation of the scenes themselves and the plausible relations between them, but also on certain iconographic details. One of these can be seen in the first scene to be discussed here, that of the Flower Mountain and procession. As can be inferred from the overview of the narrative micro-structures of the San Bartolo wall-paintings in the appendix this is a very complex scene. The project team interprets it as showing the mythological emergence of humans, involving both the bringing of water and maize (as the means of sustenance) out of the mountain and the first ancestral couples (Saturno et al. 2007, 48-50).

While in overall terms the theme of emergence remains plausible, the overview in the appendix shows that in some ways the scene can be interpreted differently. For example, the basket and gourd brought out of the mountain have both been interpreted differently, as noted in the appendix, although the project team's interpretation of a presentation of water and tamales remains a plausible option. The notion that all the figures emerged from Flower Mountain seems much less likely, however, as all the indications are the that the figures on the right are instead moving in procession toward it, rather than away from it. Although the key to this scene would seem to lie in the observation that the maize god is presented with different things from the two directions by which he is approached. On the left there are the basket and the sprouting gourd, which was interpreted by the project team to signify the taking out the means of sustenance from Flower Mountain (Saturno et al. 2007, 31). On the right there are, apart from the gesturing and adoring figures, the two bundles

⁴³⁹ Some exceptions to this can be noted, for example the case of an avian form of the Itzamnaaj deity seated in a quatrefoil that was painted in the east wall (Taube et al. 2010, fig. 17a, p. 29).

⁴⁴⁰ Even if the direction of the footsteps on back of the plumed serpent, which forms the surface upon which the figures stand, lead towards Flower Mountain, the project team argues that they may indicate the notion of a road or path in a more generic sense (Saturno et al. 2007, 25). Be that as it may, the direction of both the processional figures and the footprints is toward Flower Mountain (or perhaps better: towards the nucleus of the scene), making it difficult to accept the idea that these figures emerged from it (cf. Van Akkeren 2006, 29; Tate 2012, 242).

that are being carried towards the maize god. As noted in section 7.4.2, these bundles are closely associated with the ancestors and also with the office of kingship.

Based on this, it is possible to reinterpret the Flower Mountain and procession scene somewhat. It would not represent the emergence of presently existing humankind, but the presentation to the maize god of the means for both maize-based agriculture and also ancestral bundles. These aspects being the basic prerequisites of Maya civilisation in general, and by extension the San Bartolo state in particular. This theme is reinforced by the notion of the men and women as ancestral couples. Of course, it should be stressed that this takes place in a mythological setting rather than a historical one,⁴⁴¹ further emphasised by the plumed serpent ground surface. The footsteps on the surface indicate rightward movement, providing one clue that the overall sequence is from right to left. If accepted, this explanation would also make the relation with the next scene clearer. The gourd birth-scene was discussed in section 7.4.2, where it was interpreted as the emergence of maize-based humankind. The figure witnessing this birth holds a *coa* digging stick and small maize bundle, and can be seen as instructing based on the gesturing pose, see figure 77. With regard to its relation to the Flower Mountain and procession scene two observations can be made.

First of all there is the recurrence of the gourd as the basis from which the five embryos emerge. This can be seen as an index of the sprouting gourd presented to the maize god in the Flower Mountain and procession scene. 442 A second observation is that the two scenes are very clearly separated from each other, with the plumed serpent ground surface being absent in the gourd birth-scene. The two scenes seem to take place in two distinct spheres, something that may be indicated also by the possibility noted in the appendix that the *lok* sign acts as an index for a transfer to a different sphere. If this relation between the scenes and the overall movement from right to left is accepted, some sense can be made of the meaning of this relation. It starts with the ritual of the Flower Mountain and procession scene, which establishes the prerequisites of not only maize-based life, but also the social basis of maize cultivation with the presence of ancestral bundles and primordial couples. The depiction of this ritual may reflect as much re-enactments as the imagined original events themselves. The gourd birth-scene then shows the actual emergence of maize-based humankind, which seems to result from the ritual action of the previous scene. The dependence upon ritual and the work of deities is further reinforced by the instructional role of the figure that witnesses the birth-scene itself.

Turning now to the paintings on the west wall, see figure 78, again moving from the right to the left, the first set of five scenes can be read not in a linear way, but rather can be argued to have been organised in a more concentric fashion (Saturno 2009, 125). Based upon this, and on the outline of the different iconographic elements of the scenes provided in the appendix, it is possible to outline the properties of the different scenes, moving inwards:

1. The two outermost paired scenes share a number of common elements in the pictorial nucleus, both involving figures of authority seated on platforms receiving a headdress from an attending figure, perhaps comparable with the *ebeet* figure from the Classical period. The difference is that the scene on the left shows the maize god seated on a platform with a jaguar pelt, while that on the right appears to show a figure of authority seated on a different

⁴⁴¹ The dichotomy should not be overly stressed as in Mesoamerican narratives, myth and history often interact closely with each other (Marcus 1992, 8-9), as they do in many cultures. In the case of the San Bartolo north wall, the project team notes that the figures carrying the bundles are the only ones with textual epithets, which may well be suggestive of (mytho-)historic meaning (Saturno et al. 2007, 38).

⁴⁴² It has been noted that the gourd is sprouting, and therefore unlikely to have been a container for carrying water (Van Akkeren 2006, 50). Instead it can be seen as alive in the sense of being a womb, an interpretation enhanced by the Usign that can be seen on the gourd in both scenes.

- kind of platform. The figure on the right may have been an actual human ruler or this scene may have functioned as a mythological template of rulership. 443 Furthermore, based on the k'an signs on this platform, this structure may be connected to dynastic foundations, or at least to the office of kingship.
- 2. The second set of paired scenes is that of the infant maize god on the left and the diving maize god on the right. This has been interpreted as the death and resurrection of the maize god, a theme well-known from Classic Maya art, and one in which the earth turtle, shown in the central scene, also plays an important role (Taube et al. 2010, 79-80).
- 3. In the centre there is one single scene, arguably the central focus of the five, which shows a dancing maize god, flanked by rain and earth water deities, in a quatrefoil-shaped earth turtle. Broader iconographic and cultural parallels suggest that there was a close association between (ritual) dancing and the cultivation of maize, as well as between the maize god and earth turtles (Taube 2009, 49-50).

As discussed in section 7.4.3, the relation between these scenes is strongest in paradigmatic terms, outlining a common set of metaphors in different scenes, even if the notion of a cycle brings up the possibility of syntagmatic relations as well. These common metaphors relate the mythological cycle of the maize god to the office of kingship (Taube et al. 2010, 84), which was underlined by the concentric arrangement of the five scenes (Saturno 2009, 126-128). In particular, the pairing of the maize god and *ajaw*, whether historical or as a mythological template, emphasises this connection. In this regard it is also important to consider the Classic Maya conceptualisation of kingship, especially the close association between this office and farming:

"The ruler who presided as a sacred being could also operate in a more active mode. This is exemplified by an expression read u-kabjiiy, whose verbal root is probably related to words for working in cornfields and means to cultivate or plow after plants have been burned to prepare the surface. More generally, the root refers to the act of governing or watching over....The metaphor is revealing, for it compares in a direct way the work of kings with that of agricultural laborers. The ruler labors hard, one presumes, to public benefit, through a metaphor that would be broadly understood and appreciated." (Houston & Inomata 2009, 145)

The concentric layout of these five scenes set them somewhat apart from the next one to the left, which shows a maize god facing rightwards to a tree with a more common bird on it. The figure seems to hold a weapon in a striking position, perhaps as a hunter or even as a warrior, but what exactly this is aimed at has very unfortunately not been preserved. The tree has been related to the four world-trees to its right, forming the fifth central tree in a quincunx outline (Taube et al. 2010, 83-84), but it should be admitted that this tree seems rather detached from the ones to its left. To its left are again five scenes, starting with one of a descending PBD. As can be inferred from the appendix, this is a complex scene, which seems to show continuity in locational terms with the floral realm to its left in which the first world-tree is located. In a basic sense, it involves the summoning of the PBD through song/offering (Taube et al. 2010, 49-52), but further interpretation depends on the decipherment of the text. One very notable feature in this scene is the date 3 'Ik. This

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⁴⁴³ Even if noting the plausibility of the latter notion over the presence of a historical king, Houston (2014, note 19, p. 152) argues that both are not decisively proven. Yet it needs to be stressed that plausibility comes in different degrees, and among the elements in this scene that indicate the presence of kingship in some form it is possible to note: a) the presence of the *ajaw* sign in the text, b) the Jester God motif in the headdress being presented, c) the bundle clutched by the seated figure, and d) the platform upon which the figure is seated.

⁴⁴⁴ It should be stressed here that the descending PBD scene and the maize god/tree scene are clearly separated from each other in an iconographic sense, based on the back-to-back separation between scenes (Saturno 2009, 119). Hence the connections that the project team makes between the directional trees/sacrificial youth/PBD scenes and the maize god/tree one are more tentative, and based on paradigmatic, metaphoric associations (Taube et al. 2010, 57-60).

provides us with a very good clue that the sequence of scenes in fact has to be read from the right to the left, for together with the descent of the PBD it introduces the specific event of the raising of the world-trees in the succeeding four scenes.

These four scenes show combinations of sacrificing youths in front of trees with Principal Bird Deities (PBD's) perched atop of them. The analysis in section 7.4.2 already showed that the four trees could be connected with the four cardinal directions and cosmogonic myths, while the sacrificing youths as year-bearers could also be related to the four directions. As part of the overall interpretation here, the role of the PBD's and the relation to the wider west wall programme needs to be considered. The project team interprets the PBD as an avian aspect of Itzamnaaj, a deity also visible on a surviving fragment from the east wall (Taube et al. 2010, 30-31). As noted in section 8.2.2 for Nakbé, the PBD was a common iconographic motif in the art of LPC lowland Maya and neighbouring cultures. Here it was related to the story of the defeat of Seven Macaw by the Hero Twins from the Popol Vuh, acting as a template for royal ritual. The project team recognises a similar emphasis in these San Bartolo murals, but also notes that the focus in these paintings on the cardinal directions makes it of a somewhat different kind than the specific Popol Vuh narrative (Taube et al. 2010, 19). Here has to be understood as a malignant being as in the Popol Vuh.

Overall, as discussed in section 7.4.3, the five scenes seem to form part of a syntagmatic narrative, in the sense that the different elements are linked in a spatio-temporal sense. These linkages are based on the cosmogonic element of the raising of the world-trees, but through sacrifices, in the form of blood-letting and offerings, and the presence of the PBD are related also to broader notions of morality, involving kingship and maize-based wealth. Two paradigmatic connections can be seen that relate these two notions to the other San Bartolo murals. The first can be seen in the Jester God image on one of the sacrificing youths (Taube et al. 2010, fig. 9, p. 15), which also occurs in other scenes, and, as noted in section 7.4.3, can be related to both kingship and maize cultivation. The other was the transitional scene of the maize god facing a tree, possibly in a hunting or warrior context. Hypothetically it may be seen as taking place in an area of danger, just as the forest is conceived of in later Maya iconography and ethnography (Taube 2003b). 447 In this way the inner realm of order defined by the maize cycle and kingship would be demarcated first by its forest edges and then by the four world-trees. At the same time it should be remembered that everything points to a mythological setting, also indicated by the interpretation of the skybands framing the main pictorial space discussed in section 7.4.2. Hence it would be misleading to consider this outline as a 'map' of the San Bartolo kingdom. The west wall scenes can instead better be seen as a conceptual schema of this realm, set within a series of origin myths that underpin its existence. 448

⁴⁴⁵ Significant parallels with the contemporary sites of Takalik Abaj and Kaminaljuyu outside the lowlands Maya area can be seen in the use of the *ak'bal* (darkness) sign in combination with the PBD. This sign is shown in cartouches on the San Bartolo PBD's, in one case paired with the *k'in* sign on the opposite wings of the creature (Taube et al. 2010, 31-34). This pairing is commonly used to specify daytime and nocturnal contexts, in a broad metaphoric sense, in Classic Maya art (Stone & Zender 2011, 145), and can be seen for the PBD at sites more contemporary to San Bartolo such as Takalik Abaj and Kaminaljuyu as well (Guernsey 2006, 103-104).

⁴⁴⁶ Two indications that the overall mythological theme of Seven Macaw from the Popol Vuh was present at San Bartolo can be recognised. The first comes from a wall-painting fragment found near the Pinturas Sub-1B building, showing a dead PBD carried on the back of an unidentifiable figure (Taube et al. 2010, fig. 12, p. 20). While the find context separates this fragment from the west wall PBD scenes, their paradigmatic relation is clear (Saturno 2009, 123). The other factor concerns the use of maize elements on the PBD's, which are related by the project team not only to maize, but also more generally to notions of abundance, noting a generic connection to Seven Macaw (Taube et al. 2010, 39).

⁴⁴⁷ In this regard the jaguar seat on the left platform and the jaguar hanging from the tree of the right platform in the two accession scenes may be important as well. Later scenes in Classic Maya art depict the use of jaguars in palanquins of Maya kings, showing a close conceptual association between kingship and jaguars (Taube 2003b, 480).

Here it is also good to remember the conceptualisation of k'uh in these murals, discussed in section 7.3.3, as indicating a "primal landscape of animating essence" (Houston 2014, 86).

This focus on origins could also be seen in the north wall paintings. In the interpretation favoured here these scenes show the emergence of maize-based humankind in the gourd birth-scene and the presentation of the means of agriculture and social life to the maize god in the Flower Mountain and procession scene. This reinforces the overall concern in the paintings in this building with emergence, maize, the maize god, and kingship. Even so, given the lack of evidence for the other walls, it is impossible to be completely sure that this theme extended to all of the Pinturas Sub-1A murals. Furthermore, kingship is only one aspect of the known scenes and need not necessarily have been the dominant one, in the sense of conveying a strong, explicit ideological message. Nevertheless, it is present, whether explicitly or implicitly, within the broader set of metaphors revolving around emergence, maize and the maize god, and spatio-temporal order. This brings us to the question of the function of the building and its wall-paintings. Saturno (2009, 130) points out the accessibility of Pinturas Sub-1A, especially compared to the temple on top of the Ixim pyramid nearby, proposing that it may have been used for 'ideological education'. This kind of teaching would most likely have taken place in ritual contexts, which can be inferred from the effects of incense burning on parts of the murals (Lang 2004, iii), and also from the intentional striking on the scene of the maize god in the quatrefoil (Taube et al. 2010, 125-126). 449

8.2.5: Preclassic art at K'axob

The site of K'axob is located in northern Belize, in the same New River Valley where Cerros is also located. It was located more inland and alongside the river, in an area that is rich in food sources, both agricultural and wetland fauna, but lacks hard stone and mineral resources (McAnany 2004a, 8). Fieldwork took place from 1990 through 1993, under the direction of Patricia McAnany, and focused primarily on the southern part of the site (McAnany 2004b, 13). This project is of interest not so much for its architecture or monumental artworks, which are lacking for the Preclassic period here, to the detailed information on the trajectories of domestic structures. The project succeeded in tracing these structures over a period of more than a thousand years, from the early MPC through the Early Classic periods, helped by the favourable taphonomic conditions for reconstructing their stratigraphies (McAnany 2004c, 24). Within these domestic contexts burials and caches were found, and from them a long-term development can be traced that allows for interpreting the specific way in which monumental architecture eventually emerged out of household-based social organisation. In this way the site is especially useful for interrogating the usefulness of the 'house society' model discussed in section 6.4.3.

In total some 20 domestic structures were (partially) excavated, spread out over seven different excavation units or 'operations'. Recurrent features were the co-occurrence of domestic (middens) and ritual (caches, burials) activity, an apsidal plan and sizes of 24 m² and 32-33 m², with one structure in operation 1 standing out with a size of 64 m² (McAnany 2004c, 59-60). Due to the good stratigraphic conditions it proved possible to relate caches and burials to specific construction phases of the different domiciles, and this may well point to a relation between ritual and house building and rebuilding, as it is known from the ethnographic record (McAnany et al. 1999, 131-132). In this section the focus will lie in particular on the outstanding structure in operation 1 (see figure 80), as most of the significant evidence was found here. Not only was it the largest and oldest known domestic building of the site, it was also the only one with MPC period burials. It may, then,

⁴⁴⁹ In this sense the wall-paintings could have functioned as 'instruments of seeing', *ilb'al* for the Popol Vuh, as discussed in section 7.4.3. In this sense the notion of central Mexican codices as 'portable frescoes (Jansen & Pérez Jiménez 2005, 12) can be turned on its head.

⁴⁵⁰ See figure 79 for an overview of the site and the location of the excavation areas.

⁴⁵¹ Although the project uses the term Formative in order to expressively situate K'axob in its broader Mesoamerican context (McAnany 2004a, 3), here the term Preclassic will continue to be used for consistency.

have functioned as the residence of a 'village leader' as at a site like Paso de la Amada at the Pacific coast of Chiapas (McAnany 2004c, 62), 452 and the evidence from the caches and burials allows us to unpack that term and define it with greater specificity.

Again, an important thing to note about the domestic structure in operation 1 is that it was the only location in which MPC burials were found, starting with a female and a male one immediately preceding the construction of the house (Storey 2004, 110-114). The male burial is notable for the presence of 2,019 shell beads in it, with a large variety of types (Isaza Aizpurua 2004, table 14.4, p. 341). It is argued that for shell beads the quantity was initially important as an indicator of wealth, shifting to a more sparse use of the material in the form of more elaborate objects in the LPC period (Isaza Aizpurua & McAnany 1999, 124). The implication is that these burials fulfilled some kind of foundational, ancestor-related function for the new building erected over them (McAnany 2004c). While it is clear that operation 1 is the only location with MPC burials, in the succeeding LPC period changes occur, as can be seen in two different trends. The first development concerns changes in ritual activity, with the first known caches and new forms of mortuary behaviour. Furthermore, other domestic structures can now be recognised in different operations, and these also contain caches and burials. At the same time, operation 1 remains distinctive from the new activity areas in terms of the ritual activities that took place there.

These activities can be inferred especially well from the burials, which show elaboration in the use of flexed or seated burial positions, as well as an increase in multiple and secondary burials (McAnany et al. 1999, 132-135). 453 Grave goods also show a trend toward more complexity (Storey 2004, 120), in particular with ceramic vessels with cross-shape or k'an motifs that only occur in adult burials in operation 1 (Headrick 2004, 368-370), see figure 58. As was discussed in section 7.4.2 of the previous chapter, this iconographic motif can be related to the quincunx outline of the Maya cosmos and broader notions of centrality. To these associations can be added the use of bowls in divination, feasting or blood-letting rituals, and ultimately also to the ritual aspects of sociopolitical power (Headrick 2004, 377). One of the caches in operation 1 also reinforces the relation to cosmology and centrality, featuring a quadripartite outline of four vessels, which also contained faunal remains and scattered chert debitage (Harrison-Buck 2004, 70-71). This scattering of debitage also occurred in three burials in operation 1, all with cross-shape decorated vessels, and the golden colour of the chert may relate it to the yellow colour of ripened corn (McAnany & Peterson 2004, 303-304). There is more to be said about the houses, burials and caches at Preclassic K'axob, but for the present purposes it is important to emphasise the relation between centrality and ritual in operation 1 in the LPC period, alongside the new evidence for habitation and ritual in other domestic structures.

The focus on the centrality of the area of operation 1 can be seen even more clearly in the transition from the Preclassic to the Classic period, especially in the Early Classic period. In the Terminal Preclassic there was a great number of secondary burials in operation 1 that has been likened to a 'gathering of the ancestors', and in addition a shrine was constructed here that seem to have been

⁴⁵² However, as acknowledged by McAnany, this site is 800 years older. More recently new data from the Belize River Valley point to a pattern in which significant domestic structures, interpreted as elite residences, with pre-Mamom ceramics directly underlay later public monuments (Powis & Cheetham 2008, 179-182). It may be the case that a more general pattern in this can be recognised that is specific to the Maya lowlands, but which took place at a slower pace at K'axob than at the Belize River Valley sites.

⁴⁵³ The burials from K'axob can be contrasted with those from Cuello in the same region, which show more complexity in burial positions already in the early part of the MPC period (Storey 2004, 114). Although there are similarities in the LPC burial record between K'axob, Cuello, and other sites in the region that can be related to socio-political developments (McAnany et al. 1999, 141), there are also differences. Important in this are what appears to be sacrificed individuals at Cuello, which are coeval to the emergence of monumentality at Cuello around 400 BC (Hammond 1999, 59-60). No such sacrificial human remains are inferred for K'axob (Storey 2004, 132).

dedicated to ancestor worship (Storey 2004, 131-132). In the succeeding Early Classic era, the construction of a pyramid and the consequently more formal outline of plaza B (McAnany 2004a, fig. 2.1, p. 14), signals a shift away from a focus on the domestic structure in operation 1. But the focus on centrality remained, as also outlined by caching activity related to the building of the pyramid (Harrison-Buck 2004, 76). What is significant in this is how symbolic aspects of centrality remain constantly visible in the archaeological record, even over the very long-term trajectory from initial settlement to the outline of a monumental-scale civic-ceremonial centre. Also, even in the 'brevity' of the cross-shape motifs on the bowls found in the LPC period operation 1 burials, connections can be discerned to more complex expressions of Mesoamerican worldview:

"Yet to equate style and quality with the ability to fully comprehend the import of symbols would be to miss the function of these symbols in smaller, rural sites in Mesoamerica. Indeed, K'axob enables us to understand how such symbols were used in smaller sites and to better grasp how fully the Mesoamerican symbol system permeated all the corners of the region. In short, we can safely say that the elites of K'axob were not agrarian outsiders who mimicked the art of larger cities without understanding their symbols. On the contrary, the quadripartite bowls of K'axob indicate that the elites of this site fully understood the symbols that they used, for they used them in the same manner as did the elites of grander sites. Furthermore, one might presume that the non-elites of K'axob were also fluent in the visual vocabulary of Mesoamerica as the manipulation of these symbols could not have been effective if it were not understood by an audience." (Headrick 2004, 378)

This sharing in a common ideology should not be conflated with egalitarianism, however, as even the MPC period distinction of the domestic structure in operation 1 points to social differentiation within the community (McAnany 2004d, 416-417). Instead, the information on domestic ritual at K'axob underlines the notion of the emergence of the lineage as 'crucible of inequality' (McAnany 1995, 123-124). Here one can point to the coeval emergence of the agricultural exploitation of the wetlands in the MPC period (Berry & McAnany 2007, 155). Based on ethnohistoric sources, it may well be that the creation and curation of a genealogical record of ancestors can be related to the 'principle of first occupancy' (McAnany 1995, 95-100). This should not be understood as landownership in a Western legalistic sense, but rather as rights and obligations of lineages in the K'axob community. The burials and caches of operation 1, as well of others at the site, can be understood as part of a trajectory in which lineages defined themselves within the community, eventually transforming their ancestral location into a civic-ceremonial core. Furthermore, this process took place in a region more characterised by heterarchical relations of sites, such as between K'axob and emerging major centres like Lamanai, than by a hierarchical landscape under the control of states (McAnany 1995, 154-156; Berry & McAnany 2007, 160-161).

8.2.6: Preclassic art at Chan

Some of the key characteristics of the site of Chan were already discussed in section 6.4.3, in order to contrast it as a small community to the very large site of El Mirador. Here the features of art that can be recognised for this site will be considered in more detail. Chan is located in the upper part of the Belize River Valley. It was initially recorded as part of a project focused on the nearby centre of Xunantunich, but between 2002 and 2009 it was the focal point of a separate survey and excavation project led by Cynthia Robin. The project is especially notable because it allowed for following a smaller farming community over a period of two millennia, from 800 BC to AD 1200, making it possible to address questions about the role of peasants in complex societies (Robin 2012). 454 For the present purposes, it is especially interesting to consider this issue in relation to the role of art in

⁴⁵⁴ The site is classed by the project as a 'minor centre' and can be compared in size, material culture, and social structure to the very well-known Cerén site from Honduras (Robin 2012, 336-337).

the community. Although Chan lacked the large-scale stucco-work, stelae, and wall-paintings of the larger sites, it still possessed a central plaza with associated monumental structures (see figure 81). In them caches and burials were found, a number of which contain different kinds of art objects. This makes it possible to consider the relation between monumentality and art at the site, even in the absence of conventional iconographic programmes.

Based on the survey and excavation evidence, Chan is estimated to have had a population of 249-418 persons in the MPC period, 196-330 in the LPC period, and 144-242 in the Terminal Preclassic period, with the latter two estimates likely too low because of under-represented ceramics (Robin et al. 2012, 29-30). This population was spread out over different mounds, and as early as the MPC period there is evidence for extensive water management, such as through the construction of terraces, which continued throughout the history of the site (Wyatt 2012, 81). The central group was also established in the MPC period, with an early focus of caches and burials in the plaza floor (Robin et al. 2012, 118-119). These were the first ritual deposits in the area that would for two millennia function as the central focus of the site. One single burial in particular contained jadeite and associated stones, as well as a shell bead, and was re-entered in both the MPC and the succeeding LPC periods (Novotny 2012, table 12.1, pp. 232-233). Additionally, a number of caches were found that contain the same kinds of materials, but in larger numbers, and also ceramic, and obsidian objects (Kosakowsky et al., 2012, table 15.1, pp. 290-291).

In the succeeding LPC period, two buildings are constructed in an east-west alignment, interpreted as an E-group and defining the core of the site for the next 2,000 years or so (Robin et al. 2012, 119-120). This complex acted as a focal point for burial in the centre of Chan from the LPC through the Late Classic periods. As much as eight burials have been found for the LPC period in the east and west structures, many containing objects of jadeite, obsidian and chert, marine materials, and fine ceramics (Novotny 2012, table 12.1, pp. 232-233). Of special note are the numerous torsos and heads of MPC figurines that were found in burials and other contexts, which may have constituted actual portraits of ancestors (Kosakowsky & Robin 2010, 48), see figure 82. As was noted in section 7.2.3 of the previous chapter, in the LPC period figurines ceased to be made in the lowland Maya area. The fact that the MPC period ones were extensively curated in the LPC period would seem to reflect a continuing concern with ancestors, also indicated by the re-entering of the first burial and the deposition of a considerable amount of offerings therein. Such episodes are well-known from the art of the Classic period, as can be seen in iconography that has been plausibly interpreted as showing royal figures 'feeding' a dead ancestor with incense and gaining energy in return (Fitzsimmons 2009, 154; Houston & Inomata 2009, 213).

Only two caches are known for the LPC period at Chan, without exceptional finds (Kosakowsky et al., 2012, table 15.1, pp. 290-291), but mention should be made of a cache dated to the transition from the Terminal Preclassic to the Early Classic period. In it four small 'Charlie Chaplin' figurines and a human profile head were laid out in a quincunx pattern at the bottom of a bowl, reflecting the Maya cosmogram, together with other ceramic, jadeite, spondylus, and haematite remains (Kosakowsky & Robin 2010, 48-49). Interestingly, the richness of goods in burials compared to those in caches in the LPC period is reversed completely in the Classic period (Robin et al. 2012, 124-125). Finally, something can be said about the role of working and consuming shell at the site. Two aspects of this are important, the first being the finds of shell-working detritus in the richer burials in the centre of the site, which leads to the inference of a connection between the leading

⁴⁵⁵ The quincunx pattern and green, yellow, red, black, and white colours suggest a strong link with the Maya cosmogram, which is also encountered in the use of coloured pebbles in a quincunx pattern found in a Late Classic house outside the centre of Chan (Robin et al. 2012, 128). This recalls the laying out of the *milpa* and house within a quincunx context, as known from the ethnography of the Quiché Maya (Tedlock & Tedlock 1985, 127-128).

households and working shell (Keller 2012, 266-267). The second element is the find of a very large deposit of jute (freshwater snails) shells, which were consumed in the Preclassic period but redeposited in the Late Classic period, seemingly for ritual reasons (Keller 2012, 258-260). The amount of material found, in relation to the population estimates for the site, suggests that these snails were consumed in community-wide feasting events.

Turning to the interpretation of these patterns, it is clear that this depends primarily upon how to understand the deposition of artefacts in caches and burials. Two different features stand out in this. Firstly, the presence of a stingray spine in burial 10, the first of the east structure of the E-group (Novotny & Kosakowsky 2009, 76), is notable for its association with blood-letting, and thereby with the cycle of birth, death, and rebirth of humans and of maize cultivation. Furthermore, the excavators point out there was a strong association between jadeite and greenstone and the site centre from the MPC period evidence of caching activity onwards (Robin et al. 2012, 126). These kinds of ritual aspects would have been closely connected with the agricultural sustenance of Chan, as seen in the terrace building activities. The second important element can be seen in the concern with the ancestors, seen both in the curation of MPC period figurines and the re-entering of burials and new depositions of artefacts in them. One important model that allows for these different elements to be understood together is that of the relation of ancestors and lineages developed by McAnany, as discussed in the previous section on K'axob.

For Chan the lineage-based organisational model and the principle of 'first occupancy' would allow both the concern with ancestors and with agricultural sustenance to be grasped in a coherent way. Keller (2012, 269-270) cites the ethnohistoric work by Farriss (1984) to argue that certain families with long historical genealogies maintained traditional and sacred knowledge, in return for goods, services and labour, and a similar situation may have existed at Chan. This would explain both the seeming limitation of shell-working to certain contexts at the site, and the evidence for feasting at the community-wide level. Both models point to a community organised around common ritual beliefs and practices, yet at the same time with lineage-based internal distinctions. This pattern proved highly durable, if by no means unchanging, during a period of two millennia. At the same time, the socio-political landscape of the upper Belize Valley surrounding the site was transformed. Initial complexity at fairly close sites like Cahal Pech and Xunantunich, both with LPC monumental art, developed through a process of an infilling of the landscape into a dense network of territorial organisation in the Classic period (Helmke & Awe 2012, fig. 11, p. 72).

8.2.7: Contexts of Late Preclassic lowland Maya art

In considering the differences and similarities between the case studies presented in the preceding sections, it is useful to distinguish between the smaller and the larger sites. For the former, it was argued that for both Chan and K'axob the concern with ancestors led to a set of recurrent patterns of burial ritual, which included the deposition of art objects. Such offerings, including those in the caches that in section 8.2.1 were closely related to burials, were also connected to notions of centrality within the quincunx outline of the cosmos. This was expressed at K'axob with the *k'an* cross painted on bowls, and at Chan in the focus of deposited jadeite objects in the civic-ceremonial centre, as well as in the layout of caches at both sites. Despite many differences in finds and the kinds of analyses carried out at both sites, these patterns do point at similarities for the role of

⁴⁵⁶ Of particular note for the Late Classic period is the focus on the civic-ceremonial Structure 6, where likely divination was practised, which, together with the shift from burials to caches mentioned earlier, is interpreted in the terms of the dual-processual model as a shift from network to corporate strategies (Robin et al. 2012, 148-149). That is, no longer would the focus lie on individual ancestors but rather on communal mores. This can also be interpreted as a changed relation between lineages, for a leading extended family is recognised (Robin et al. 2012, 134), due to the larger population estimated at 994-1,670 people (Robin et al. 2012, 32), and the changes in the socio-political landscape.

ideology at the smaller sites; focusing on offering in caches and burials and ideas of cosmological centrality. The role of lineages would have been of crucial importance in the organisation of these communities, which can be seen especially well for the excavated houses at K'axob. Of particular interest at this site is the fact that the original and largest domicile gradually, through its role as central location of ancestor ritual, developed into the civic-ceremonial centre.

With regard to the three larger sites of Cival, Nakbé and San Bartolo, considerable variation can be observed. This owes much to the different kinds of art discovered at these sites. Nevertheless patterns can be discerned that cut across the different material forms. First of all, at both Cival and Nakbé the initial construction of monumental structures took place in a singular mobilisation of labour at a grand scale, indicating some kind of coordinating mechanism to achieve this. In the case of Nakbé the larger compounds may have acted as foci for this, but at Cival there is no apparent residential concentration in this period. The second pattern concerns the elaborate layered k'an cross cache from Cival, which can be linked to the two-dimensional depiction of the quincunx outline in the directional world-trees in the San Bartolo wall-paintings. In both there is a strong connection with maize agriculture and offerings. Finally, the notion of the office of kingship as shown in iconographic themes was present at all three sites, but special mention needs to be made of the depictions of the PBD at Nakbé and San Bartolo. Whereas at Nakbé this was expressed succinctly in the form of a stucco mask of the PBD, in the San Bartolo murals this creature was, through narrative extension, related to a much broader set of scenes. In this sense these wall-paintings form an unique resource for grasping the broader cultural significance of the more limited information from caches, burials, and stucco-work.

Turning now to the differences and similarities between the smaller and larger sites, it can be noted that the mobilisation of labour to construct civic-ceremonial centres took place at sites of all sizes, if of course at different scales. Little can be said about the management mechanisms for this, although clues from K'axob and Nakbé point to the potential role of lineages, but it is clear that this mobilisation did not depend upon state institutions. Another very significant pattern is that basic cosmological ideas such as the quincunx layout and its relation with agriculture can be seen at larger and smaller sites alike, pointing to a shared ideology. In temporal terms, the elaboration of this ideology in the complex iconography of San Bartolo and other sites can be seen as an extension of this basic pattern. Especially poignant is that not only the burials and caches with quincunx outline can be related to the 'earth offerings' of section 8.2.1, especially also with regard to maize, but that this can be extended in a metaphoric sense to the San Bartolo murals as well. Even if not burying their offerings, the four sacrificing youths in these paintings are explicitly connected to the four directional world-trees. One distinction between the smaller and larger sites, however, is that complex iconography was exclusive for the latter. This was especially true for the imagery involving the PBD and its relation to the office of kingship.

8.3: The agency of Late Preclassic lowland Maya art

8.3.1: Introduction

Here the agency of the art of LPC lowland Maya early civilisation will be considered, gathering together the analysis of the various aspects discussed in the preceding sections of chapters six through eight. Although the main emphasis of the discussion will focus on overall patterns, some consideration will also be given to the ways in which the available sources have fostered or denied different avenues of interpretation. As with the synthetic account of the Mycenaean case in section 5.3, the argument is developed through a two-step approach:

- 1. Bringing together the aspects of material forms, craft and materiality, iconography, and contexts, so as to be able to establish what patterns cross-cut between them. This synthesis carries the analysis of LPC lowland Maya art to the level of art and architecture in general, as one of the ten elements of the approach to early civilisations used here.
- 2. This synthetic account of art can then be considered as part of the nine other elements of LPC lowland Maya early civilisation, thereby generating insights into the role the agency of art played within it. Keeping with the focus on the interaction between these elements, and considering also the gaps in the evidence, this will not entail a checklist-based discussion of the relation of art to each separate element, but rather will focus on the most important nodal interconnections between them.

8.3.2: The agency of Late Preclassic lowland Maya art

Before turning to the two-step analysis, it can be useful to bring up a more general issue pertaining upon the role of art in Mesoamerican civilisations. Herring (2005, 98-99) has highlighted the use of the Leiden plaque, an Early Classic jadeite object with iconography and text related to calendrical issues, by Gordon Childe in his 1950 article on the 'urban revolution' as evidence for bureaucratic regulation of the (maize) crop cycle. His argument is that such Old World analogies are misleading, 457 even if he acknowledges that accounting records may have existed in perishable media, and that the art and writing on this object have to be understood in a different way. One possibility for recognising this difference is through the notion of ritual discourse, for which the Nahuatl term *Toltecáyotl* may serve as a suitable template:

"Among the people of central Mexico, or so go the accounts, writing belonged to the broad definition of culture recognized as Toltecáyotl, 'arts of the ancients'. Toltecáyotl comprehended learning, technical skill, and refinement of behavior, all standards of proper living that the ancient Mexicans traced back into a mythic history of ancient gods and civilizations. It encompassed facility in speech and song, craft knowledge, calendrics and divination, and writing. Skilled craftsmen and literate sages were alike in their status as Toltecatl. It was a living rhetoric of ancient capitals, tested wisdom, and speech that resounded beyond the single utterance; it was the embodiment of tradition, refinement, and authoritative gentility in lived practice." (Herring 2005, 99)

This use of the notion of *Toltecáyotl* to draw a contrast between Old and New World interpretive contexts, in which objects such as the Leiden plaque are evaluated, is very useful for the discussion here. This is not to say that the concept can be transplanted directly from Postclassic central Mexico to the Preclassic Maya lowlands. Instead, it can provide a framework through which the LPC period patterns can be related to their Mesoamerican context, rather than to universal patterns of early civilisations, which will be treated in the next two chapters. Instead the synthesis of LPC lowland Maya art here will cross-cut through the four aspects of material forms, craft and materiality, iconography, and contexts to consider their interconnections in terms of metaphor, semiotics and praxis, as outlined in section 2.4.4. To start with metaphor, the basis of this can be found in the analysis of material forms in section 7.2. The bodily metaphor of containers could be seen on a monumental scale in the larger than life-size stucco-work, for which the huge masks are of particular note even if they are not well-understood. Moving away from the three-dimensional focus of these forms, there are the relief-decorated stelae and the fully two-dimensional wall-paintings. At a lesser scale, objects made from jadeite and other semiprecious stones were notable, as were

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⁴⁵⁷ To be fair to Childe, this was written long before the decipherment of Maya writing. Furthermore, his analysis is rather cautious and acknowledges cross-cultural differences in the media used for writing and for the specifics of the different calendrical systems, as they were known at the time (Childe 1950, 14).

mirrors. Instruments were limited in the number of forms, and those with artistic implications had a mostly ritual function, as with the eccentrics, stemmed macro-blades, and stingray spines.

For the understanding of metaphor in LPC lowland Maya art, the individual material forms are less interesting than are the relations between them. Looking at these relations allows for placing the basic bodily metaphors of containers and instruments into their proper cultural context. The notions of skeuomorphism and 'quotations' of surface-patterns, discussed in section 7.2.5, are a good starting-point for this. One aspect of this was the focus on durability, relating materials less susceptible to decay to those more so, although there was also skeuomorphism between materials of comparable durability like the celts and stelae. One very important feature of what may be termed an 'aesthetics of durability' is its relation to conceptions of materiality, as they can be seen in the crafting and use of art objects. In section 7.3.3, it was shown how within a monistic worldview certain kinds of craft-work, particularly reductive tasks, could channel and to some degree control the flow of the vital force known as k'uh. One of the best examples of this are the non-monumental art objects made from jadeite and related greenstones, which were closely associated with the colour term yax/blue-green and a broader set of metaphors linking colour and materiality.

First of all the association, even if they are not exactly identical, of *yax* and jadeite and related greenstones can be seen in the notion of centrality of both within the quincunx outline of the cosmos. An aspect extending from this is the connection to maize, which in the pairing of *yax* and *k'an/yellow* also refers to the maize cycle and abundance. More particular to jadeite as a material are metaphors related to water, as in wet/shiny surfaces, and to 'breath' as a life-essence. Fortunately the available sources make it possible to connect this set of metaphors about jadeite and related greenstones to the human body, for in Maya conceptions humans themselves were based on maize and part of its cycle, as discussed in section 7.4.2. Therefore it is possible in this sense to relate the less durable human flesh to the more durable jadeite and related greenstones, acting as a basic template for human material agency. At the same time, it cannot be stressed enough that jadeite was not the 'identitarian marble' of human beings in the Maya world, to borrow a term from the work of Viveiros de Castro referred to in section 2.3.3, but rather a material metaphor. As such, it intersected between important particularities in a monistic cosmos, including human flesh, maize, the colour terms *yax* and *k'an*, glistening and shiny surfaces, as well as the 'breath' life-essence.

But such intersecting metaphors are not limited to jadeite and related greenstones, as they can also be seen in the extension of personhood to art objects. The best-known example of this is the Classic Maya use of the term *baah*, relating individuals to artistic depictions of them. But it is unclear whether this can be projected back into the LPC period, even if in the mutilation or intentional preservation of stucco-work and wall-paintings it is possible to see some commonality with Classic period practices. More promising in this regard is the Jester God image, which can be found in a wide range of LPC artistic media, as discussed in section 7.4.2. The clearest example that it functioned as an extension of personhood can be found in the fuchsite mask from Tikal burial 85, an image that has a number of close parallels. Based on its roots in maize imagery, which can already be seen in Olmec iconography, the Jester God image connected the wearer not only to the office of kingship, but also to mythological narrative settings, as will be discussed shortly. The relation between the quincunx outline of the cosmos and the centrality of *yax* and jadeite and related greenstones has already been referred to. Here it is possible to add to this the central position of kingship as symbolically represented by the Jester God image.

⁴⁵⁸ As noted in section 7.3.3, the five basic Maya colour terms are related to the four cardinal directions and a centre, with *yax* occupying the central position.

However, as a container bounding the world, the quincunx shape functioned as a metaphor in its own right. This can be seen at the basic level of houses and *milpa* fields, but extended to the ideal outlines of kingdoms and the order they represented. Of course, within the Maya conception of cosmology space was defined by time, or more precisely by intervals of time, as outlined in section 6.4.2. The relation of such intervals to human beings can best be seen in the term *winik*, for which there was some evidence that it was current in the LPC period. This term was used to describe both the 20-day month and a human individual. As a metaphor it would derive from the count of fingers and toes, which formed the basis of the vigesimal number systems used in Mesoamerica. But it would be misleading to place humans in a dominant position in Maya views of the cosmos, for they were one particularity among many. The personification of plants and artefacts according to zoomorphic and anthropomorphic templates, and vice versa the botanical and even artefactual characteristics of humans, points to a pattern in which all these particularities possessed a degree of animacy, as part of their interrelations within the monistic whole. Although as a basic feature this would not always need to be shown explicitly, but as noted in section 7.4.3 for the glyphs depicted with a form of animacy it could manifest itself in (for Western eyes) unexpected ways.

The glyphs possessing animacy provide a good link to the next issue of the semiotics of LPC lowland Maya art. Despite the use of textual and pictorial signs together, in what in section 7.4.3 was referred to as a 'conjoined' use of them, text and iconography retained a distinct syntax. The metaphoric connections between them would only be actualised in praxis, as shall be discussed below. Here the focus will lie on the particulars of pictorial narratives, as outlined in section 7.4.3 and in the appendix for the San Bartolo wall-paintings. In terms of narrative micro-structures, the first thing that can be observed is the predominance of *Sagenbilder*, mythological scenes with often a monoscenic nucleus. Few catalysts are employed in supporting roles in these kinds of scenes, and very little can be inferred from them about different social roles. With regard to informants, the use of captions show that text was used to identify and further qualify iconographic elements, even if the lack of adequate decipherment means that they are not well-understood. One very important use of text was to provide a temporal marker in one of the San Bartolo scenes, foreshadowing the close integration of calendrical markers in the art of later periods. Non-textual informants can be seen in the rich variety of locational settings, including in the skybands framing the main pictorial spaces, as well as in signs giving certain qualitative information.

The function of such micro-structures was for ordering the relations between different particulars, allowing basic metaphoric concepts to be stretched into narrative settings. This could be done in a sequential way, as a syntagmatic narrative, as can be seen in the metaphor of the quincunx shape of the cosmos being extended to the four scenes of directional world-trees in the San Bartolo paintings. Even so, most narrative extension would have been paradigmatic, drawing upon the broad set of metaphors connecting human beings, maize, jadeite and related greenstones, deities, and kingship. Some material forms can only refer to such themes in a very focused way, as for the PBD stucco mask at Nakbé and the kingly figure on Cival Stela 2. But in the San Bartolo wall-paintings they are fleshed out in a more expansive way. This includes the concentric set of scenes on the west wall that are focused on the maize god, which also include aspects of agricultural sustenance and the office of kingship. These scenes may have been related in a paradigmatic way to the four directional trees on the same wall as well. On the north wall another theme can be discerned that revolves around the notion of emergence, both of the current maize-based version of humankind and of the means of agriculture and (ancestral?) bundles and male/female couples as the basis of social life.

The relation between these semiotic aspects of LPC lowland Maya art and its set of metaphors discussed earlier, can be seen very well in the case of the Jester God image. As noted earlier, the basic metaphoric associations of this motif were with maize and the office of kingship. But the

Jester God can be seen in a diverse set of narrative contexts in the San Bartolo wall-paintings, as can be inferred from the appendix and the discussion in section 7.4.2. One of them was on the headdress presented to a figure seated on a platform, interpreted as possibly a historical scene. Another case was the occurrence of the Jester God motif on the two bundles carried in procession, paralleling the vertical representation of a bundle with this motif in a mural from El Achiotal, also to be related to kingship. Finally, there is the Jester God on one of the sacrificing youths in front of a world-tree with a PBD perched atop it, which brings up its role in this more complex narrative. These three examples point to how this basic metaphor can acquire more specific meanings through narrative extension. Most important in this are the basic elements that make such extension possible, especially informants with regard to location and temporal setting.

Turning to the third general aspect of LPC lowland Maya art, that of praxis, it was already noted in the discussion on semiotics that the 'conjoined' use of texts and images has to be understood as part of this. That is, they have to be understood together as part of a 'way of seeing' characteristic of the Maya of this period, which, through synaesthesia in ritual contexts, would involve senses other than vision as well as sound for oral performance and smell for the burning of incense. Although direct insights into the LPC lowland Maya 'way of seeing' are lacking, given the impossibility of an ethnographic encounter, there is enough coherence in iconographic and textual conventions and concepts to make some inferences. In particular it is important to note the close association between vision and surface-patterns, as outlined in sections 7.2.5 and 7.4.3, which is most clearly expressed in the notion of the Popol Vuh as an 'instrument of seeing'. Such vision would have been actualised most powerfully in the praxis of ritual performances, and the San Bartolo wall-paintings are the most plausible LPC lowland Maya example of this. This is based both on the evidence for ritual activity in the building in which they were housed, including intentional damage to the murals, as well as on their purported role in 'ideological education'.

Another important element of praxis in LPC lowland Maya art concerns the art objects deposited in caches and burials, both constituting, as noted in section 8.2.1, a general category of 'earth offerings'. What was offered in them were a variety of materials and different kinds of art objects, ranging from stingray spines to pottery and from shell to jadeite. Often an emphasis on cosmological centrality can be observed, especially in the focus on deposition in plazas and other features of the civic-ceremonial core. This emphasis can also be seen in a special kind of offering in caches and burials that highlighted the quincunx shape of the cosmos, as in the k'an crosses on bowls at K'axob or the elaborate, layered outline of a cache from Cival. The relation between the quincunx pattern and offerings can also be discerned in narrative extension in the San Bartolo wall-paintings, with the sacrifices performed in front of the four directional world-trees. The clear association between 'earth offerings' and cosmological ideas resonates with the notion of the landscape as an animate being through which payments need to be made, 460 a theory that finds strong support both in the ethnographic/ethnohistoric and archaeological records. In this way the offerings made in caches and burials, especially those in the civic-ceremonial core, establish and maintain the moral community in the landscape that sustains it.

This conception of 'earth offerings' would be shared by smaller and larger sites alike, as can be inferred from the discussion in section 8.2.7. Here it was also noted that, despite clear differences in scale, at both kinds of sites there existed an ability to mobilise labour to a significant degree relative to the size of the population. State institutions were not required for this. Rather, the most important

⁴⁵⁹ Here the presence of the Jester God motif and the PBD in Nakbé Stela 1 should also be remembered. For the Classic period, the conflation between Jester God, world-trees, and the PBD has been noted as well (Taube 1998, 456-458). ⁴⁶⁰ With an emphasis on 'through' rather than 'to' as the offerings were addressed to a variety of recipients such as deities

and ancestors, rather than exclusively to the landscape itself.

distinction between the smaller and larger sites would lie in the focus of text and complex iconography in the monumental art of the latter, even if sharing basic concepts with the art found at the smaller sites. Based on the *chaîne opératoire* analyses outlined in section 7.3.2 it is possible to say that not specific materials were connected to the elites at larger sites, but rather the textual messages and complex iconography inscribed on them. The fact that certain materials such as jadeite, also found at smaller sites like Chan, were favoured for this can be ascribed both to their intrinsic symbolic connotations and to their suitability in creating an 'aesthetics of durability'. As the elites that created this complex aesthetics were concentrated at the larger sites with state institutions, the notion of memory-work here would be elaborated from that of the smaller sites. Through monumentality and narrative extension the basic conceptual framework of the moral community was adapted for the purposes of state ideology. Without carrying the analogy too far in terms of specifics a parallel can be made here using the direct historical method, between the memory-work of LPC lowland Maya art and the Postclassic central Mexican notion of *Toltecáyotl*. 461

8.3.3: The agency of Late Preclassic lowland Maya art in its *longue durée* context

At this point the analysis of the praxis of LPC lowland Maya art intersects with the analysis of its agency in the broader social, cultural, economic, and political structures of the period. As discussed in section 6.4.3 the notion of the moral community, based primarily on maize agriculture, lineage-based inequality, and a focus on civic-ceremonial centres, provided an interface between smaller communities like Chan and states such as the one focused on El Mirador. Acting as an ideological template for both community and state, the notion of the moral community is very closely related to memory-work. In fact, it can be argued that memory-work is the means through which the moral community is shaped in terms of its ideological praxis. This can be seen especially well for the concept of 'earth offerings' discussed earlier, which can be grasped according to the notion of debt repayment. With the community or state located in an animate landscape of reciprocal yet also hierarchical relations among humans, ancestors, deities and indeed the landscape itself, the offerings, as well as the broader mythological associations that can be seen in narrative extensions, materially and ritually manifest this ideology.

In this way the moral community and memory-work contain both ideological and material factors, which are inseparable, whether at the level of the community structured by lineages or at the scale of a hegemonic state. This differs from the classical Marxist position on class and state, which is based mostly on Old World sources.⁴⁶³ A recent application of that perspective to the shift from a kinship-based mode of production to a tributary one in the Formative period of the Soconusco region at the Pacific coast of Chiapas and Guatemala (Rosenswig 2012), makes this clear. As the

¹⁶¹ One of the best eva

⁴⁶¹ One of the best examples of this can be seen in the Olmec influences in the San Bartolo wall-paintings, in particular for the rendering of maize symbolism. Lest this be seen as an example of how larger sites with monumental art and complex iconography differed from the smaller sites, it is necessary to point to the early, pre-state contacts between the lowland Maya area and the Olmec. This can be best seen in the blue-green jadeite that is found in caches at a number of MPC sites, including Cival, Nakbé, and Seibal.

⁴⁶² The same pattern can be noted for the Mixtec or Nuu Dzaui case, where the notion of the 'covenant' is closely related to aspects of memory-work (Hamann 2002, 361-362). See in this regard also the focus on 'landscapes of memory' that situated the Postclassic city-states or *cacicazgos* in a conceptual landscape involving both memory in the sense of the history of elite lineages and more cosmological-oriented notions of origins (Jansen & Pérez Jiménez 2011, 271-354).

⁴⁶³ Even so, it should be noted that Marx' notion of the Asiatic mode of production was in fact partially based on the available sources from Mexico and especially Peru (Marx [1858] 1964, 69-71). In this mode the major interface is between self-sufficient communities and a state that hovers over them, expropriating labour and tribute, with no significant economic role for cities. Ideological distortions and the imposition of an unilineal schema in Soviet thought on social evolution (Hobsbawm 1964) squandered any chance to update this concept in a source-critical way, even if for its time it was quite useful. Furthermore, as noted in chapter two, the term 'Asiatic' by no means should be seen as indicating something negative given the interest by the later Marx in alternative pathways of past and future history.

author notes, here radical changes in artistic representation occurred by 1400 BC, while the development of large-scale maize cultivation and a tributary polity did not develop until 1000 BC, reversing the primacy of 'base' and 'superstructure' (Rosenswig 2012, 38-39). 464 Instead, the early artistic developments may have provided a key way to transcend the constant process of social fissioning that can be observed in the settlement pattern data of the Jocotal phase, while also forming the basis for the ideological legitimation of elites in the succeeding Conchas phase (Rosenswig 2012, 30-32). It would go too far to impose the moral community model upon the Soconusco data, but a shared element with the Preclassic lowland Maya can be seen in the existence of an ideological template based initially on communities ordered through a kinship-based mode of production but adaptable to state-level organisation.

While it is useful at one level to consider the shift from a kin-ordered to a tributary mode of production, based on the perspective outlined here this should be seen in historical rather than evolutionary terms. For it is just as important to emphasise the structural changes of the *longue durée* that made this transition possible, which in the Soconusco includes not only the emergence of new forms of artistic expression around 1400 BC but also the gradual lengthening of maize cob sizes. Much the same can be said for the concurrent development of maize agriculture and the artistic means of ideological expression of the MPC lowland Maya. Captured in the notion of the moral community, it provided the basis for both the longevity of a site like Chan with kinship-based organisation and a series of successive state formation processes. Hence it would be unproductive to emphasise rigid dichotomies between states and kin-ordered forms of organisation. Nor would it be useful to see both as stable in the long-term, as the moral community in all forms depended on the active praxis of memory-work and therefore was far from insulated from historical change itself. For this reason it is now necessary to look in more detail to the role of LPC lowland Maya art with regard to the different elements of its early civilisation.

First and foremost in this is the role of jadeite and related greenstones, which as a material metaphor intersected with maize and its seasonal cycle, the maize deity, the current maize-based version of humankind, and cosmological centrality. Also, the Jester God motif associated with this set of metaphors was, through the semiotics of narrative extension, part of broader stories of origins and kingship that were actualised in the praxis of ritual. With regard to praxis, the *chaîne opératoire* analysis of jadeite and related greenstones indicates that those objects with texts and complex iconography can be most closely associated with elites and the larger sites. This has led to an emphasis on distinctions for the Classic period, even if in a basic sense these materials were widely available and also used in non-elite ritual contexts:

"Elites hoarded these green or blue things. Taking a commonplace, appreciated by all, they sequestered it, in purest, most enduring form, to limited or restrictive use. The process of appropriation and reworking was pervasive, a governance likened to tending a field and the reception of regalia to holding an ear of corn. A unified aesthetic, bridging classes, fell into step with the need to differentiate people. But, for lords, the beauty could not perish or disappear. Every effort of peasants or mere townsmen was trumped by royal versions of the same: kings might have lived longer than ordinary folk, and so did their things. These precious goods underscored their political status, with direct value. They were worn and transferred within a material idiom of respect, depending on the identity of the giver and the recipient." (Houston 2014, 129-130)

2002, 367-368). These issues will be further explored in chapter nine.

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⁴⁶⁴ Rosenswig (2012, 37) makes the useful observation that the archaeological record provides a good opportunity to explore the different kinds of interaction between these factors in individual cases, noting that in prehistoric Europe it was the economic base that developed gradually while the superstructure was characterised by sudden, punctuated changes. Contrasts between Europe and Mesoamerica have also been noted for the notion of memory-work (Hamann

Based on the analysis of LPC period art provided here, the same pattern can also be recognised. As such, jadeite and related greenstones can be related to the a number of elements of LPC lowland Maya early civilisation, including the ecological and agricultural basis, economic relations, long-distance exchange, state form, inequality, and specialised knowledge. All these factors can, to varying degrees, be grasped as part of the Western notion of 'political economy'. The iconographic and conceptual connection of jadeite and its colour associations to maize make the relation to subsistence fairly straightforward. More complex are the elements of economic relations and long-distance exchange, which will be treated together here. As noted in section 6.4.2, the use and representation of bundles was closely connected with the notion of wealth and exchange, as well as with important ritual uses such as in burials. For the Classic period the connection between bundles and jadeite can be seen very well in the *ikatz* bundles, while for the Preclassic period it is possible to note at least the relation between jadeite and related greenstones on the one hand and maize symbolism on the other hand. It is this metaphoric relation, based on the skeuomorphism connecting maize in its many manifestations to an 'aesthetics of durability', that lies at the basis of the role of these materials as forms of wealth in Maya culture.

However, in the discussion in section 6.4.2 it was also noted that there existed different ideas as to how this wealth was conceptualised, with alternatives such as currency and treasure having been proposed. Furthermore, the notion that jadeite and related greenstones were convertible with maize, or indeed any other substance, cannot be directly proven. Given the great difficulty of resolving these matters, an alternative can be sought in the notion of wealth as conceived within a semantic system. In order to do so, two factors should be borne in mind. The first of these concerns the relation between less elaborately worked forms of jadeite and related greenstone objects, and the more elaborately crafted ones made from the same materials with texts and complex iconography. The former can be seen not only as the raw material for the latter, but also as part of a broader sphere of exchange, whether as currency or as treasure, something corroborated by their more ubiquitous find contexts. The second factor to consider is the role of of jadeite and related greenstones in monumental art, either through direct representations or indirectly through the metaphoric links to maize symbols like the Jester God motif, adding narrative meaning. 465

When considering these two factors, the closest parallel is to Polanyi's (1968b) notions of payment and storage in a 'money institution' designed to regulate status. That is, both the possession and use of jadeite and related greenstones can be understood in the context of a timocracy framed in terms of religious obligations. Yet it would be misleading to just denote these materials and the objects crafted from them as prestige items in a wealth-finance model. Rather the ideas of Polanyi provide the generic skeleton that has to be embedded closely within the LPC lowland Maya context. Basic in this is the recognition that most jadeite and related greenstones objects have been found in caches and burials. While the archaeological record ensures a greater visibility to these contexts than it does to exchange, it should still be recognised that a prominent use of 'payment' with these materials is in the form of 'earth offerings' of caches and burials. As noted earlier, such offerings can be understood as part of the moral community, as part of the mutual obligations between humans, the ancestors, deities, and the landscape itself. The mask from burial 85 with its Jester God motif and likely attachment to a bundle provides a pivot from such offerings to the more elaborately objects crafted from jadeite and related greenstones. Even if most of these objects are without secure provenance, the wall-paintings from El Achiotal and San Bartolo indicate a close association between them and the office of kingship through uses in bundles and in royal insignia.

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⁴⁶⁵ While this can be recognised in a basic sense for the LPC period, the evidence for the Classic period is much better in this regard, as shown by the mythological and cosmological associations of the *ikatz* bundles (Stuart 2006, 136-137). Also, in the Classic period the Jester God image on the headband of rulers was made of jadeite (Martin & Grube 2008, 14), while in the Preclassic this is highly plausible but not securely proven.

In this way the elements of economic relations and long-distance exchange are inseparably linked with those of inequality (encapsulated within the moral community) and state form (through the office of kingship). These uses, then, point to the need to look beyond 'political economy' in a Western sense. To prevent a relapse to blanket notions of prestige goods, it can be useful to relate the first element of ecological and agricultural sustenance to that of specialised knowledge. Based on the connection between the sets of metaphors of maize and jadeite and related greenstones, the objects crafted from these materials can be understood as 'intellectual tools' in the Childean sense. As such they were part of a broader toolbox revolving around maize agriculture and offerings, in particular in the use for blood-letting of macro-blades, eccentrics, and stingray spines. There was an ontological aspect to the use of these tools, as can be inferred from the manifestations of *k'uh* as part of blood-letting rituals in the San Bartolo wall-paintings. While the objects crafted from jadeite and related greenstones were not primarily used for blood-letting, their surface colour and shine related them to the colour term *yax*/blue-green, as extensively discussed in section 7.3.3. As a colour *yax* both occupied a central position in the quincunx outline of the cosmos, basic to both the *milpa* field and kingship, and can be related to the fragrant paradise of Flower World.

In this way jadeite and related greenstones provide a bridge from mundane farming activities toward the office of kingship based on a shared set of metaphors, with the latter sometimes understood in terms of the former as noted in section 8.2.4 for San Bartolo. As such the function of the objects crafted from them as intellectual tools can be understood as providing the material means for a value system encompassing all layers of LPC lowland Maya early civilisation. At the level of kin-ordered communities the basic materials were obtained through some form of exchange, either as currency or as treasure. But their function was not analogous to that of money, in the sense of possessing fungibility with other substances, 466 but rather within the moral community as 'payment' in the 'earth offerings' of caches and burials. Although hierarchical structures were already present for the lineage-based communities, the state in the form of the office of kingship provided a vertical power dimension for the elaborately crafted objects with writing and complex iconography. The broad set of metaphors associated with them, the ability to function at these different levels, as well as the intersections with the tools for blood-letting and with wider iconographic programmes, place jadeite and relate greenstones in a central position. That is, the value system of the LPC lowland Maya can be grasped best through these materials and the different kinds of objects crafted from them.

This notion of a value system is especially useful, as it mitigates the idea of prestige goods based on the conscious manipulation of ideas for political ends. 467 Instead, it outlines the ascription of value based both on conceptions of materiality and on ideas of socio-political power. Status may well be of relevance in this, but it concerns status as conceived of within the framework of a specific Maya timocracy rather than as viewed from a generic or universal perspective. The implication of this is that Childe's notion that the Leiden plaque functioned as a tool of bureaucracy may in fact be only partially wrong. A basic function of bureaucracy is to arrange people and things through a process facilitated by administrative devices, which ultimately involves the ordering of human relationships. The objects crafted from jadeite and related greenstones were not administrative tools, but rather intellectual tools used to structure social relationships, including with agents such as deities,

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⁴⁶⁶ In more abstract terms it should be noted that money fungibility is also based on a metaphor, as all semantic systems are, that allows for interchangeability. But there are no real indications that the close relation between jadeite and related greenstones and maize symbols shows that this metaphoric link extended from the aesthetic to the conventional economic realm. It is also important to remember here Renfrew's warning not to conflate the notions of 'number' and 'art' value, as often done in the contemporary highly monetised Western society (Renfrew 2012, 255-257).

⁴⁶⁷ Such ideas are at any rate dependent upon the separation of material and ideal factors. In the Maya case such notions are rendered moot by the presence of a monistic worldview, in which even certain glyphs can be characterised as possessing materiality and animacy.

ancestors, or the landscape itself. But this also allowed them to be used to arrange people and things, even if not in a way that can be easily compared to an administrative setting. The challenge then is to grasp how the structuring of social relationships through the value system of jadeite and related greenstones impacted other elements. This constitutes a very difficult task given the lack of direct and indirect insights into social relations in the LPC period, not least due to the very limited information on social roles from artistic and textual sources.

Nevertheless, some insights can be gained through the different kinds of 'work' discussed earlier in this section for the praxis of LPC art. An important concept in the Maya world, work can be grasped in the present case both in the mobilisation of labour to construct the civic-ceremonial cores and in the memory-work shaping the cultural meaning expressed there and in other places. As such these aspects of work intersect with the elements of economic relations, state form, inequality, and specialist knowledge of LPC lowland Maya early civilisation. The first three of these elements are involved in the direction of labour to construct monumental structures. Based on the discussions in sections 7.3.2 and 8.2, two important aspects of labour mobilisation in the Preclassic can be noted. The first concerns the observation that labour mobilisation to construct monumental buildings, especially in civic-ceremonial centres, can already be seen in the kin-ordered communities of the MPC period. Hence in principle it did not depend on the existence of state institutions, although these may well have facilitated the mass mobilisation of labour for larger-scale works like those in the Mirador Basin. Instead the organisation of labour can be grasped as part of lineage-based power structures, which as noted acted as crucibles for inequality themselves.⁴⁶⁸

The second notable aspect with regard to labour mobilisation concerns the technological styles used to create monumental art in the LPC period. Not only were the architectural methods used to build pyramids and other structures very labour-intensive, as noted in section 7.3.2 the techniques used for stucco-work and wall-paintings point to a more corporate or group-focused socio-political framework. Further support for this idea can be found in the contexts in which the art was deployed and the subject matters that were depicted. Interestingly, these patterns can be contrasted with those from the Classic period, with its emphasis on individuals and genealogy that was also reflected in the material forms and technological styles. One possible explanation for this difference might be that the Classic period practice of inter-elite marriages, especially important for dynastic politics (Martin & Grube 2008, 20), was not yet as developed in the LPC period. This would imply that the emerging elites and royal lineages were embedded more closely within their local or regional setting, rather than as part of an elite network extending over the Maya lowlands as a whole. 469 Also, it is possible to infer from table 7.2 in section 7.3.2 that materials like chert, obsidian, and shell could be worked as part of community-wide specialisation, though with some evidence of additional specialisation in certain households.

Taking into account these two aspects of labour mobilisation, a fairly coherent overall pattern emerges. The basic source of labour from households could be effectively organised in kin-ordered

⁴⁶⁸ This was most powerfully shown for the house structures at K'axob discussed in section 8.2.5. The later transformation of the initial 'chiefly house', also acting as a locus for richly furnished burials, into the central focus of the civic-ceremonial core is significant in this regard. Even it does not prove anything directly with regard to the direction of labour, the end result renders some relation between labour mobilisation and lineage more plausible.

⁴⁶⁹ More concretely it is possible to point in this regard to the interacting 'peer polity' sites in the region surrounding Cival, discussed in section 8.2.3, as an example of this. On the other hand there is the relative homogeneity in ceramic style across the region. Given that the development of polychrome ceramics after the LPC period is ascribed more to the need for distinctions among the elite, a paradox can be observed: greater regional distinctions arising from the competition of different elite groups within the overall network of which they formed part. Another aspect for both the Preclassic and Classic periods is the impact of hegemonic polities like El Mirador, Calakmul, and Tikal on the dynamics between regional distinctions and macro-regional homogeneity. But the evidence for the LPC period is insufficient as of yet to construct a coherent model for the extent of the El Mirador state.

communities, with the moral community acting as an ideological means of structuring social relations. This can be best seen in the construction of civic-ceremonial centres and the 'earth offerings' in the caches and burials located therein. In the memory-work this entailed, objects made from jadeite and related greenstones played an important role as part of the broader ritual toolbox for inducing the sustenance of the community. The existence of community-wide specialisations for working materials at certain sites does point to more scope for coordinating labour at the community level. But it should be stressed that direct insights into this are lacking and therefore it would be rash to argue that such economic activities were actually directed through ritual. For the construction of the civic-ceremonial cores the patterns at a number of different sites are strong enough to link labour and ritual, through the aforementioned memory-work. States seem to have used these means, rather than creating them, perhaps even coming into being because of them but this scenario is hard to ascertain. Furthermore, the large-scale mobilisation of labour by states still seems, on the basis of the analysis of the technological styles of monumental art, to have been constrained to articulating a group-focused ideology rooted in regional power structures.

Yet the kind of memory-work characteristic of the art that can be associated with LPC period states drew upon a set of symbols that far transcended regional boundaries, showing great similarities to areas and periods remote from it. In addition to this, the shift away from figurines at the transition from the MPC to the LPC period can be understood as part of a reorientation of ritual from households to the state, just as it happened in similar cases elsewhere in Mesoamerica. It is therefore necessary to grasp in more detail the ideological content specific to LPC lowland Maya art, as it pertains upon the memory-work of states. Of key importance in this is the Jester God motif, already referred to multiple times in this section. One aspect of this motif concerned its metaphoric relation to kingship, deriving in part from the underlying connection to maize and the maize deity. Both materially and metaphorically, especially through its use on bundles, the Jester God image was also connected to jadeite and related greenstones. This constitutes the second way in which the value system embodied in these materials shaped memory-work, taking their basic properties and metaphors into the realm of writing and complex iconography.

This can be seen both in portable and monumental art, as the discussion of the close iconographic relations between them in section 7.4.2 showed. But it is only in the more expansive space of the San Bartolo wall-paintings that the Jester God motif can be grasped as part of broader narratives. It is useful to briefly recapture these different narrative contexts of this motif here:

- 1. On the headband of the sacrificing youth in front of one of the four directional world-trees on the west wall.
- 2. On the headdress presented by an attendant to a seated figure of authority, hypothetically to be interpreted as a king, on the west wall. This image has close parallels to two other greenstone objects with Jester God motifs: the mask from burial 85 at Tikal and the Dumbarton Oaks plaque without secure provenance.
- 3. On the two bundles carried in procession on the north wall. There is a parallel here to the use of a Jester God motif on a bundle in a wall-painting from El Achiotal.

The San Bartolo paintings do not exhaust all possible options, as the Jester God image on the headband of a maize deity from Cival shows. But they are crucial for understanding the ways in which the metaphoric basis was shown in different kinds of narrative extensions. These included the raising of the world-trees and the sacrifices and Principal Bird Deity associated with that, the accession scene as part of the maize cycle and the death and resurrection of the maize god, and the broader themes of the emergence of maize-based humankind and the basis of social life. All of these formed part of an iconographic programme that, conceived of as analogous to an 'instrument of

seeing', functioned as a means for ideological instruction in the San Bartolo state. The impact of the value system revolving around jadeite and related greenstones on this was more indirect, compared to the deposition of objects made from these materials in the 'earth offerings' of caches and burials. Nevertheless, through the metaphoric associations of these materials with the Jester God image, as well as with maize-related symbolism in general, the value system can still be seen to have had a pivotal role in many of the San Bartolo scenes. Reiterating a point made a number of times already, the narrative extensions are rooted in basic metaphors, and thereby share the same value system that facilitated memory-work for both kin-ordered communities and states.

What has emerged in this synthesis, then, is a fairly coherent pattern that captures what is arguably the core aspect of the agency of art in LPC lowland Maya early civilisation. As the value system lay at the basis of the memory-work that shaped the praxis of the moral community, it can be seen as a pivot between the kin-ordered communities and state forms as they coexisted in the *longue durée*. As such, it intersected with the elements of the agricultural and ecological basis, economic relations, long-distance exchange, state form, inequality, and specialised knowledge. But at the same time the analysis is also limited, lacking more detailed insights into social roles and the role of the calendar as they are known from the art of the Classic and Postclassic periods. The implication is that with regard to social structure, the analysis remains a bare bones one, although further discoveries and advances in the decipherment of LPC period texts have the potential to remedy this. The situation is even worse with regard to the elements of physical coercion and the cycle of public festivals and feasting. The importance of both is well-established for later periods in the Maya lowlands, but despite a few hints the evidence is simply too limited for this case to hazard any significant interpretations. Together with the material under study but as of yet still unpublished, these elements constitute the 'known unknowns' that will likely greatly modify future interpretations of LPC lowland Maya art and its agency.

⁴⁷⁰ Including, of course, a cosmological aspect in the extension of the quincunx pattern of the conception of houses and the *milpa* fields to the outline of the boundaries of the state.

CHAPTER NINE: COMPARING THE ART OF THE MYCENAEAN AND LATE PRECLASSIC LOWLAND MAYA EARLY CIVILISATIONS

9.1: Introduction

The subject of this chapter is the comparison of the Mycenaean and LPC lowland Maya early civilisations, and their art styles in particular. It will focus primarily on the substantive findings of the case study chapters, referring to theoretical work or other cases only to facilitate this comparison. The implications for high-level theoretical concerns will be addressed in the next chapter. The analysis here will be divided into two main sections. The first one (section 9.2) will deal with the holistic comparison of both cases. This involves the aspects of chronology and terminology, sources, as well as the interpretation of the structural and historical properties of both early civilisations. Of course these aspects are not only treated separately, the interrelations between them will be investigated as well. The second main section (9.3) focuses on the comparison of the different elements of art and its agency in the two early civilisations. Again, this inevitably also includes the issue of comparability given the differences in sources and material forms between Mycenaean and LPC lowland Maya art. But the main emphasis will lie on the three elements of metaphor, semiotics, and praxis, and also on how they can be understood together in terms of agency. For this last aspect of the agency of art, the findings of section 9.2 on the general comparison of both early civilisations will be brought up again as well.

9.2: Comparing the Mycenaean and Late Preclassic Maya early civilisations

9.2.1: Introduction

The issue of comparability is intertwined inseparably with the process of comparison itself, even if, as noted in section 2.4.2, this is not always addressed sufficiently. As stated in the previous section, the comparative discussion of the Mycenaean and LPC lowland Maya early civilisations will be evaluated through their chronology, sources, and the interpretation of the historical and structural properties as early civilisations. This is covered in sections 9.2.2, 9.2.3, and 9.2.4, while section 9.2.5 will consider the relations between them. Before turning to the details of these matters, it can also be useful to note the meta-issue of contemporary social contexts of scholarship. While archaeology in both Greece and Mexico was shaped institutionally by nationalism, especially with regard to the protection and representation of cultural heritage, they also differ in being shaped respectively by imperialism and colonialism.⁴⁷² This did have a detrimental impact in both cases. For the Mycenaean case this could be seen in the initial focus on the masculine and aggressive character ascribed to it by European imperialist thinkers, and later by its marginalisation in the dominant origins narrative of Western civilisation. In a different way the colonialist bias towards indigenous populations in the Americas led to a neglect of grasping the pre-Columbian cultures of the Americas in their own terms. However, the further development of archaeology and the decipherment of scripts in both areas has led to the possibility of comparing both cases on their own terms in the framework of a world archaeology as originally envisaged by Gordon Childe (1944c).

⁴⁷¹ Therefore references will be given only to these added sources of theory or data, for statements about the Mycenaean and LPC lowland Maya cases the reader is referred to the specific sections on which they are based.

⁴⁷² Or to be more precise for the Mexican case, an initial imperialism followed by a deepened and far-reaching process of colonisation that sought to completely subvert the pre-Columbian cultures in the area.

9.2.2: Comparing chronology and terminology

A very important difference between the LPC lowland Maya and Mycenaean early civilisations lies in the terminologies formulated to account for their trajectories. In fact, even within the scholarly traditions of both areas considerable differences exist for different periods, and also for different categories of artefacts within them. This can be seen clearly for Aegean archaeology. Whereas the chronology of Aegean prehistory is principally derived from a combination of the Three Age system and tripartite ceramic phases, from the Archaic period (starting c. 700 BC) onwards it was based on a fine-grained sequence deriving from historical-textual and artistic sources (Whitley 2001, 60-74). Here it is possible to see how the dominance of specific kinds of sources leads to a preference for particular kinds of 'chronotopes' to situate them within a coherent spatio-temporal framework.⁴⁷³ The impact of the use of different kinds of chronotopes can be significant, and may well form one of the reasons behind the observed lack of studies that compare Bronze Age and Archaic-Classical state formation in Aegean archaeology (Renfrew 2003b, 317-318). Lacking a clear sequence of metal ages, and with its indigenous historical record almost obliterated by the Spanish conquest, the case of Mesoamerica presents even more obstacles to comparability in this regard.⁴⁷⁴

In order to grasp the differences between the chronotopes of Mycenaean and Preclassic lowland Maya archaeology, it can be useful to look at the underlying factors that have shaped them. Chief among these are stratigraphy and seriation, initially developed in culture-historical archaeology to delineate chronological frameworks (Trigger 2006a, 290-299). In general archaeological deposits in the Americas are more shallow and less sharply defined than those of the Old World (Willey & Sabloff 1980, 93). This does not mean complex stratigraphic analysis is lacking in Maya archaeology, see for example Hammond (1993). Rather, it implies that the different taphonomic conditions have some impact on the way chronological frameworks are developed, and by extension on the chronotopes used in interpretation. As discussed in section 6.2, the basic unit of Maya chronology was defined at the site level. For some sites the successive phases were in fact of remarkably similar lengths over their entire trajectory. Using a simple metaphor, these site-based phases can be seen as 'boxes', 475 containing different kinds of cultural elements, potentially including sub-chronotopes based on architectural sequences and textual sources. Furthermore, contemporary 'boxes' from different sites can be connected to over-arching ceramic spheres, such as

⁴⁷³ The notion of the chronotope was already implicit in the discussions in sections 4.4.2 and 7.4.2, which were concerned the way space and time were rendered in Mycenaean and LPC lowland Maya art. Here the focus will lie instead on the way archaeologists conceive of spatio-temporal frameworks in their own interpretations. The notion of the chronotope has already been used for more reflective purposes in discussions of archaeological theory (Joyce 2002, 34-38). The concern here is more practical, dealing with the impact of terminology on interpretation, much as explored by Ian Morris (2000, 77-106) for the 'dark age' of the Early Iron Age Aegean. One just has to consider, as an extreme example, a situation in which the lists of various royal dynasties would be the only available evidence for one medieval country, and the demographic data that allowed Ladurie to formulate his concept of *l'histoire immobile* (Ladurie 1977) the only source for another. The chronotopes that would derive from these sources would render these cases effectively incomparable, being part of very different kinds of interpretive strands (cf. Bintliff 1999b, 132-135).

⁴⁷⁴ It is important to recall here the discussion in chapter two of the conception by figures of the moderate Enlightenment of Amerindian cultures as unworthy of serious consideration, a notion that can still be encountered today (Smith 2013, 2014). The idea of progress as following a scheme with fixed 'stops' can also be seen in Diamond's comparison of the dates at which key 'stops' were reached in different areas of the world, noting a 5,000 year lag in the development of agriculture-based villages in the New World (Diamond 1999, 361-363). Even if Diamond acknowledges that the time between 'stops' varied considerably, his use of a 'railroad chronotope' obscures the substantive differences of Amerindian early civilisations, which might well have led to different kinds of trajectories if they had not been checked by the Spanish conquest (cf. Fagan 1992, 36). The notion of a railroad chronotope is close to Wittgenstein's observation that modern society tends to make progress its form, and impose that on others, rather than one of its particular attributes, as discussed in section 2.3.6.

⁴⁷⁵ In the terminology used in the Maya area this 'box' constitutes a ceramic complex, which can in turn be subdivided in a chronological sense into different 'facets' (Powis 2002, 20-21). Here the term 'box' is instead used to focus more on the terminological aspect than on the ceramic classification.

the Mamom and Chicanel ones in the Preclassic. The correlation of developments at different sites for which absolute dates are available makes it possible to circumvent the straitjacket of the 'boxes' to some extent in order to trace cultural developments, but they remain the terminological backbone of the chronologies of individual sites.

The situation is very different for Aegean prehistoric archaeology, where there are no site-specific chronological terms but rather the broader macro-regional categories of Helladic (mainland), Cycladic, and Minoan (Crete), as discussed in section 3.2. In addition to this, there is significant diversity in the lengths of periods, which became considerably shorter during the era of the Mycenaean palaces. Regional variation in ceramics and trajectories are of course recognised, but not reflected in a separate chronological framework. Therefore, instead of being defined by a sequence of relatively uniform period 'boxes' with varying content and macro-regional connections, as in the Maya case, Mycenaean sites do by chronological definition partake in a macro-regional process that moves through time at varying speeds. The implications of this difference are twofold. First of all, it shapes the way in which synthetic accounts are composed. In the case of the Maya, sites, or sets of sites such as those in the Mirador Basin, form an important unit not just for the presentation of data but also for cultural synthesis. In the Aegean case the synthetic accounts from the outset are more focused on the macro-regional context, although the regional focus of survey projects has changed this somewhat.⁴⁷⁶ As will be discussed in section 9.3.2 the difference can be seen especially well for synthetic accounts of art in both areas.

The second implication of the different structures of the chronologies of the Aegean and Maya areas concerns the relation between continuity and discontinuity. It should be clear that the temporal framework of Aegean prehistory, rooted as it is in shifts playing out at the macro-regional level, is more conducive for recognising sharp cultural breaks than the Maya one with its site-based period 'boxes'. This might lead to uncomfortable questions with regard to the impact of modern, socially constructed frameworks upon the interpretation of very limited archaeological and historical records, in effect chaining them to preconceived culture-historical ideas. Yet in both areas scholars have succeeded in outlining coherent reconstructions of temporal development using models very different from those of culture-historical archaeology. Hence the chronological frameworks should not be conflated with the set of ideas within which they were originally developed, even if their particularities should always be taken into account. Furthermore, there are strong reasons to believe that the differences in approaching chronology between the Mycenaean and Maya cases derives not just from the scholarly traditions of both areas, but also from the constraints on interpretation presented by their archaeological records. This includes not only the available sources but also the substantive properties of early civilisations in Mesoamerica and the Mediterranean, an

⁴⁷⁶ A particularly good example of the use of the regional focus of survey to integrate other sources into a comprehensive framework is Davis (1998). The regional focus might provide better comparability with the Maya case, but here differences in survey conditions and methods, see the next section, provide new obstacles.

⁴⁷⁷ This should not be taken in a too absolutist sense, in that the use of absolute dates can give more detailed insights into complex historical issues such as the Classic Maya collapse, see the papers in Demarest et al. (2004). But for the chronological resolution of the Preclassic the impact is certainly a serious one, as can be inferred from the treatment of the different elements and *longue durée* framework of LPC lowland Maya early civilisation in section 6.4.

⁴⁷⁸ The pitfalls of not doing so can be observed in a recent comparative study of the impact of Teotihuacan and Minoan Crete on the architectural development of, respectively, the Early Classic Maya site of Tikal and Late Bronze Age Pylos. The authors isolate two phases from the trajectories of these sites and compare them using the dual-processual theory (Englehardt & Nagle 2011, 376-377). Although not entirely without merit, the synchronic focus in the treatment of Tikal is misleading, since it obscures the fact that state formation had already occurred in the Maya lowlands long before the impact of Teotihuacan, while on the Greek mainland no states were as yet present. This makes for a very different kind of interaction between the lowland Maya and Teotihuacan, as shown in the artistic and textual record of Tikal and the Maya presence at Teotihuacan itself (Stuart 2000; Taube 2003). To lift one Mesoamerican period from its proper context and put it into the chronotope characteristic of Aegean prehistory, or even that of the 'absolute space' of cross-cultural research noted in Smith (2003), therefore risks misconstruing the evidence.

issue that will be addressed further in section 9.2.4 below.

9.2.3: Comparing sources

Turning to the comparability of the sources available to interpret the Mycenaean and LPC lowland Maya early civilisations, there seems to be a broad coherence in terms of the archaeological techniques used to study their records. These include excavation, survey, and the use of special scientific techniques to study particular topics or artefact categories. Yet when looking at their application in more detail, interesting differences emerge. The excavation of large centres with monumental architecture forms the backbone of archaeology in both areas, but the different material conditions encountered in digging and reconstructing them have led to specific analytical frameworks. This was already discussed in the previous section for chronology, but it extends to other aspects such as the way in which architectural phases can be traced. Even more different are the survey techniques used in both areas, which is not surprising given the starkly different conditions of terrain and vegetation. Even so a significant convergence can at least be noted, in that through systematic survey work the existence of forms of urbanism could be recognised for Mycenaean Greece and the Preclassic lowland Maya, if with quite distinctive characteristics. Nevertheless, owing to the very different field techniques and the nature of the material found in the field, the survey results from both areas cannot be compared at a high level of detail.⁴⁷⁹

Furthermore, the relation between survey and excavation work in reconstructing regional settlement patterns is also quite distinct in the Aegean and Maya areas. In many New World regional projects survey and excavation are closely integrated, while this is rarely the case for those carried out in the Mediterranean (Stanish 2003). This can be seen very well for the project focusing on the Maya site of Chan, discussed in sections 6.4.3 and 8.2.6, for which a Mycenaean counterpart is entirely lacking. The understanding of small sites and household archaeology is far more developed in the Maya case, even if in the Aegean positive developments can be noted. 480 Burial archaeology is welldeveloped in both areas, at a roughly comparable level, but the funerary records themselves are quite different from each other. Unfortunately, one way in which the records as they stand in the two areas converge very well is that they, so far, do not allow for the robust reconstruction of basic social systems. For example, the importance of kinship systems can be inferred for both cases, but any precise reconstruction of their particulars is currently impossible. Yet it is known from anthropological and historical studies that variations in such systems can be very important for understanding long-term historical trajectories (Goody 1990). For both the Mycenaean and LPC lowland Maya early civilisations it is the reconstruction of basal social patterns that is most likely to change current interpretations of them, reflecting a broader trend in archaeology (Wade 2014).

Considering writing, it can be observed that the decipherments of the Maya and Mycenaean scripts have made very significant impacts on the interpretation of both early civilisations, and the intellectual challenges were certainly of equal worth (Palaima et al. 2000). Of course, as noted in section 6.3, LPC lowland Maya texts are not understood very well, especially compared to the Classic period material. Yet at least in a basic sense the LPC record conforms to that of the later period, making a comparison of generic properties worthwhile. Despite the fact that writing

⁴⁷⁹ A basic distinction between Mesoamerican and Mediterranean surveys is the smaller scale of the latter, something criticised by Mesoamerican specialists as being too small to address questions of state formation (Blanton 2001). Given that the scale of lowland Maya surveys tends to be smaller than their counterparts in central Mexico as well, this makes them closer to the Mediterranean situation. However, in the lowland Maya case what is recorded are structures, not the spread of surface ceramics as in many Mediterranean surveys.

⁴⁸⁰ A good example of this the Laconia Rural Sites Project that investigated a sample of the sites discovered in an earlier survey through more intensive research methods (Cavanagh et al. 2005). For household archaeology the work done on the Neolithic is not carried on into the Bronze Age, but see now Wiersma (2013).

constitutes a highly useful source in both areas, the different characteristics of both scripts, and the kind of media on which they have been recovered, do have a largely negative impact on the comparability of both early civilisations. This negative impact is not due to the different properties of Linear B and Maya writing in a technical sense. Rather, in both cases the longest and most complex texts may have been written on perishable materials and have been lost, and the texts that survive address very different subjects. In terms of the functions of writing as a recording system (*Understanding*, 587-588), Linear B is primarily concerned with administration and the Maya script with political and religious matters. Given that these texts have been an important focus in the interpretation of both early civilisations, this difference has to be kept in mind very much when evaluating their comparability.

With regard to insights into the Mycenaean and LPC lowland Maya cases from sources external to them, it is clear that in the former case horizontal links to contemporary counterparts were more important and for the latter one vertical connections to later periods. In more practical terms, this means the relations with the contemporary early civilisations of the eastern Mediterranean for the Mycenaean case. For the LPC lowland Maya this concerns the long-term connections to the Classic, Postclassic, Colonial, and contemporary periods. This does not mean that there were no long-term continuities in the Aegean or that the lowland Maya formed a completely self-contained geographical unit, both of which are clearly not the case. But the relative weight of the sources supports this contrast, which is especially pronounced for the sources used to interpret art. Here a clear parallel can be noted with the discussion of chronology and terminology in the previous section, with the focus on changes over larger areas in the prehistoric Aegean and site-based continuities in the Maya area. This reinforces the notion that there is solid substance to this difference, given the coherence between the internal chronological frameworks of both areas and their external sources. In practical terms the contrast in external sources is another factor impacting different kinds of interpretations in both cases.

In overall terms, the datasets of the Mycenaean and LPC lowland Maya cases that are most suitable for comparison derive from the 'big digs' of larger centres with monumental art and architecture, despite their different chronological frameworks. This creates a rather one-sided view, but the increasing amount of evidence for basic social patterns should remedy this in the near future. Unfortunately, the larger centres have very different contexts in both areas. Not only are the survey conditions and methodologies very distinct, creating different views of the hinterlands of centres, but as noted earlier the character of external sources also differs considerably. The written sources make for an additional contrast, though partially obscured by the lack of understanding of Preclassic lowland Maya texts. Consider, for example, the difference between the use of kingly titles in administrative contexts, as in Mycenaean writing, and in the role of kings in political and religious affairs in Classic Maya texts. Failing to take a source-critical approach to the role of kingship in both areas will here clearly lead to results that are highly problematic. In fact, if evidence is taken at face value the comparative exercise is unlikely to yield insights that could not be better gained through in-depth study of the cases themselves.

9.2.4: Comparing interpretations of early civilisations

The comparison of the Mycenaean and LPC lowland Maya early civilisations here will focus not so much on the enumeration of the differences and similarities of the ten elements of each case. Instead these will form the basis for a comparison based on the more general categories of economic, socio-political, and worldview-related elements, as listed in table 2.4. This will not only allow for a more flexible and less encyclopedic analysis, but also makes it possible to connect this analysis more closely to the substantive findings of Trigger's *Understanding* and other comparative

work. This is of great importance as it can mitigate some of the problems of the very small sample used here by reference to the larger sample of Trigger's work. A fourth aspect of the two cases to be compared is the *longue durée* framework within which these early civilisations were embedded. This intersects with the comparative analysis of trajectories in Adams' *Urban Society* and Yoffee's *Myths*. Turning first of all to the comparison of the Mycenaean and LPC lowland Maya economic elements, clear differences can be noted for the kinds of sources available. In particular the availability of administrative texts in the Mycenaean case would seem to favour a top-down perspective. For the Maya case the combination of survey and excavation techniques for the investigation of households at both rural and urban sites is more conducive to a bottom-up view. Yet it will be argued here that the differences in economic patterns are not only a matter of different kinds of sources and field techniques.

Fortunately, for the first topic of food production the sources are more evenly matched. In his consideration of the differences between maize and wheat and barley as basic staples, Blanton (2004, 210-213) has contrasted the means of generating surplus in Mesoamerica and the Mediterranean as being based on distinct bases. Respectively these are biotechnological innovation (over long periods of time) and irrigation resulting in higher yields, and in the use of technologies like the hoe and plough to reduce labour time. Based on the use of plough and oxen, one household in the Mediterranean could support 1.01 households not involved in farming activity while one Classic Mesoamerican household using irrigation farming could support 1.7 non-farming households (Blanton 2004, table 15.3, p. 212; table 15.5, p. 213). These differences impact both the ways and means of generating surplus and the forms of urbanism. Trigger had argued for a high degree of 'possibilism' with regard to food production, noting the lack of coherence between crops, technologies, climate, and population densities (Understanding, 279-284). A more detailed look at the Mycenaean and LPC lowland Maya cases shows, however, that the basic parameters of agricultural techniques did play a more constraining role, even if certainly not a deterministic one. To understand this, it is useful to turn to the different 'economic logics' outlined by Scarborough (2003) in his comparative study of water-management systems.

Whereas in a 'labour-tasking' system economies of scale are developed through a highly skilled and specialised labour force, in the 'techno-tasking' variant this is done through the introduction of technologies that substitute labour for tools (Scarborough 2003, 13-16). He specifically identifies the Classic Maya and Mycenaean early civilisations as organised, respectively, according to labour-tasking and techno-tasking logics (Scarborough 2003, 108-115, 146-151). While not every aspect of this theory should necessarily be accepted, in general it provides a very good way for conceptualising the differences between the two cases. As discussed in chapter three, in the Aegean Bronze Age the ability to generate a surplus depended on a shift from either swidden farming or intensive horticulture to extensification of cereal cultivation, for which the labour-saving use of ploughing oxen provided the backbone. Economies of scale in the form of large flocks of sheep for textile production, vine and olive orchards, and landscape modification projects would all be dependent on the ability to mobilise cereal surpluses. By contrast the Maya 'managed mosaic' would depend on intensification of maize agriculture, as well as the development of a variety of other resources, including possibly orchards for cacao.

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⁴⁸¹ With the caveat that the study of Blanton used only data from the central Mexican highlands, which is quite distinct from the Maya area in agricultural terms. But in both areas maize was cultivated and irrigation practiced, so the overall distinction holds in terms of agricultural parameters.

⁴⁸² Scarborough's (2003, 14) assertion that techno-tasking leads to greater susceptibility to collapse because of the inability of the labour force to routinise tasks between generations, is not likely to apply to pre-industrial cases of craft traditions. Furthermore, the ready comparison between pre-Columbian Maya architecture and modern Balinese farming as examples of labour-tasking (Scarborough 2008), while insightful in many ways, should be qualified given the long-lived presence of cattle as agricultural capital in Bali (Mohamad et al. 2009, 3).

In the longer term this contrast between Mesoamerican labour-tasking and Mediterranean technotasking would play itself out dramatically in the process of the European colonisation of the New World. The impact of the Spanish introduction of metal tools and especially ploughing oxen can be clearly recognised in the ethnohistoric record of both central Mexico and the Maya area (Lockhart 1992, 201; Restall 1997, 179-181). One notable argument concerning this development is that the introduction of the oxen-drawn plough greatly uprooted the agricultural patterns of indigenous communities (Wolf 1959, 198-199). While the use of the plough saved labour, it also led to lower vields and the need to feed cattle. Furthermore, it induced a shift away from indigenous communal labour relations towards a regime based on the extraction of agricultural surplus. 483 A somewhat similar pattern can be recognised for the difference between plough and hoe cultivation in 16th to 18th century Iroquois agriculture (Mt. Pleasant & Burt 2010). Such differences in the basic means of sustaining human life are not always fully appreciated in cross-cultural research, where attention often focuses more on organisational questions regarding the roles of smallholders or state bureaucracies in farming (e.g. Erickson 2006). As noted long ago by Haudricourt (1962), however, basic differences in the use of domesticated animals and plants, as well as the environments in which they were used, are also of great importance for grasping cultural differences. This is a question that will be further explored in section 9.3 as well.

While the agricultural means of production of the lowland Maya and Mycenaean cases both allowed for higher densities and surplus mobilisation, the structure and dynamics of urbanism they brought about were quite different. In a very general sense the density of Maya urban sites tends to be an order of magnitude lower than that of the Aegean Bronze Age, while the situation for rural densities is reversed almost in mirror-like fashion. There is a clear contrast here between the high-density Mycenaean urbanism and low-density Maya urbanism. In more general terms a difference in the scale and character of urbanism in Mesoamerica and Eurasia had also been noted by Kohl and Chernykh (2003, 308-309), who argued that it derived from differences in farming regimes. In the Mesoamerican case they saw involution, with higher productivity being gained by more intensive use of human labour, while in Eurasia productivity was lower but surplus could be created through labour-saving animals and technology. This more or less corresponds to the distinction of labour-tasking and techno-tasking discussed earlier. Furthermore, a comparison of Mesoamerican and Mediterranean settlement patterns also seems to indicate that different patterns of expansion were the result from basic differences in agriculture (Blanton 2004, 226-227).

Core regions in Mesoamerica show faster growth trajectories because of the ability to increase maize surpluses through labour intensification, later incorporating surrounding regions through economic (markets) and political means. In contrast to this core regions in the Mediterranean did not see very much intensification, but rather expanded through sea-based power (thalassocracy). It should be noted that the impact of naval power on the agricultural supply of the smaller-scale polities of the Bronze Age eastern Mediterranean is more questionable, hence it is better not to focus exclusively on naval power. 485 Yet there does seem to have been a relation between political

⁴⁸³ Even so, clear differences in this can be seen in the use of flocks of cattle within Maya communities and those dominated by Spaniards (Farriss 1984, 182, 278). Some of the communal uses of cattle suggest an adaptation of pre-existing communal farming patterns to these new agricultural practices.

⁴⁸⁴ These are very rough and imprecise estimates, based for Aegean prehistory on the estimation of site densities in Whitelaw (2001a) and overall densities for Mycenaean Messenia (Carothers & McDonald 1979) and Minoan Crete (Driessen 2001). For the Maya case it is based on the combination of a few LPC lowland Maya estimates and more reliable work for the later Classic period in this area, see for references the discussion of urbanism in section 6.4.2.

⁴⁸⁵ Or rather not exclusively on the importance of naval power for agriculture. It has been argued by Whitelaw (2004, fig. 13.7, p. 242) that there were two distinct (but co-existing) strategies for state formation in the Aegean Bronze Age. One of these focused on agricultural development, and the other on exchange, craft-work, and prestige objects. The latter strategy would still require the use of naval power, but this would be part of complex, long-distance economic interaction that also included mercantile activities (Knapp 1993). As noted in section 3.4, metals were very important in

economy and settlement expansion in the Mycenaean case. Here the trajectories of different regions were distinct in that core regions, especially those with palatial centres, expanded early while more peripheral regions often only developed under the stimulus of palatial influence. Although the LPC lowland Maya settlement data are not as detailed, from what is known it appears to show at least for the Mirador Basin a pattern of fast-paced and large-scale development, followed by political and economic expansion out of the confines of the basin. This conforms to the general Mesoamerican picture. The result is that Trigger's observation that the increase of commoner farmers was the key way for elites to generate more surplus (*Understanding*, 313-314) has to be qualified considerably. For such increases in the two cases studied here followed very different patterns.

The key to understanding this difference lies in the specifics of the control over land and labour. Unfortunately, unlike for the cases studied by Trigger (*Understanding*, 315-337), the evidence for Mycenaean and LPC lowland Mava landholding is not sufficient to determine whether land was owned communally, privately, or institutionally. Most likely is that in both cases there was a mix of communal and institutional ownership. 486 Yet something more can be said about the means through which surplus could be obtained. In general these means derived from the contrast between Mycenaean techno-tasking and Maya labour-tasking, even if the existence of orchards of respectively vine/olive and cacao imply that the distinction should not be overdrawn. The largescale use of teams of ploughing oxen, large flocks of sheep for textile production, as well as the landscape modification projects need to be grasped from the perspective of the political economy of the palaces. They represent an extensification of land-use geared toward the creation of surplus to be used in craft-work, as well as other purposes of the palatial elites. A complex system to facilitate the use of this surplus, and economic relations in general, can be recognised as being based on weighing, sealing, and the Linear B writing system. Before the rise of the palaces elite groups would have had central economic roles already, and there is increasing evidence that such groups played a key role in the Mycenaean economy as well, facilitated by the administrative apparatus.

There exists a clear contrast here with the LPC lowland Maya case, as basic farming activities can almost exclusively be seen as part of the social economy of households. Even intensification in the form of terraces and other works could be undertaken at this level. The only connection between this social economy and the political economy can be seen in the appropriation of labour for such tasks as the construction of monumental architecture, reservoirs, and causeways, or, in a more speculative interpretation, to support elite households. This overall pattern of a social economy more autonomous from the political one cannot be attributed to the fact that, unlike in the Mycenaean case, there are no written sources that deal with economic matters. For the storage and food preparation facilities associated with the large-scale mobilisation of surplus are also lacking. An absence of state control can also be observed for LPC lowland Maya craft-work which was organised at the household level, if also with a clear pattern of community-wide specialisation as at Colha. It should be stressed again that the inference of an absence of state control is not based on the lack of written sources, but predominantly because of the distinctive lack of centralised storage and production spaces, as well as the absence of weighing and sealing systems. Based on the betterknown later Maya societies it may be supposed that the raw materials and finished craft products were exchanged through markets.⁴⁸⁷

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Bronze Age long-distance exchange, but for the Greco-Roman thalassocracies a very different material situation existed, including the need to feed very large cities such as Athens and Rome.

⁴⁸⁶ This is based for the Mycenaean case on the *da-mo* as a landholding unit and the land-rights of office-holders of the Mycenaean state. For the LPC lowland Maya case it is based on ethnography and the patterns of land-use at the sites of Chan, El Mirador, and K'axob as discussed in sections 8.2.6, 8.2.2, and 8.2.5.

⁴⁸⁷ Although even for these later periods there are clear limits with regard to the evidence, there are few indications that a standardised system of weights was used. Instead for Classic Maya bundles there seem to have been two ways of determining value, one of goods easily quantifiable (*pih* bundles) such as cacao beans, and another of objects seen as

Because of the uncertainties with regard to markets even for the Classic period here the term 'openloop' exchange will be used instead. Such 'open-loop' economic relations extended to the longdistance exchange networks of the LPC lowland Maya, in which even small communities like Chan had access to a variety of obsidian sources as well as the highly valued jadeite. At the same time an aspect of political economy can be observed here as well, in the form of the greater quantities of precious materials mobilised by elites and their transformation of these materials into art objects with complex iconography and writing. This can be seen as a form of 'conspicuous consumption', which also existed for Mycenaean high-value materials and finished products acquired through long-distance exchange. This seems to strongly support Trigger's emphasis on the importance of 'conspicuous consumption' in early civilisations (*Understanding*, 405-406). However, as there is an important aesthetic dimension to these kinds of high-value materials and objects, his argument of their role in furthering the emergence and persistence of class and inequality will have to wait until section 9.3.7. Returning to long-distance exchange, a clear difference can be seen between the two cases in this regard. In the LPC lowland Maya case 'open-loop' exchange can be seen both for economic relations within regions and for long-distance relations, even if these were likely distinctly organised owing to the travel involved in the latter.

By contrast in the Mycenaean case a clear distinction can be observed between regional economic relations and long-distance exchange. The 'closed-loop' control of regional political economies was based on a combination of palatial administrative techniques and a form of patrimonial elite control that preceded the palaces itself. While the controlling participants in long-distance economic relations were likely also predominantly elites, there was no ultimate 'closed-loop' control over the process by any actor. Even if more work needs to be done on the role of palatial elites in such exchange, in particular for exchange between different areas of the Aegean, a basic pattern of mercantile long-distance exchange can be inferred. This broad scale of differences in Mycenaean and LPC lowland Maya regional and long-distance economic relations make it unlikely that Mesoamerican market-exchange can function as an analogy for interpreting Mycenaean political economy, as proposed by Feinman (2013b). Instead it is more useful to consider some of the key differences between the two cases. In this regard one of the conclusions of the outline of some of the distinct characteristics of Mesoamerican economies by Kowalewski is particularly instructive:

"But in Mesoamerica there is no cash in the Western sense, no piece of metal or paper that is the economic social fact par excellence. States are small, numerous, and do not have large administrative apparatuses. The state does not have the power to wrest control over the means of production by linking staple grain production to cash and controlling the money supply. Instead of bullion or state coinage, there are quasi-moneys, goods that have use-value and that in some cases people can produce. Obligatory expenditures, such as funding rituals and paying tribute, are not market behavior, but they can have important effects on the market. In the main, these social obligations act to stimulate production and consumption. But when and where markets are weak, community-level obligations can act as an alternative to or a refuge from the market." (Kowalewski 2012, 222)

It should be noted that this contrast is drawn by Kowalewski between Mesoamerican and Western economies based on coinage. As such one would expect that in the pre-coinage Bronze Age Mediterranean a broadly similar picture of quasi-moneys and exchange could be observed. This is

treasure (*ikatz* bundles) like jadeite objects (Stuart 2006, 127). Enumeration seems to have been especially important for cacao beans, if less for other goods, and this may have facilitated a currency role (Stuart 2012, 499-502). Yet one thing that is clear from the much better-known Aztec marketplaces is that in the large-scale barter going on in them there was very little in the way of a standardised measure of value (Berdan 2014, 123-128).

what should be the case if there were strongly universal patterns in economic organisation, adapted only slightly to regional particularities. The summary of key characteristics of the economic organisation in the Mycenaean and LPC lowland Maya cases in table 9.1 below, however, indicates that this is not the case. The roots of these differences may be traced to the different material conditions in the Aegean and lowland Maya areas, as well as to the different tools available for labour. In the Mycenaean world the key constitutive elements for political economy were Mediterranean polyculture, especially the cereal surpluses gained through the use of teams of ploughing oxen, and metallurgy. Systems of weighing, sealing, and writing were used to facilitate the extraction and allocation of raw materials and finished products. Even when economic activity took place in regions without states, a controlling role of patrimonial elites can be discerned. In contrast to this, the elaborate stone-based technology and the use of intensification by labour-tasking in the LPC lowland Maya case remained embedded in the social economy of households and 'open-loop' exchange networks.

Political economy in the Maya case seems to have been limited to the extraction of labour coupled with some form of taxation or tribute. 488 Given the lack of state or elite control over craft-work there would be less of a need to centralise such activities, even in certain cases where communities as a whole specialised in a specific economic task. The raw materials used to craft objects for 'conspicuous consumption' could be gained through some form of tribute or taxation on exchange activities. This can account to some degree for the recurrent pattern of low-density urbanism, given the lack of centralisation of craft-work, together with the observation that this was better suited to the necessities of intensification to adapt to very specific local conditions in the forest environment. This important difference in the scope of political economies points to an explanation of the highdensity urban places in the Mycenaean case. In themselves the agricultural techniques available in the Bronze Age Mediterranean do not demand this, but it is through the channelling of secular trends in demography and settlement that the political economy makes its mark. Not only could labour-saving devices such as teams of ploughing oxen be used to concentrate surpluses, but elite control over important kinds of craft-work also demanded some centralisation. At the same time the 'loop' of economic relations at the regional level could never be completely closed, because of the need to acquire raw materials and products through long-distance exchange. Of particular importance in this were metals, as well as other goods used in 'conspicuous consumption'.

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⁴⁸⁸ This is not so clear for the LPC lowland Maya but the Classic period provides more insights in this regard, especially for the role of captive-taking in the political economy of warfare (McAnany 2010, 273-283). Based on ethnographic and ethnohistoric work in Mixtec communities the notion of 'liturgical allocations' of resources has been proposed, as comparable to the liturgies of ancient Athens (Monaghan 2008). This would represent another hypothetical way for labour and resources to be mobilised in the LPC lowland Maya case.

	Mycenaean	LPC lowland Maya
basic surplus staple	wheat and barley, gained through teams ploughing oxen	maize, higher yields through labour input/water-works
form of urbanism	high-density, small sizes of 5,000 – 10, 000 maximum	low-density, large size, at least 10,000s
means of administration	weighing, sealing, writing	none (known)
control over craft-work	overall regulation palaces and patrimonial elites	household-based production, cases community-level specialisation
regional exchange	'closed-loop', elite control	'open-loop', possibly markets
long-distance exchange	more 'open-loop', relation palatial and mercantile elites	'open-loop', possibly long-distance traders
surplus extraction	taxes, services, tribute?	labour, tribute

Table 9.1: Overview of distinct characteristics of Mycenaean and LPC lowland Maya economies.

With regard to the differences in the economic patterns of the Mycenaean and LPC lowland Maya cases, it can be observed that materials matter a great deal more than is sometimes assumed. That is, the impact of the environment, resources, and the tools available greatly shapes the kind of economic system that can be developed. This is not to be seen in a strictly deterministic way, but can rather account for recurrent forms and trajectories. This provides some qualification for Trigger's emphasis on the organisational aspects of surplus extraction over environmental and technological parameters (*Understanding*, 404-406), even if this qualification here is admittedly based on a much smaller sample. In particular issue can be taken with his argument that the initial development of metallurgy was not of great economic significance (*Understanding*, 279-281). While it is true that tools made of metal were not very important in Mycenaean agriculture, metals did play a crucial role in warfare and 'conspicuous consumption'. 489 The systems of weighing and sealing have been closely connected with the emergence of large-scale metallurgy in the area stretching from the Indus to the Aegean in the middle of the 3rd millennium BC. All of this remained absent from the LPC lowland Maya and Mesoamerica in general, creating a very different economic pattern. Hence there seems to be reason to reconsider the usefulness of Childe's views on the relation between technology and social life based on the material differences between the Mediterranean and Mesoamerican macro-regions. This issue will be treated further in section 10.3.

Turning now to the comparison of socio-political elements, there are both convergences and divergences with regard to state form. A clear example of convergence can be seen for the geographical distribution of political centres. In overall terms this conforms in both the Mycenaean and LPC lowland Maya cases to a city-state pattern, with on-going debates about the possible hegemonic role of, respectively, the sites of Mycenae (or Thebes) and El Mirador. There are no indications that a true territorial state ever developed in the Aegean and lowland Maya areas. Instead in both macro-regions the transition would be from a city-state pattern to imperial polities, even if in the Maya case it remains unclear whether this actually did take place. In the Mycenaean case regional centres could subdue emergent small city-states or *Dorfstaaten*, turning them into administrative districts. Through this a more powerful city-state could develop, able to project its

⁴⁸⁹ This point will be discussed more in-depth in section 9.3.7 below.

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⁴⁹⁰ It has been noted that the Classic period super-states of Calakmul and Tikal in the Maya lowlands shared some generic properties with the later Postclassic hegemonic states in central Mexico (Martin & Grube 1995). But the term imperialism is not used unequivocally here for the lowland Maya case.

power also through naval forces. Later in Classical Greece such a process would result in the formation of *megalopoleis* such as Athens, Sparta, and Thebes, but in the Bronze Age the potential for demographic and economic agglomeration was limited by the available technology and means of economic exchange. As noted earlier in this section, the process of urbanisation was very different in the Maya case, as was the pattern of expansion beyond the core region.

Yet the similarities in the overall pattern of a landscape of city-states and the role of hegemonic powers within it are striking for the Mycenaean and LPC lowland Maya early civilisations. Before accounting for this pattern, however, it is also necessary to address the divergences between the two cases with regard to the element of state form. A great impact in this regard can be discerned for the differences between the writing systems of the two cases. The focus in Mycenaean Linear B on administrative matters allowed for relatively detailed insights into the different state offices, and even into their spatial distribution. Significantly, the office of kingship is also known primarily through these texts, as no consistent set of artistic representations of Mycenaean kings has so far been decisively reconstructed. For the lowland Maya case the situation is almost the reverse of the Mycenaean one, as the surviving textual record seems to address mostly religious and political ones. Even if the LPC texts are less well-understood, their properties and contexts suggest that they did not have an administrative function. As a result much more is known about kingship as part of ritual and cosmological frameworks, rather than as an office within a hierarchy of other offices that would have constituted the LPC lowland Maya state. This is true as well for the much better-known Late Classic period, for which only a few glimpses of state officers can be gleaned from the more abundant textual record (Houston & Inomata 2009, 163-192).

The impact of the differences in sources can also be seen for the element of military organisation. Whereas for the Mycenaean case the combination of Linear B, artistic representations, and the funerary record allowed for insights into the role of physical coercion in the emergence of the palatial states, this kind of evidence is lacking for the LPC lowland Maya. While there is evidence for Maya warfare from the MPC period onwards, the sources are too sparse to allow for solid inferences about its role in the emergence of states. A single discovery could completely overturn any hypothesis to be formulated. Given the large-scale fortifications at El Mirador and other sites, however, it was likely that there was a connection between labour mobilisation, the state, and the ability to pursue warfare at a larger scale. Due to the limits of the available sources the specifics of this connection remain unknown. Despite the clear constraints on the comparability of the sociopolitical elements of the Mycenaean and LPC lowland Maya early civilisations, the similarities are significant enough to warrant further explanation. Because of the reliance on artistic sources, the convergences with regard to the office of kingship in both cases will be addressed in section 9.3.6 below. Here the focus will lie on the recurrence of the city-state pattern.

The similarities in state form seem to confirm further Trigger's notion of city-state systems as a stable and recurrent type alongside territorial systems. In particular also his treatment of hegemonic city-states within such systems (*Understanding*, 113-119) seems very useful for further considering the position of the sites of Mycenae and El Mirador. The balance between the hegemon and persistent local and regional states is an important feature of such systems, and can be contrasted with the wholesale reorganisation of the political landscape in territorial states. Trigger sought to find an explanation for the recurrence of these two state types in 'information theory' (*Understanding*, 272-275). Briefly, this holds that increases in the complexity and scale of a society will demand the creation of new 'decision-making nodes' that allow for coordinating actions. It should be noted that this functionalist explanation is not the only driving force behind the sociopolitical patterns discussed by Trigger, but information theory does account for him for the recurrence of similar organisational structures. In this he seems to be broadly correct, as the

capacity of the human brain to process (social) information indicates a number of discrete levels or thresholds in organisation (Gamble et al. 2014, 40-44). These numbers range from 5 to 1,500 and recur in a wide variety of organisational forms, including notably unit sizes of different modern armies. Such work confirms and expands upon the use of information theory by Trigger.

This factor of the impact of scale on organisation is strongly universal, being rooted in basic human biology, but there are other factors as well that are more specific to early civilisations. Some of these were treated in the discussion of Mycenaean urbanism in section 3.4.2, notably the interplay between community fissioning, endogamy, and agricultural catchments. The last feature brings up the specific scale and density of early civilisations as dependent upon pre-industrial agriculture. Even if in the LPC lowland Maya case the settlement data so far has not been applied for looking at the interaction between fissioning, endogamy, and agriculture, it can at least be noted that the scale fits within the range of early civilisations (cf. *Understanding*, 120-141). At this scale state control is influenced by another parameter, that of the 15-20 kilometre radius of a day-return journey on foot. 491 This radius has been highlighted as a key threshold for the development of state administrative control, involving a qualitative change in organisation in crossing it (Johnson 1982, 415; Spencer 1990, 6-7). 492 This threshold may well lie behind the difference between city-state systems and territorial states, for in a basic sense the former remain within this boundary while the latter radically transcend it. With hegemonic city-states the geographical limit is overcome as well, but as a relation of domination rather than as the imposition of a new kind of organisational structure. The evidence points to such a pattern for the Mycenaean and LPC lowland Maya cases.

Unfortunately, the differences in the available sources, or lack thereof, on the hierarchical structures and administration of states in the two cases are such that for this they are effectively incomparable. This means that the question of the administrative frameworks of city-state systems as investigated by Trigger (*Understanding*, 197-207) must be left unaddressed in its details. Instead it is now time to turn to the last socio-political element to be discussed here, that of class and inequality. In the work of Trigger this element was interpreted by means of a strongly unitary model that focuses on a two-class system in which the upper class extracts surplus from a commoner class, using a variety of socio-political strategies to sustain this inequality (*Understanding*, 165-166). The role of kinship in this was secondary, even if it could serve as an means to prevent social mobility through the practice of endogamy by the upper class (*Understanding*, 160-165). For gender relations Trigger noted variation in traditional kinship systems that preceded the formation of early civilisations as a key factor behind the variation in gender roles between the different areas covered in his sample (*Understanding*, 186-190). Yet because of the formation of states and class systems a more uniform pattern of gender relations can be traced for early civilisations as well:

"For men broad political considerations and for women the welfare of their families acquired increasing precedence over personal interests. It was as a result of these trends that the household and the nuclear family came to be viewed as a miniature kingdom, with its male head as a ruler and women, children, and dependents as his subjects. Under these conditions, gender relations grew increasingly unequal, and female identity was subordinated to complementing male gender roles." (Understanding, 188)

⁴⁹¹ Clearly, the day-return journey radius of 15-20 kilometres is more complex in the dense forest environment of the Maya lowlands, but alongside the causeways more humble paths would have existed as well. It is also possible that, as noted in section 8.2.2, the seasonal swamps or *bajos* were used for transport purposes.

⁴⁹² The radius of 15-20 kilometre also recurs in the settlement patterns of markets and their hinterlands in a variety of pre-industrial societies (Bintliff 2002b, 214-216). Of course within such an area multiple centres may exist that are subordinated to the largest site, as were the districts of Attica to Athens and indeed the secondary centres of Pylos in Messenia. Yet this would not warrant the use of the term territorial state for this arrangement, which is best seen as a variation on the city-state pattern.

The relation between kinship and class here appears as one in which the former acts as the passive reflector of the active development of the latter. A different perspective can be seen in Adams, who explored the role of kin-based formations such as conical clans in the emergence of class systems in central Mexico and Mesopotamia (*Urban Society*, 80-94). Another observation was made by Yoffee, who noted that gender roles could be more diverse and structured also through corporate groups distinct from family groupings (*Myths*, 116-121). These differences highlight the fact that the relation between class and kinship remains underexplored in archaeology, something exacerbated by the clear limits placed by the sources on reconstructing kinship systems. This may well be one of the reasons behind the difficulties encountered in the interpretation of Mycenaean and LPC lowland Maya class and inequality. For the relation between class and kinship is likely to hold the key for understanding inequality in early civilisations, both in a political economic sense and for gender relations. Recent anthropological work that addresses this relation has considerable relevance for archaeologists (cf. Ensor 2011), as does work on the role of kinship in the process of the biological formation of early humans (Allen et al. 2008). The task here is to provide a few 'empirical handles' that could facilitate the extension of such work to early civilisations.

Returning to the patterns of class and inequality in the Mycenaean and LPC lowland Maya cases, the first issue to be addressed is that of direct exploitation. An Some Linear B references point to the existence of slavery in the Mycenaean world, but these are not unambiguous and the recorded numbers do not involve a great percentage of the estimated population. There are significant groups of (mostly female) textile-workers that depended upon rations provided by the palaces, which can be seen as a form of direct appropriation of surplus labour. Even so, these workers constitute a special group of which the broader social status remains unclear, and their position cannot be extended to other groups that existed within the framework of Mycenaean palatial administration. The situation with regard to direct exploitation is even less clear for the LPC lowland Maya case. Labour services would have been the prime way for appropriation, but the exact social mechanisms through which this was organised remain unknown for this period. This makes it impossible to qualify what 'exploitation' really meant in this case. Based on the lack of centralisation and an administrative apparatus to direct economic activities, it seems highly unlikely that direct exploitation in craft-work took place at the supra-household level. Finally, the existence of household-based slavery cannot be verified for the LPC period.

Despite the clear limits of the evidence, it does not appear that direct exploitation was the primary structuring device for class and inequality in the Mycenaean and LPC lowland Maya cases. This further confirms Trigger's finding that slavery in early civilisations was limited and involved fewer people, also relatively speaking, than in the Greco-Roman world (*Understanding*, 157), which is often taken as a template for slave-holding societies. The alternative for direct exploitation is that class relations were shaped within a variety of self-sustaining social groups, such as households, larger kinship groups, and corporate bodies. In both the Mycenaean and LPC lowland archaeological records, the best way to recognise class and inequality in such social groups is through the burial evidence. This source is supplemented by more limited evidence from settlement contexts, as well as more idiosyncratic sources like Linear B for the Mycenaean case and insights from ethnography for the Maya one. The first substantive point that can be made for this is that the basic social groups in both areas are quite different. In the Aegean the so-called modular household had already become defined as a distinct unit within the communal framework by the end of the Neolithic. By contrast the, admittedly less copious, evidence of Preclassic lowland Maya settlement points consistently to the continuing durability of extended household groupings.

Direct exploitation here refers specifically to the appropriation of the entire labour surplus except the means of subsistence (cf. Marx [1858] 1964, 86-87)

Further distinctions can be seen in the burial record. For the Mycenaean case this showed an initial focus on high-status burial monuments, with distinctions in wealth serving to differentiate persons within what can be interpreted as conical clans. Later in the period of the Mycenaean palaces it also becomes possible to see patron-client relations that involve a much greater portion of the population. Both the initial establishment of ranking in conical clans and the later broadening of hierarchy through patron-client relations depend upon the pre-condition of modular households. For it was this that made distinctions in the wealth deposited in burials meaningful, within the framework of socio-political competition between persons and the households within which they were embedded. Leaving aside the royal burials, less well-recognised for the LPC period anyway, differences in status appear to have been structured differently in the lowland Maya funerary record. Although high-value materials and objects were deposited in Preclassic lowland Maya burials, it is not easy to construe this as part of a competition between persons as in the Mycenaean case. The low number of burials and their characteristics seem rather to point to the 'curation' of ancestors. In socio-political terms this is more likely to represent an articulation of lineage within the community, an observation that is in line with the persistence of extended household groups referred to earlier.

In broad terms this contrast between the Mycenaean and LPC lowland Maya patterns is clear, even if it should also be admitted that the determination of the exact kinds of kinship systems in both cases is lacking. Unfortunately, the archaeological record does not allow precise insights into this, and therefore recourse has to be made to rather generic terms. Nevertheless, even the general contrast between Mycenaean modular households and the hierarchical clan and patron-client relations built from them and the LPC lowland Maya extended households and the articulation of lineage ancestors, can be seen to have further ramifications for interpreting class and inequality. For the Maya case lineages can be seen as the prime way to structure inequality, both internally and in terms of relations between different lineages. The appropriation of labour services would play a key role in this. This would have generated different kinds of class and gender inequality, but structured ultimately through the notion of the 'moral community' that provided a (ritual) template for social relations. In the Mycenaean case the unequal relations between households can not only be placed within local patron-client relations, but also within the administrative framework of the palaces. The analysis of personal names in the Linear B tablets and other sources indicate that parallel to the hierarchy of state offices, other relations of class and inequality could be observed. These would have been broadly shaped by the patrimonial distinctions that can be observed in the burial record.

The difference between the Mycenaean and LPC lowland Maya early civilisations for class and inequality calls into question the applicability of Trigger's notion of a strongly unitary system of class relations for these two cases.⁴⁹⁴ Instead the findings are more in line with Yoffee's recognition of the variety of social divisions in early civilisations (*Myths*, 34-38). Clearly more research is needed, especially for gender relations, but the distinctions between the two cases are of significance for the understanding of their overall socio-political patterns as well. Of particular note is the difference between the convergence of patterns of state form and the divergence of patterns of class and inequality. State form was powerfully shaped by universal patterns in the sizes of social groups, and a roughly similar scale in terms of population and human geography. By contrast while class and inequality may ultimately derive from a more universal template, their properties were very different in the two cases. This may well have something to do with the distinct features of

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⁴⁹⁴ This interpretation of Trigger relies mostly on terms for different classes as they are known from the literary sources. By contrast the analysis of the burial record usually points to a wider variety of distinct groups. Both kinds of approaches obviously have different merits and drawbacks, and should preferably be used together. Certainly, terminology alone should not be held as sufficient to understand unequal social relations, for in practical terms these terms may well have been used in very different ways. Trigger recognises this ambiguity when addressing the complications of the emic use of class terminology in his case studies (*Understanding*, 65).

economic elements discussed earlier, an idea that will be further explored for the comparison of the *longue durée* frameworks of the two cases below. At least this does seem to confirm Trigger's point that the socio-political structures of early civilisations were not only shaped by the functional constraints of information theory, but also by other kinds of factors (*Understanding*, 274).

With regard to the worldview-related elements, the most useful information in both the Mycenaean and LPC lowland Maya cases comes from the element of monumental architecture and art. This is because of the fact that many of the topics covered by Trigger in *Understanding* for this, such as conceptions of the supernatural, cosmology, and civilisational values, depend for their interpretation on the artistic record given the absence of substantial textual records that deal with these issues. As the comparison of the art of these two early civilisations will be covered in section 9.3 below, these topics will be discussed there. Here only a few brief remarks will be made for the elements of specialised knowledge, and feasting and cycles of public festivals. For the former a clear distinction can be noted between a Maya focus on calendrical issues that is visible even at small sites, and the bureaucratic world-ordering of the Mycenaean palatial scribes. Despite the limited evidence there are clues that these differences gave rise to quite distinct worldviews. Even if LPC lowland Maya astronomical texts cannot as of yet be recognised, the astronomical orientations of monumental architecture show that it was a concern already in this period. In the same way the basic ordering of geographical space in the Linear B tablets point to a basic template for ordering the world, which can be seen in much more elaborate variants in the eastern Mediterranean and Near East.

The evidence for feasting and cycles of public festivals is limited for the LPC lowland Maya case, thereby constraining the comparison with the more detailed Mycenaean information on this. The presence of feasting in the LPC period can be inferred from different kinds of material remains, and the causeways and plazas are suggestive of large-scale public ritual. Unlike for the Classic period there are no indications for a diacritical aspect of feasting so far. In its communal focus the LPC lowland Maya case parallels the distributional aspect of Mycenaean feasting. However, the 'sacred economy' of Mycenaean feasting and public festivals centred around the distribution of meat, as related to the importance of oxen and livestock in general. There is also a clear diacritical aspect of Mycenaean feasting, coupled with the role of corporate bodies such as sanctuaries. Such detailed insights are missing for the LPC lowland Maya case, even if a more generic connection between feasting and the notion of the moral community may be plausibly inferred for a small site like Chan. As a result it is not possible to gain more detailed insight into comparative insights for the element of feasting and cycles of public festivals until better data become available. This is to a large extent true for the element of specialised knowledge as well. As such, it is hard to establish a comparison of the worldviews of Mycenaean and LPC lowland Maya early civilisations, but this problem will be mitigated through the comparison of their art styles in section 9.3.

Having discussed the different sets of elements of the Mycenaean and LPC lowland Maya early civilisations, the next issue that needs to be considered is the interplay between them within the framework of the *longue durée*. Relevant ideas from comparative research on this that were discussed in section 2.4.3 are Adams' simile of 'ramp' versus 'step' trajectories and Yoffee's contention that the emergence of cities and states can be seen as 'supernovae' that restructured societies in a comprehensive way. Yoffee's theory, based mostly on the Mesopotamian case, appears to fit neither the Mycenaean nor the LPC lowland Maya case. More interesting is the distinction between 'ramp' trajectories of more gradual development and 'step' trajectories of more rapid, discontinuous development. It can be useful for the following discussion to summarise here Adams'

In both areas many key elements of the fully-developed early civilisations were already present in more basic forms prior to their emergence. The notion of a 'supernova' like emergence of states and cities thus hardly fits, except in the case of the Shaft Graves (but there was no concurrent development of urbanism coinciding with this).

main findings (*Urban Society*, 171-173). First of all, different features can develop in different ways, with monumental architecture and art following a more step-like trajectory, while a ramp one can be seen for the emergence of classes, elite control, and economic interaction. Secondly, a close parallel can be seen between homotaxial phases of development, moving from theocratic polities to militaristic ones, and finally to conquest states. Adams also argued that the Mesopotamian case followed the ramp model closely, while the central Mexican one was seen as more step-like, if not completely so owing to more discontinuity between periods.

Adams' notion that Mesopotamia followed a ramp-like trajectory and central Mexico a step-like one reverses the original formulation by Braidwood and Willey for Old and New World development, as noted in Adams (1963, 407). They argued that Mesoamerican trajectories, and Andean ones as well, were more gradual because monumental architecture and ceremonial centres emerged here already before the earliest cities and states, while in Mesopotamia the crucial changes occurred together in a much shorter time period (Braidwood & Willey 1962, 350-352). The reversal in Adams' work is likely due to his exclusive focus on the 'culture core' of societal organisation, even if he doesn't address the difference between his position and that of Braidwood and Willey. It is not surprising, perhaps, that the use of a wider set of elements here makes for a pattern that more closely resembles that of Braidwood and Willey, with the Mycenaean case following a step-like pattern and the LPC lowland Maya case a ramp-like one. The main point here, however, is not to return to these positions to seek to prove the accuracy of one over the other, but rather to build upon these debates by using the findings of the present case studies. In order to do so it is useful to develop further Adams' point that different features can develop in different ways and at different speeds. Furthermore, even if he emphasised the unitary model of the 'culture core', Adams also recognised idiosyncratic patterns in the two cases compared by him, which are listed in table 9.2 below.

Mesopotamia	central Mexico	
compact area settlement patterns, resulting in a more unified culture	smaller, dispersed valley enclave settlements	
primacy urban loyalty over ethnic identity	continuity in mobile ethnic groups, rather than loyalties urban centres	
continuity occupation in the major centres	n/a	
innovation in craft-work, cumulative pattern of technological development	more static in a technological sense	
administrative mechanism in economy	focus on horizontal economic integration through markets, little evidence administration	

Table 9.2: Idiosyncratic patterns Mesopotamia and central Mexico, based on (Urban Society, 174).

Some of the elements listed in table 9.2 are suggestive with regard to the different trajectories of Mesopotamia and central Mexico. In particular the differences in settlement patterns and economic means of integration could have played a role in this. However, in being so focused on the 'culture core' and homotaxial development, Adams never explored the causal connections between these more idiosyncratic patterns of his two cases. ⁴⁹⁶ The aim here is to do precisely that for the *longue durée* frameworks of the Mycenaean and LPC lowland Maya early civilisations. Recalling the discussion of the different kinds of elements earlier, the clearest distinctions could be recognised for

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⁴⁹⁶ Instead there was the homotaxial scheme of a sequence of theocratic states to military ones, and finally to conquest states, as discussed in sections 2.4.3 and 6.2. This scheme cannot be recognised for the two cases discussed here.

the economic elements, as well as for that of class and inequality. It is useful to summarise the key characteristics of these elements here:

- 1. First of all, from the comparison of the elements of the agricultural means of production and urbanism it was clear that patterns of growth and settlement expansion were very different in the Aegean and lowland Maya areas. In the latter case intensification could occur widely, including in small communities outside the direct control of states. Core regions could later incorporate other regions through political and economic means, but as a secondary process after the initial growth through intensification. By contrast in the Mycenaean case both the ability to create staple surpluses at a large scale and the initial, primary process of the expansion of the core regions has to be understood within the context of political economy.
- 2. Secondly, economic relations at both the regional and long-distance levels were structured very differently in the two cases. In the Mycenaean case a nexus of weighing, sealing, and writing facilitated an over-arching administrative system, albeit one in which different kinds of social sub-divisions could exert agency as well. In the LPC lowland Maya case no similar over-arching system can be discerned, with distribution patterns of raw materials and goods indicating more 'open-loop' exchange networks.
- 3. Finally, with regard to class and inequality important differences can be observed as well. The emergence of modular households at the end of the Neolithic in the Aegean allowed for the kind of competition that lies at the basis of the hierarchical relations of conical clans and patron-client structures. The persistence of extended household groupings in the Maya case can be placed alongside the articulation of ancestry and lineages, within the overall framework of the 'moral community'.

Alongside these very distinct patterns, a clear similarity could also be observed between the two cases with regard to state form. It is precisely through looking at the *longue durée* framework that the causal factors behind such differences and similarities can be teased out. For the Mycenaean case this framework can be seen as as a set of transformations that can be characterised by distinct kinds of patterns between economic, socio-political, and worldview-related elements. This can be seen for the Late Neolithic, the Early Bronze Age, the Shaft Grave era, and of course the period of the Mycenaean palaces. The emergent palatial states were built upon these preceding eras, but at the same time comprehensively re-ordered the different elements within a new constellation. In this sense there was an unitary line of development, even if not all regions participated in it to the same extent. It can be argued that such unity derived from the centralising tendencies inherent in the economic patterns, together with the ability to develop class systems based on the competition between modular households. The ordering mechanism that was the state did not only coordinate the different elements in a more hierarchical way, in so doing it also transformed them. The pattern that emerged after the palatial states in LH IIIC again provided a reorientation of elements rather than a return to a more elementary pattern. Such transformations of the framework of economic, socio-political, and worldview-related elements can in fact be seen as characteristic for the post-Bronze Age periods as well. 497

Such a path of a more unitary set of transformations in the *longue durée* cannot be discerned in the Maya area, where changes have to be conceptualised in a different way. The basic features of agricultural intensification, economic relations, and class and inequality discussed earlier can already be seen at the level of communities early in the Preclassic period, long before the first states emerged. Furthermore, the limited scope of the political economies of LPC lowland Maya states

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⁴⁹⁷ As will be explored further for the agency of art in section 9.3.6. No technological or economic determinism should be inferred for this, however, as major developments such as the transition from Greco-Roman and Near Eastern polytheism to Christianity and Islam are not derivative of a specific kind of technological or economic change.

meant that the basic patterns of communities were impacted but not comprehensively transformed. This does not mean that the lowland Maya *longue durée* was one of stagnation, as in the classical Marxist conception of the Asiatic mode of production. For example, later in the Postclassic period both metallurgy and elaborate marketplaces developed here. The expansion of states would have created different conditions for communities, just as their collapse would have. The communities themselves were also not static entities, as the case of Chan showed. These changes, however, did not take place as part of a more unitary process of transformation. Instead state and community would have co-evolved, leading Mayanists to perceive recurrent themes such as the segmentary character of states and a tension between 'kinship' and 'kingship'. This constitutes a different long-term dynamic than that of the Aegean, if not to be seen as its polar opposite. The basic reasons for this derive from the distinct patterns of economic elements and of class and inequality.

What then about the similarities of Mycenaean and LPC lowland Maya state forms, which as noted earlier show considerable similarities. As discussed in section 2.4.3, Adams saw a strongly homotaxial process of state formation in Mesopotamia and central Mexico. The two cases discussed here may indeed have followed a broadly similar step-like pattern in overcoming the numerical thresholds of organisation referred to earlier. One problem in ascertaining this is that the chronology of the Preclassic lowland Maya is not refined enough to study state formation with the same temporal resolution as is possible for the Mycenaean case. In any case another point to be made is that the appearance and character of the organisational forms of states should not be conflated with early civilisations as a whole. In the final analysis it is necessary to incorporate the *longue durée* frameworks of the areas, as well as the broader social fields that surrounded them. Kohl and Chernykh (2003, 311) have pointed to the role of metallurgy and the resulting cumulative and episodic character of technological innovations as having a key structuring impact on trajectories in Eurasia. Together with differences in agricultural technologies and economic relations this may well be one of the reasons why more step-like developmental patterns can be observed for the western part of Eurasia. The comparison of the two cases here seems to support such a thesis, but both cannot automatically be taken as exemplary for the social fields within which they were embedded. To further investigate the matter either the number of comparative cases should be increased or alternatively the size of the geographical areas they cover. 498

9.2.5: Comparing Mycenaean and Late Preclassic Maya early civilisations

A key lesson to learn from the comparison of the Mycenaean and LPC lowland Maya early civilisations is the primacy of 'basic level' work over 'high-level' theoretical ideas. This can already be seen in the fact that the discourses of colonialism, imperialism, and nationalism did not prove very formidable obstacles to comparison. This does not mean that the effects of such discourses should not be taken into account, for they can greatly impact research in their specific contexts. Rather, it means that even a very modestly sized 'world archaeology' can appropriate the records from different macro-regions, if it uses a source-critical approach, without being prevented in this by the discourses prevalent within them.⁴⁹⁹ Another finding is that the different conceptual

⁴⁹⁸ Some indications that this pattern can be applied more broadly can be seen in a cross-cultural statistical analysis of long-term trajectories, as this shows a correlation between metals, the state, classes, and settlements larger than 400 persons (Peregrine et al. 2004, 148-149). In particular the trajectories in which metallurgy developed do seem to show a recurrent step-like trajectory (Peregrine et al. 2004, fig. 2, p. 147). Of course at this level of analysis it is not easy to trace the causal connections between elements. It may be more useful to return to the cases studied in Trigger's *Understanding*, in order to trace the long-term trajectories in relation to the structural patterns discovered through his 'synchronic-comparative' approach.

⁴⁹⁹ Of course this is greatly facilitated by the fact that in both the Aegean and Mesoamerica there is a fairly strong internationalist dimension to archaeological research, with specialists from many different countries collaborating on complex field projects and research questions. In areas where such collaboration is absent it is likely that the literature upon which comparative research depends would be less accessible.

frameworks behind the chronology and terminology of the prehistoric Aegean and lowland Maya areas do not necessarily obstruct their comparison. Although the chronotopes of analysis and synthesis differ considerably between the two areas, this can also be related to the different *longue durée* frameworks of the Mycenaean and LPC lowland Maya cases. While it is important to consider the impact of different chronotopes on interpretation, there is no reason to suppose that the terminologies of culture history adopted early on in the archaeological traditions of both case study areas has created self-contained units that are incomparable. They can instead be seen as terminological shells that contain chronological content shaped by constant empirical work. As a result it has also proven possible to use theoretical models very different from those of culture history, such as processual archaeology and *Annales* school history.

Turning to the differences in sources, it is clear that the distinct writing systems of both cases allows only for specific kinds of interpretations, as in the Mycenaean focus on administration that was lacking in the Maya case. However, by using a variety of sources it was still possible to compare economic elements in-depth. For some elements the properties of the available sources either preclude comparison because the data is too meagre, or provide a great challenge to it as the kinds of interpretations allowed by them differs significantly. This latter aspect will become particularly clear for the discussion of art in section 9.3 below, but it can also be seen for regional projects in the Aegean and lowland Maya areas. The combination of survey and excavation that allowed for an indepth understanding of Preclassic Chan was used to contrast this site to El Mirador. Through this the *longue durée* framework of LPC lowland Maya early civilisation was elucidated. It was noted in section 9.2.3 that a Mycenaean counterpart of Chan was lacking, so it might well be asked what the impact of an equivalent set of information would be for the Mycenaean case. For example, partial excavation would likely result in a quite different picture of a long-term prehistoric sites such as Sambariza Magoula in the southern Argolid, now known only through the surface collection of ceramics (Jameson et al. 1994, 484-485). 500 This would allow for much greater insights into the longue durée trajectories of communities outside the palatial core areas, with the ability to draw contrasts with palatial sites like Mycenae and Pylos.

The impact of such evidence would likely lead to important qualifications in the framework of the *longue durée* of Mycenaean early civilisation. In the same way it can be said that if the ability to recognise regional settlement patterns in the same way as in the Aegean were to be available in the Maya lowland area, it would be possible to trace the relation between these patterns and state formation in the same way. At the same time it is unlikely that such potential convergences in data and method would lead to the disappearance of the structural differences between the two cases outlined in section 9.2.4. The information available for smaller Mycenaean sites does not indicate that they shared so many characteristics with palatial sites as observed for the relation between the sites of Chan and El Mirador. Furthermore, the added information from a site like Sambariza Magoula would add significant texture to the overall picture, but it is unlikely to be able to overthrow the causal nexus behind the *longue durée* of Aegean prehistory as reconstructed from a diversity of sources. These concluding remarks point to the usefulness of using a source-critical

⁵⁰⁰ This site is particularly notable because the ceramic sample shows that it had some occupation in all the periods from the Final Neolithic/Early Helladic to the Geometric/Archaic period (Runnels et al. 1995, 275-279). This constitutes a period of over 3,000 years, comparing favourably to the more than 1,500 years of Chan. The site is of some prominence, and the AEP project team identified it with Homeric Eiones (Jameson et al. 1994, note 1, pp. 58-59).

⁵⁰¹ It is unlikely that anything that could be learned from an in-depth investigation of Sambariza Magoula would go against the recognition of the centrality of the nexus of weighing, sealing, and writing in administration and economic relations, both regional and long-distance. It could well reveal more evidence for economic activity at the lower scale of the settlement, and outside the direct hinterland of the palaces as well, but the character of economic relations at the macro-regional level would not change. What would change would be the conception of the relation between the palatial centres and the peripheral sites.

approach to comparing early civilisations. Not only can an evaluation of the comparability of cases improve the reliability of the comparison, it also allows for the ability to question 'high-level' theoretical ideas based on 'basic level' datasets. It enables the Mycenaean and LPC lowland Maya archaeological records to 'talk back', and for modifications as new discoveries are made, rather than drawing them into questionable analogies.

9.3: Comparing the art of the Mycenaean and Late Preclassic lowland Maya early civilisations

9.3.1: Introduction

In this part of the chapter the comparative analysis of the art of both case studies will be treated, starting with the basic issue of their comparability. This will be treated in the first section (9.3.2), and involves, apart from the basics of the material remains themselves, a number of other factors that pertain to the interpretation of Mycenaean and LPC lowland Maya art. After this the three main analytical categories of metaphor, semiotics, and praxis will be used in successive sections (9.3.3, 9.3.4, and 9.3.5) to compare the art of the two cases. This builds up the argument in the same way as for the synthesis of the agency of art of the individual cases themselves (in sections 5.3 and 8.3, respectively). The more empirical themes of material forms, craft and materiality, iconography, and contexts of art support the arguments presented, but in order to keep the analysis focused they will not be considered separately. The comparison of the three analytical categories forms the basis for the consideration of the agency of art in both early civilisations in section 9.3.6, which is investigated in a two-step approach. The first step involves the synthesis of art itself through the three analytical categories, while the second one uses that synthesis in order to connect the element of art to the general interpretation of the Mycenaean and LPC lowland Maya cases. Finally, in section 9.3.7 the implications of the comparison of art of the two cases for general ideas about forms of agency of art in early civilisations will be discussed.

9.3.2: The comparability of Mycenaean and Late Preclassic lowland Maya art

The basis for any comparative study using archaeology logically consists of the material record, in this case the material forms of Mycenaean and LPC lowland Maya art outlined respectively in tables 4.1 and 7.1. The common occurrence of such notable forms like wall-painting, figurines, and finely crafted jewellery, provides some reassurance that a convergence can be seen in both cases, although as we shall see in the next section there are many significant differences. Here the concern is with the impact of the distinct materials and taphonomic conditions on differential survival rates of art objects in both areas. Of particular importance in this is the fact that no metals and vitreous materials were used by the LPC lowland Maya, and also that the tropical environment within which they were located was not very suitable for the survival of materials such as wood, textiles, and quetzal feathers. As a result, it would seem that the Maya record consists of a more uneven sample of the art objects originally present, because of its greater susceptibility for degradation, than the Mycenaean record despite this being more than a thousand years older. For monumental art forms this seems to form less of a problem, perhaps not very surprisingly so, given that large-scale architecture demands the use of durable materials.⁵⁰²

Given that Classic Maya depictions and other sources indicate the importance of textiles and quetzal feathers, the disparity may be greater for portable art objects. Yet, while the Mycenaean case shows a greater diversity of such objects, there are also durable materials such as shell and jadeite that were used to craft such objects by the LPC lowland Maya. These materials would on average have

⁵⁰² An exception of course would be formed by wood, especially as it would potentially have been used for stelae and statues, but this material has 'conveniently' rotted away with more or less equal measure in both areas.

had better chances of surviving than Mycenaean metals as they cannot be melted and reused. Hence some degree of comparability is retained also for these kinds of material forms. ⁵⁰³ In overall terms the material records of the art of both early civilisations are similar enough to make a comparative study possible, taking into account various qualifications. Furthermore, in both areas scientific techniques are increasingly used to study the characteristics of art objects and the materials from which they were made. This represents a convergence not only with regard to the data itself, but also for the use of similar modes of analysis like the *chaîne opératoire* approach. Moving beyond the basic properties of the material record, the other sources used to make sense of the respective records are more different, however, causing Mycenaean and LPC lowland Maya art to be interpreted in somewhat different ways.

Before turning to these sources, it is also necessary to note that the meta-issues regarding interpretation are quite distinct in the two cases. The debate on the role of modernism in grasping Aegean prehistoric art is mostly lacking in the Maya case. This is not because there was no interaction between modernism and pre-Columbian art, for this was intensive and played a positive role in the recognition of this art as worthy of serious attention (Pasztory 2005, 122-123). In this way pre-Columbian Mesoamerica became part of the modern unconscious, converging with the prehistoric Aegean in this sense but in a very different way. The case of the Maya very much participated in these developments (Lerner 2011), but the impact of modernism on the interpretation of its art is not a subject of significant research. It might have been otherwise, however. One of the strangest parallels between Aegean prehistory and Maya archaeology is that both at one point were dominated to an extraordinary degree by British scholars, both with tenuous links to the university, who formulated highly influential interpretations. The Maya counterpart to the Aegean's Arthur Evans was Edward Thompson, who had developed a model of Classic Maya civilisation as a peaceful theocracy ruled by priest-kings mainly interested in astronomical questions. The

This idyll was cut short by the decipherment of the Maya script, the impact of which will be discussed shortly, which revealed a society that was far from a peaceful theocracy. Maya archaeology has seen little need to return to the pre-decipherment interpretations, despite some continuities in iconographic analysis (Corbey et al. 2004, 370-371). One implication of this is that the relation between archaeology and modernism as a cultural movement can be addressed more critically than in the Aegean case, as the cultural context is better understood. The conflation between modernism and the work of Evans who was no real modernist himself in the sense of being part of the avant-garde, as noted in section 5.1.2 (neither was Thompson), in some reception studies in Aegean prehistoric archaeology can be avoided in the Maya case. The most important aspect of the decipherment of the Maya script, however, lay not in discrediting certain ideas but rather in its impact on generating new insights in pre-Columbian Maya culture. This is particularly true for the Classic period with its now abundant corpus of deciphered texts, but the sparser and less well-

⁵⁰³ As argued for by Leach (1976), however, there is considerable redundancy in cultural systems with information being communicated in a consistent way across a variety of media.

⁵⁰⁴ Two exemplary figures in this sense can be recognised in Freud for the prehistoric Aegean (Gere 2009, 153-171) and Eisenstein for the Maya (Lerner 2011, 120-143). It is interesting to note in this regard how Freud used a layered model to trace back the contemporary Western psyche to its prehistoric roots, while the Maya of Eisenstein are seen as 'aoristic', existing in a forest environment outside of the main course of history (which for Eisenstein carried no intrinsic negative meanings). Examples such as these make it very worthwhile to go back to modernism, for it reveals the psychological interface with the past more clearly and creatively.

Thompson, for the idea goes back to the 19th century (Miller 1986, 5-9). It can be understood as part of the idea of a general Mesoamerican (even New World) contrast between the peaceful theocratic cultures of the Classic period and the militaristic states of the Postclassic (Willey & Phillips 1958, 204-205). In the time in which these ideas enjoyed widespread currency, features in the mural art of Teotihuacan that can be related to war or violence in general were likewise not interpreted as such (Pasztory 1997, 19-29).

understood Preclassic texts can give some basic insights into semiotics as well, as discussed in section 7.4.3. The textual and iconographic evidence also allows for a more solid way to evaluate the use of ethnographic and ethnohistoric sources for interpreting pre-Columbian Maya worldviews. The added information from these textual sources has also made it possible to grasp the contextual meaning of recurrent iconographic motifs better for some periods.

All of this should not be taken as implying a static, essentialist long-term Maya worldview. Instead it is possible to view the recurrence of images and ways of phrasing words as part of a process of memory-work, which in some ways persists even today. The situation for the Mycenaean case is very different, since indigenous textual sources only play a small role in the interpretation of art and ethnography plays no role at all. Instead iconographic and textual evidence from contemporary Late Bronze Age early civilisations in the eastern Mediterranean and Near East can be used to gain more insights into Mycenaean art. A general contrast between 'vertical' connections for the Maya case and 'horizontal' ones for the Mycenaean case was already noted in section 9.2.3, and some of the causal factors behind this were explored in the discussion of the *longue durée* framework of both early civilisations in section 9.2.4. The matter will again be discussed for art specifically in section 9.3.7, as a similar tension can be noted between the character of the sources and the substantive findings of the comparison of the two cases. Another aspect to consider when comparing Mycenaean and LPC lowland Maya art is that of the different levels of synthesis induced by the distinct chronological frameworks. As discussed in section 9.2.2, a focus on individual sites could be noted for the Maya area, in contrast to an Aegean emphasis on regional and macro-regional contexts.

This is especially true for accounts of Maya art, which are often presented in-depth at the site level, as can be seen for the cases of Copán (Fash 1991), Yaxchilan (Tate 1992), and Quirigua (Looper 2003), to name just a few. Compared to these in-depth accounts, macro-regional overviews of Maya art tend to have a more encyclopedic character (e.g. Miller 1999). This does not mean that synthetic accounts at the macro-regional level do not occur for the Maya, including for art, 506 but the importance of site-level synthesis remains. In the Aegean substantial synthetic work in the form of monographs with a considerable interpretive component rarely takes place at the site level. Instead treatment often focuses either on specific periods or, more usually, on specific themes or material forms over larger geographical areas, as can be seen for Aegean seals (Crowley 2013), wall-paintings (*Aegean Painting*), dance and ritual in Minoan and Mycenaean art (German 2005), and depictions of fantastic creatures in Crete (Zouzoula 2007). Of course, some analysis does take place at the site level, as for Pylos (McCallum 1987) and Akrotiri (Palyvou 2005a), 508 but the greatest interpretive weight can be found at the macro-regional level. This difference in the spatio-temporal focus of synthesis in Aegean prehistory and Maya archaeology can be understood to

⁵⁰⁶ Of particular note in this is the analysis of long-term cyclical trends in art styles across Mesoamerica and the Andean is the work by Willey (1991, 1999), later added to by Marcus (2007). There are also the 'international styles' in the art of Postclassic Mesoamerica that has received much debate (e.g. Boone & Smith 2003). Yet these discussions of overarching styles are a second step, after the establishment of site-based chronologies.

⁵⁰⁷ The exception of course being Knossos, where the monumental work of Arthur Evans laid the foundation for the kind of chronotope that is being discussed here, and which even in the face of antagonism with other scholars over the position of Crete relative to the mainland was applied at an Aegean-wide scale (McNeal 1973, 1975).

⁵⁰⁸ Even for Akrotiri on the Cycladic island of Thera the focus to connect to other Aegean regions can be seen in many studies, and for good reasons. An excellent overview of the art and architecture of the site demonstrates this, as in its final synthesis it strives primarily to situate it within its macro-regional context, as expressed in the following way:

[&]quot;It is important to remember that all this took place at a time when Crete was going through major reforms. The archaeological data speak of a proliferation of palatial privileges in the towns and of rich rural installations in the countryside. In this process Thera, though outside Crete, is not only present from the very beginning, but receives a distinctly large portion of the pie that gives her an almost privileged place by the side of Knossos itself. This is the archaeological assumption; the political and historical implications are a much more complex issue that needs to be evaluated through a comprehensive and multivariable study." (Palyvou 2005a, 187, emphasis added)

derive, at least partially, from the chronological frameworks of both areas.

The impact of this difference can be seen for the organisation of the discussion of the element of contexts of art for the Mycenaean and LPC lowland Maya cases, treated respectively in sections 5.2 and 8.2. Whereas for the Mycenaean contexts of art a thematic division was made between public ritual, warfare and elite culture, and the relation between the human and natural worlds, its Maya counterpart was based on the separate treatment of five sites. This difference was not intentional, for the initial plan was to use a thematic division for the contexts of LPC lowland Maya art as well. Ultimately, however, this thematic approach did not prove satisfactory and was pragmatically abandoned in favour of a site-based analysis that accommodated the available evidence better. Given the focus in this thesis on providing a synthetic account of art, it is likely that the different way of discussing the contexts of art in the two cases was influenced to some degree by their distinct chronological and terminological frameworks. Of course, as could be seen for the discussion of both early civilisations in general in section 9.2, the specifics of the record itself may be just as important in this as the interpretive framework that was used. For this reason the question will be discussed again in 9.3.7. There the findings of the comparison of Mycenaean and LPC lowland Maya art will be used to address the potentially distorting impact of the available sources and interpretive frameworks on synthetic accounts of art in both areas.

9.3.3: Comparing the metaphors of Mycenaean and Late Preclassic lowland Maya art

As noted at the beginning of the previous section, there were notable similarities and differences between the material forms of Mycenaean and LPC lowland Maya art. For the discussion of metaphor as an analytical category, however, it is not the material forms in themselves that are of interest but rather how they relate to forms of agency of art. Therefore the basic properties of material forms will not be compared in-depth here in terms of their technical characteristics. Even so, a number of general points should be noted concerning the material forms of art of the two case studies, based on the information contained in tables 4.1 and 7.1. The first of these points concerns the great similarity in the generic material techniques used to create art, including painted plaster, pottery, stone carving, weaving, and chert and obsidian knapping. The one great difference in this regard is the use in the Mycenaean case of pyrotechnology for the transformation of materials, as can be seen for metallurgy but also for vitreous materials. Another point concerns the greater number of Mycenaean material forms of art compared to the LPC lowland Maya case. This can be partly attributed to the ability to create more forms through metallurgy and vitreous materials, but factors such as the basic availability of a range of materials and the different impacts of long-distance exchange may have played a role in this as well.⁵⁰⁹

The third and final point concerns the greater emphasis on instruments in the Mycenaean case. Again, the impact of metallurgy may have played a role in this by allowing for the creation of a greater variety of instruments than is possible with stone and obsidian. However, it is also possible that there were functional reasons for this difference, as in the use of seals in the Aegean for administrative purposes. These three differences of the Mycenaean use of 'transformative pyrotechnology' for metals and vitreous materials, and of its greater number of forms and use of instruments compared to the LPC lowland Maya case, are basic but fundamental. As such, they need to be constantly remembered for the more elaborate comparison of the role of metaphor in the art of the two case studies. Turning now to the discussion of metaphor proper, the first issue to

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⁵⁰⁹ Sitting at a pivotal position between Europe and the Near East allowed access to a wide variety of very exotic materials such as amber and ivory, the lowland Maya area was more limited in terms of access to far-reaching regions. ⁵¹⁰ This is of course not to deny the usefulness of these materials, even today as can be seen in the applicability of obsidian scalpels for certain kinds of medical operations.

consider is that of the basic relations between material forms of art in both cases. Again, the different materials used in Mycenaean and LPC lowland Maya art have some impact on the comparability of cases in this regard. Furthermore, the insights from Maya ethnohistory and ethnography are lacking in the Mycenaean case, limiting the scope of comparison. Nevertheless, it is possible to recognise basic patterns of skeuomorphism that are of relevance to the understanding of the role of metaphor in the art of the two cases.

In the Mycenaean case the notion of 'naturalistic skeuomorphism' or the imitation of natural features in wall-painting was important, since as noted in section 5.2.4 it formed part of a broader naturalistic 'background' in architectural settings. As argued in section 5.3.2 this wall-painting background can be understood as a metaphoric 'connector' between the architecture in which it was deployed, from storeroom to throne room, and the physical world surrounding the architectural structures. Parallels to the use of patterns of skeuomorphism as the basis for metaphor can be seen in LPC lowland Maya art. Here, as noted in section 8.2.5, recurrent surface patterns can be seen on different material forms that are akin to 'quotations' from one material to another. In contrast to the Mycenaean case, however, this skeuomorphism seems not so much to incorporate the physical environment but rather to be contiguous to it. Good examples of this can be seen for the relation between stelae and naturally-occurring rock, but especially for the term ts'ib as denoting surface patterns as they occur in natural settings and in artistic representations, as discussed in section 7.3.3. It should be considered that the interpretation of ts'ib was facilitated by ethnographic work, while the Mycenaean case is interpreted purely on the basis of the archaeological evidence. Even so, the kind of metaphoric connections that can be made on the basis of these patterns of skeuomorphism still seem distinct enough to warrant further investigation.

This distinction in patterns of skeuomorphism raises questions with regard to the broader frameworks that shaped metaphor in Mycenaean and LPC lowland Maya art. For the Mycenaean case use was of the work of Descola (2013) to account for this in section 5.3, where specifically the notion of an 'analogical schema' of ontology was discussed. This allowed for grasping not only basic metaphors in skeuomorphism, but crucially also a broader set of metaphoric relations between different phenomena in Mycenaean art. Yet the analogical schema as initially formulated was based partly on the study of Mesoamerican ontology (Descola 2013, 207-221). This raises the question of how both the Mycenaean and Maya cases can be grasped according to the analogical schema, while at the same time their basic patterns of skeuomorphism seem very distinct. In order to address this question it is necessary to explore the background of Descola's work in more detail. The basic impetus behind his work was to understand the relations between phenomena, both human and nonhuman, as structured by recurrent, cross-cultural schemas, rather than as part of either universal or culturally idiosyncratic patterns. Such schemas function as intermediaries between unconscious individual psychology and conscious collective belief systems, and are 'internalised' through practical activities as part of a form of life (Descola 2013, 96-101). 511

Although a variety of specialised schemas can be noted, the integrating schemas that connect them and allow for innovation through the development of new connections are more important (Descola 2013, 104-105). The most general schema is that of identification, which serves to recognise the relation between self and non-self in terms of interiority and physicality (Descola 2013, 115-116). Interiority here refers to intentionality and notions like the soul and consciousness are associated

⁵¹¹ Such kinds of tacit knowledge gained from practical experience is likened by Descola (2013, 100-101) to the building-up of connections between neurons in the brain as well as to 'connectionist' models of artificial intelligence. This seems corroborated by recent work on the impact of carrying out certain kinds of activities on neuronal patterns that are developed in the brain (Bintliff 2005b; Mithen 2010). Of course, it should be stressed that these are patterns acquired by individuals in social learning processes, and cannot be seen in any way as biologically hereditary.

with it, while physicality refers to the substantial, including form and physiology. ⁵¹² Based on whether physicality and interiority are seen as similar or dissimilar between different phenomena, it is possible to recognise distinct schemas of identification. For example, in 'naturalism' it is physicality that is similar between phenomena while their interiority is distinct, ⁵¹³ and this can be situated along other possible schemas (Descola 2013, fig. 1, p. 122). In the case of the analogical schema of special interest here, both interiority and physicality are dissimilar between phenomena. This creates an abundance of multiplicities, which are related to each other in a dense network of analogies. Descola also considers why this analogical schema recurs in different cultural contexts far removed from each other, focusing in particular on the social dimension of identification:

"Analogical collectives are not necessarily empires or statelike formations. In fact, some, as the case of the Chipayas testifies, involve quite modes numbers of human beings who know nothing of stratifications of power or disparities of wealth. Nevertheless, what they all share in common is the fact that their constituent parts are arranged in hierarchical order, even if only at a symbolic level with no direct political consequences. The hierarchical distribution is in many cases repeated within each segment, thereby marking out subgroups that find themselves in unequal relationships similar to those that obtain between units at a higher level." (Descola 2013, 273)

Descola's work is highly useful, and more use will be made of it in section 2.3.6 for comparing the agency of the art of the two cases. This work can be used to account for the metaphoric associations that derive from the basic patterns of skeuomorphism in Mycenaean and LPC lowland Maya art. Yet at the same time these metaphoric associations are quite distinct in terms of the kinds of connections they make, as discussed earlier in this section. The incorporation of natural features in Mycenaean art is different from the lack of a conceptual distinction between certain kinds of natural and artistic patterns in the Maya case, even if both are used to represent analogies between different phenomena in the world. It should be remembered that Descola sought to identify cross-cultural schemas, not universal or culturally idiosyncratic ones. One aspect largely ignored by him, however, is that of history. The long-term historical trajectories of macro-regions may have exerted a more structuring role on his schemas of identification than Descola allowed for.⁵¹⁴ In fact, he pays very little attention to the long-term persistence of schemas of identification in different areas of the world. Here reference can be made instead to the historical process of building up a 'stockpile of mimetic intuitions' through language, as discussed in section 2.3.7. Although such 'stockpiles' ultimately would derive from the intermediary schemas of identification between individual psychology and collective representations, they also play a structuring role in the forms of life that greatly shape the

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⁵¹² Descola (2013, 121) notes that while a dualism between nature and culture seems more unique to the modern West, the distinction between interiority and physicality recurs more strongly in a cross-cultural sense.

solution 4.4.1 the term naturalism is here used as the culture-specific stylistic rendering of the physical world as based on human vision. This is in contrast to Descola's use of the term naturalism for an ontological schema. Yet there are some inherent problems with Descola's usage of this term, for as he himself shows it is the separation of nature and culture that sets up the latter as a distinctly autonomous sphere as well (Descola 2013, 72-78). Hence it would have been just as possible to speak of 'culturalism' as it is to speak of naturalism. This is not the place to discuss the ontological schema of the modern West, merely to note why the term naturalism to describe it seems incomplete and insufficiently robust to change more established meanings of the term as they are used here.

⁵¹⁴ Anthropologists by virtue of using ethnography as a field method tend to be somewhat optimistic of the ability to transcend cultural and historical boundaries. Perhaps something like this is behind the notion that the Spanish conquest of Mexico and adjacent areas represents an encounter between two analogical modes, with the analogical worldview of the Spanish allowing them more direct insights into that of the Aztec than is possible for modern scholars (Descola 2013, 208). Apart from the book burning activities of the conquerors (which might after all have been based on 'insights'), this also ignores the role of historical and tradition-shaped prejudices that can shape the perception of other worldviews and their art (e.g. Pasztory 2005, 119-122). In fact it is through the use of modern scientific techniques and the checks on prejudices of modern scholars that the 'mysteries' of the Aztecs can be revealed, as can be seen in a recent scientific analysis of the materiality of the colours used in Sahagun's account of their world (Wolf & Connors 2011).

kinds of cognitive processes through which schemas of identification are acquired. 515

As such, a dialectical relation exists between the analogical schema of identification and the specific macro-regional, long-term pattern within which it was embedded. The reasons behind this relation will be explored in section 9.3.6 below. Here the concern is with elucidating the different kinds of metaphors of Mycenaean and LPC lowland Maya art, within the overall context of the use of an analogical schema of identification in both cases. Two sets of metaphors will be discussed in particular, namely those concerned with materiality and colour, and those related to personhood as expressed in art. To start with materiality and colour, the first thing to note is that the differences for this element follow the distinctions in the metaphors based on patterns of skeuomorphism discussed earlier. This concerned the Mycenaean incorporation of natural phenomena in a 'natural background' in wall-painting and a conceptual contiguity between artistic surfaces and natural phenomena in the Maya case. For the Maya this can be understood within the framework of a monistic worldview, in which k'uh as a vital, animating power played a connective, regulating role between different phenomena in the world. For the Mycenaean case it is less easy to recognise a similarly coherent worldview, even with the help of additional evidence from the contemporary Near East. This means that there is a greater reliance for this case on the analysis of craft-work and colour-use in art, and what this allows to be said about conceptions of materiality.

As noted in section 7.3.3, the relation of craft-work to *k'uh* as a vital, dynamic flow of energy was closest in reductive kinds of craft techniques rather than in additive or transformative ones. Two notable material forms (if by no means the only ones) worked through reductive craft techniques were stelae and stone-carving in general, as well as the working of jadeite and related greenstones. It was especially the ability to create surface patterns in these durable materials that showed the ability of the reductive techniques to work them to interact with the flowing power of *k'uh*. For jadeite and related greenstones further associations with colour can be noted as well. By contrast for the Mycenaean case a full insight in material ontology is lacking, but it can be noted that the most complex colour aesthetics often involve materials that have been created through transformative craft techniques. This can be seen for the painted plaster, but even more so for art objects shaped from metals and vitreous materials. This broad contrast between the importance of reductive techniques in the Maya case and transformative techniques in the Mycenaean one can be used to further explore the differences in conceptions of materiality. To facilitate this the characteristics of Mycenaean blue glass and Maya jadeite are listed in table 9.3 below, for these two materials that explored in the most detailed way in the respective analyses of art of the two cases.

⁵¹⁵ If the adoption of an ontological schema would depend mostly on unconscious learning patterns in a certain way of life, then it should be expected that modernisation would lead to the eradication of pre-existing worldviews. Yet there are reasons to assume that this may in fact be due to other factors, such as the *anomie* induced by highly unequal social systems. The case of the Maori in New Zealand provide an alternative, as outlined in Henare (2007), in that Maori semantic concepts are incorporated into the legal framework of the state. Of particular importance in this are the *taonga*, certain things that have acquired a (relational) value in Maori conceptions of the world. Through the analysis of the status of *taonga* in historical and recent legal affairs, Henare concludes that this concept is far from being an obsolete term as it might be supposed in modernising discourse:

[&]quot;The implications of this for analyses of cultural dynamism and the articulation of culture-based claims in postcolonial situations are significant and wide-ranging. If one can no longer assume that the effects of colonisation necessarily adulterate or demolish distinctive concepts, producing ontological hybrids, half-castes and cross-breeds, then it is necessary to acknowledge positions that may be wholly Maori **and also** European. The creativity of taonga does not derive simply from the minds of individual subjects, but from a fabric or relations peopled both by objects that appear as people, and by people that appear as things." (Henare 2007, 64, emphasis in the original)

	Mycenaean blue glass	Maya jadeite
production	pyrotechnology, transformation	quarrying
exchange form	ingots	blank celts
working	moulding, inlay (convertibility)	reduction (polishing, carving)
main material forms	inlays (architecture, furniture, weaponry), seals, beads	celts, beads, jewellery, masks, axes
iconography	limited repertoire (using moulds)	complex iconography and writing
associated materials	lapis lazuli (through ku-wa-no), gold	greenstones (fuchsite, serpentine)
colour conception	<i>ku-wa-no</i> , as darkish, lustrous surface, kinetic phenomenon	yax (blue-green), metaphoric overlap based on moisture/shine
semantic associations	adornment, value	maize, centrality, rulership, adornment, breath-soul

Table 9.3: Key characteristics of Mycenaean blue glass and Maya jadeite compared.

Based on the characteristics listed in table 9.3 and the analysis in the Mycenaean and Maya case chapters, it is possible to recognise important similarities and differences. One key similarity can be seen for both the conception of colours and their uses in art. This concerns the view of colour as a dynamic phenomenon, metaphorically creating connections between a diverse range of phenomena. With regard to the uses of colour in art, in both Mycenaean and LPC lowland Maya art a dual pattern of naturalistic and symbolic colour-use can be noted. A bridging role between these two uses can be seen in the depictions of blue glass (or lapis lazuli) beads in Aegean art and jadeite art objects in Maya art. In both cases, then, colour could act as a metaphoric 'connector' between a host of different phenomena within a world overall rendered in a 'naturalistic' way. This can be understood very well within the analogical schema of Descola discussed earlier, for in an ontology structured by this schema there is a constant need for connecting the unending multiplicities of intentional (interior) and physical elements. Greek *kyanos* and Maya *yax* as colour terms were not tied to blue glass/lapis lazuli and jadeite, but rather linked their visual and other properties to a whole range of other phenomena based on a complex set of metaphors.

However, it is also possible to note stark differences between the conception of colours and their materiality in the two cases. For the Maya, the close relation between yax and jadeite also carried with it the central position in the quincunx outline of the cosmos. Similarly the colour terms for red, black, yellow, and white were ascribed to the four cardinal directions. Hence the basic colour terms were embedded in a coherent cosmological grid. Furthermore, through an 'aesthetics of durability' colours were also connected to the concept of Flower World, based in material terms not only on hue but especially on shine and brightness, as well as on sound qualities. A particularly close metaphoric connection in this vein can be seen for jadeite and the notion of a breath-soul, which constitutes one aspect of Flower World. The placing of a jadeite bead in the mouth of a deceased person is a poignant example of this connecting role of jadeite. The point here is that the use of jadeite in this way provides a durable material for connecting to more fleeting phenomena, further relating this to the durability of Flower World. Based on its association with centrality in the quincunx cosmos and with Flower World, jadeite was clearly embedded within a coherent framework. Many of the other associations, such as with the shiny, wet skin of sharks, can be seen

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⁵¹⁶ As noted in section 4.4.1 and above the term naturalism is here used strictly as the culture-specific stylistic rendering of the physical world as based on human vision.

as secondary derivations from the cosmological aspect of jadeite and its role as a durable material.

What is remarkable is that this pattern of conceiving of materiality, colour, and through synaesthesia (the substitution of senses) other perceptive aspects like sound, influenced the later development of metallurgy and its colour aesthetics. The full-scale adoption of metallurgy occurred in the Postclassic period in Mesoamerica and can best be seen in western Mexico (Hosler 1995, 2009). The persistence of a monistic conception of the natural world can be grasped in the Nahuatl name of gold as deriving from both teotl (the Nahuatl equivalent of k'uh) and cuitlatl or excrement (Sahagun 1950-1982, XI, 233). Both gold and silver as naturally-occurring metals were highly valued and divine qualities were ascribed to them, but they were also recreated through the use of alloying techniques as can be seen in western Mexican metallurgy (Hosler 1995, 229). 517 The key attractive qualities of metals in a host of pre-Columbian cultures lay in their brilliance and shine, just as jadeite and related greenstones were valued for their colour in the period preceding the use of metallurgy. This does not mean that jadeite was directly replaced by metals, rather a kind of coexistence can be seen (Saunders 2003, 30-32). A partial continuation of pre-existing ideas also extended to the conception of the materiality of metal alloys, the transformative character of which was conceived of in terms of key changes in biological life-cycles such as birth and growth (Hosler 1995, 230; Saunders 2003, 26).

One very interesting account of human origins in the *Relación geográfica* of Ajuchitlan in Michoacán (western Mexico) gives insights into the conception of metallurgy. In this account of origins humans are created out of metal alloys and ash, with the first humans being contiguous in a material sense with the metal ritual bells used in this area (Hosler 1995, 246-247). What is important is that in terms of the relations between humans and deities, and the obligations implied by them, there is a very close parallel here to the Popol Vuh. The only difference is that humans are now created not out of maize but rather out of metal alloys (themselves part of natural cycles) and ash. There are further implications of this for understanding the agency of art, which will be discussed in section 9.3.6 below. Another parallel, based more on Nahuatl sources, concerns the relation between shining qualities of metals, as well as their auditory ones, and the notion of a paradise (Hosler 1995, 232-233). All of this points to a degree of continuity in aesthetics and the set of metaphors associated with colours, a point also emphasised by Saunders:

"Indigenous Amerindian valuations of gold, silver, and their alloys derived from already established ideas concerning the aesthetic of brilliance that hitherto had been connected to minerals, shells, plants, animals, and natural phenomena as they appear in nature and, transmuted through technology, as artifacts. From this perspective metals were received into a preexisting, ageold, symbolic, analogical, and multisensory world of phenomenological experience that had little in common with fifteenth-century or modern notions of commercial wealth." (Saunders 2001, 23)

What this shows is that the particularities of Mesoamerica as a macro-region shaped conceptions of materiality and colour in a specific way. For metallurgy this can also be understood as part of a broader Amerindian social field of the kind discussed in section 2.4.3, an issue that will be further discussed in section 9.3.6. The implication of this is that there may exist important differences in conceptions of the material world between cases located in different macro-regions such as the Mycenaean and Maya ones, despite the commonalities in the use of an analogical schema of identification. That such differences existed becomes readily apparent when seeking for a parallel to

⁵¹⁷ The valuation of gold and silver, as well as the use of copper-based alloys to reproduce their colour aesthetics can already be seen in the Andean area for the Moche (Lechtman 1984). Only in the Postclassic period did these techniques spread northwards to Mesoamerica.

One difference, however, is that the new metallurgy-based colours were not directly associated with maize, perhaps one of the reasons why jadeite remained a significant and ritually-charged material.

the cosmological role of jadeite and related greenstones in Mycenaean blue glass and lapis lazuli. A problem in this is the lack of insights from textual and ethnographic sources for the Mycenaean case into any kind of cosmological framework. On the other hand the iconographic depictions and find contexts of these two materials also do not point to a clear cosmological role, unlike for the layout of caches and iconographic depictions in LPC lowland Maya art. Neither do the richer sources from the Bronze Age Near East on blue glass, lapis lazuli, and other semiprecious stones provide a very strong parallel to the Mesoamerican association between colour and the outline of the cosmos.

The only aspect of this that can be seen in Mesopotamia is for the association between sub-zodiacal areas of the sky with specific stones, cities, plants, and trees in 'stage 4' of the classification of the natural environment (Postgate 1997, 218-219). Although this is certainly of some relevance for the understanding of lapis lazuli, it can scarcely be seen as being the key to the shared template of lapis lazuli and blue glass in the eastern Mediterranean outlined in section 4.3.3. The more copious sources from the Greco-Roman period likewise do not associate *kyanos* and the materials grouped under it with a clear cosmological role. Even if a relation between astrology and materiality can be seen as an undercurrent from the Bronze Age up till the Early Modern period in the Mediterranean, this cannot be seen as analogous to the Mesoamerican case. The central cosmological 'grid' for Maya conceptions of colours and their materiality can therefore be assumed to have been absent in the Mycenaean case. Despite the lack of direct sources, the uses of lapis lazuli and blue glass, as well as the inferences of meaning from the contemporary Near East and Greco-Roman Mediterranean, make this a reasonable inference. As a result the role of materials like lapis lazuli and blue glass as 'connectors' in an analogical schema of identification is likely to have been a different one from that of jadeite and related greenstones in the Maya world.

This can be grasped best in the final aspect of metaphor of art to be discussed here, that of personhood. For this topic it is useful to briefly consider some aspects of a comparative study of Egyptian and Classic period Maya embodiment (Meskell & Joyce 2003). Although the more copious evidence available for these two case studies make it impossible to consider certain topics addressed in this work for the Mycenaean and LPC lowland Maya, others can be considered. ⁵²⁰ In particular it is significant how the two authors explore conceptions of personhood and the body as they differ from Cartesian views of the separation of corporeality and mind. For the Egyptian case this can be seen in the discussion of the role of adornment, which involved a wide range of materials and extended to a broad section of society (Meskell & Joyce 2003, 58-66). Notably, some of this jewellery had a amuletic role and in this way extended personhood beyond the body:

"Irrespective of age and sex, people wore amuletic jewellery, usually within close proximity to the specific bodily locale concerned. Magic was literally performed on the body. It might be possible to think of such amulets and body part doubles as extensions of the self, as part of the individual's personal magic known as heka. The repertoire of magical symbols and the means of attaching them to the body was extensive." (Meskell & Joyce 2003, 66)

The precious materials of which such amuletic jewellery was made included lapis lazuli and gold, which were respectively used to describe the hair and the skin or flesh of deities (Meskell & Joyce 2003, 15). The use of gold and lapis lazuli as materials of adornment can be understood not as an extension of flesh and hair, but rather as a metaphoric connector to the magical and divine qualities

⁵¹⁹ Here the reference in section 6.4.2 to the work of the Brickers (2011) can be recalled, which counterposed the Maya reliance on intervals of time in mapping the sky to the Mesopotamian 'geographical' reconstruction of the heavens.

⁵²⁰ Some of the topics covered in Meskell and Joyce (2003) that are insufficiently covered for the Mycenaean and LPC lowland Maya cases, mostly because of the limitations of the evidence, are gender and sexuality and also the notion of hybridity between humans and animals. More potential would exist to consider these questions if the cases were broadened to consider Aegean prehistory and Formative Mesoamerica as a whole.

and forces embodied in these materials. A subtle but important contrast can be noted for the Classic Maya case as discussed in the book. The use of metaphoric connections in difrasismos (a poetic technique pairing two terms in a common metaphor, see also section 7.4.3) relates bodily aspects such as blood, bones, and breath to each other in their overarching context (Meskell & Joyce 2003, 74-78). This context was defined by the complex and dynamic tropical forest environment of the Maya lowlands, and this clearly impacted conceptions of the Maya body as related to animal and plant life. This picture of Classic Maya embodiment and personhood is in broad agreement with the interpretation of these two aspects for LPC lowland Maya art, as discussed in section 7.4.2. In particular this can be seen in the notion of an intrinsic 'botanical substrate' of human beings, as well as the concept of baah that signifies the potential of the extension of personhood in art surfaces.

The iconographic and especially the textual evidence for the LPC period was more limited, and allows no insights into social roles as depicted in art. Nevertheless the discussion of the Jester God motif in section 7.4.2 did point to an extension of personhood in art. Without repeating the entire argument here, it can be noted that this symbol related a diverse set of phenomena to each other. As such, the Jester God image acted as a metaphoric connector between maize, the office of kingship, one or more maize deities, jadeite and related greenstones (as well as the aesthetics of durability), and also centrality within the quincunx outline of the cosmos. Though different from each other, all these elements overlap in the connecting metaphor of the Jester God motif, forming as it were an 'identity in difference'. As used in narrative settings of mythological themes of origins like those of the San Bartolo wall-painting treated in section 8.2.4, the meaning of the Jester God on headdresses, bundles and other elements was derived from the underlying metaphoric connector of this symbol. This in turn derived from the 'botanical substrate' of human beings that linked the cycle of maize to the human body and personhood as expressed in the social life of the Maya state. Of course, this cannot be seen separately from the centrality of jadeite in cosmological terms and its importance in the aesthetics of durability either.

That the relation between different phenomena can be conceptualised as identity in differences can be seen even better in the notion of co-essences and personhood in Classic Maya art (Meskell & Joyce 2003, 49). As the LPC record is added to it will undoubtedly become possible to expand the interpretation of personhood and embodiment to include such concepts. For now it is sufficient to note the presence of a similar kind of metaphoric connector in the Jester God motif. Turning again to the Mycenaean case, it is not possible to determine whether the jewellery made from lapis lazuli and blue glass had a similar amuletic role as in the Egyptian case. At the very least, as discussed in section 5.3.2, it can be said that these two materials were used to adorn both the dead and the living. often also being associated with gold. Adornment in this way does not imply a shared co-essence between lapis lazuli, blue glass, and the human body, however, and it is certainly not possible to recognise a contiguity between artefactual and biological materials. Rather, the use of materials for adornment can be seen as a simile that connects the embodied person to a broader set of metaphors. 521 The use of the Linear B term ku-wa-no points to the broader colour aesthetics of lapis lazuli and blue glass, one shared in broad terms with the contemporary Near East.

⁵²¹ A parallel to this can be seen in the scheme first expressed in the Archaic Greek poet Hesiod, of a sequence of five ages, being the Golden Age, Silver Age, Bronze Age, Heroic Age, and Iron Age. Yet here the use of the term Golden Age does not imply that human beings were actually made of gold or that their life-cycle corresponded to metallurgical processes, but rather acts as a simile to refer to the intrinsic qualities of this period (Campbell 2006, 40-47). Compare this to the Popol Vuh, where different kinds of humans were actually made first of mud, wood, and later of maize (Christenson 2007, 66-77), or the Postclassic Relación geográfica of Ajuchitlan discussed earlier in this section in which humans were made from mixing ash and metal alloys. Here there is a contiguity with the material world, whereas in the example of Hesiod materials played a role as a simile to connect with certain qualities. Such qualities are implied in the Mesoamerican case as well, but situated in a framework very distinct from the Greek one.

When considering the later use of kvanos in Homer, it is useful to recall from section 4.3.3 the notion of a 'semantic prototype' that linked a wide variety of seemingly very distinct phenomena. This included the prototype $\gamma \lambda \omega \rho \delta \zeta$ (green/yellow) as "the green fecund vitality of moist growing things" (Clarke 2004, 134), as well as the new prototype of kyanos as a 'vital, vigorous and lustrous darkish surface'. As in the Maya case, these terms act as metaphoric connectors, but the kinds of connections that are made are quite different. The reason behind this difference seems to be that the 'cosmological grid' that links different phenomena in the world to each other is highly distinct for the Mycenaean and LPC lowland Maya early civilisations. For the Maya this 'grid' can be clearly recognised in the relation of colours to the quincunx outline of the cosmos and to the notion of Flower World. A further set of metaphoric connections sprung from this, as can be seen in the Jester God motifs and its drawing together of cosmological centrality, jadeite and related greenstones, maize and the 'botanical substrate' of humans, and the office of kingship. The closeness of these phenomena implies that human embodiment and personhood can be extended to certain artefacts, which imply 'identity in difference' (in the Classic period recognisable in co-essences).

Even when taking into account the lack of insights into Mycenaean cosmology, no such 'identity in difference' can be recognised for the role of lapis lazuli and blue glass in Mycenaean notions of embodiment and personhood. There is no ku-wa-no or any other clearly recognisable artefactual or botanical 'substrate' for prehistoric Aegean bodies. Instead adornment can be seen as an attribute that connects individual bodies and personhood to certain qualities of relevance to their identity, in line with the discussion of the rendering of anthropomorphic figures in Mycenaean art in section 4.4.2. The role of lapis lazuli and blue glass as an artefactual 'connector' based on the metaphors of colour aesthetics capture in the term ku-wa-no, can therefore be seen as a very different one than for jadeite and related greenstones in the Maya case. Differences in connecting metaphors extend to other subjects covered in art as well. Although the evidence for the LPC period for this is limited, it is nevertheless useful to consider here the notion of a co-essence between certain animals such as jaguars and certain humans such as kings in Classic Maya art (Meskell & Joyce 2003, 90). 522 This can be compared to the simile between the predatory character of lions and human hunters discussed in section 4.4.3. There is no question here of humans and lions sharing some kind of identity, but rather hunters share common traits with lions in certain kinds of situations.

This situation-based use of metaphor is extended to include a broader set of artefacts and images, as discussed in section 5.2.4 and 5.3.2. These include boar's tusk helmets, various kinds of depictions of hunting and warfare on weaponry, and can even be recognised in narrative settings of these kinds of themes in wall-paintings. At this point it can be asked whether it is not superfluous to emphasise the difference between a 'co-essence connector' between jaguar and king in the Maya case and a 'simile connector' of hunter/warrior and lion in Mycenaean art. Both of these metaphoric connectors can be easily accommodated within the analogical schema of Descola discussed earlier. Yet the work of Descola himself already provides an answer to this. He stresses that the Neolithic pattern of domestication in the fertile crescent, from which Mycenaean agriculture derived, had special features that make it quite distinct from similar processes elsewhere in the world:

"The cultivation of wheat, barley, and rye was accompanied by the raising of goats, oxen, sheep, and pigs. In this way, a complex and interdependent system for the management of nonhumans was set up in an ambience designed to allow their coexistence. But such a system is at variance with what happened in other continents, where large mammals were for the most part domesticated either quite a while after the plants were or, in the case of East Africa, long before – that is, if they

⁵²² Even so two jaguars could be seen in the two San Bartolo accession scenes, and as noted in section 7.4.2 evidence from Cahal Pech might also point to a close relation between humans and jaguars. When more evidence becomes available it will be possible to more systematically address the role of the jaguar for the LPC lowland Maya.

were indeed domesticated at all, for in much of the Americas and Oceania the raising of livestock did not occur, or else was adopted only later on, as a result of the arrival of already-domesticated animals from elsewhere." (Descola 2013, 52)

The implication of this is that the relation between humans and animals, domesticated and wild ones, is different to such a degree that the specifics of the ontologies in these areas are different. Descola (2013, 327-328) also refers to the work of Haudricourt (1962) to point to the extension of the metaphoric connection between humans and animals to relations among humans, in particular between rulers and subjects. This relation would be analogous to that between a herdsman and his flock, even if it should be noted that in this work other metaphors like seafaring were stressed as well (Haudricourt 1962, 46). By contrast the cultivation of plants in China and Melanesia resulted in different kinds of metaphors for relations between humans and their means of sustenance, and among humans themselves as well. What matters here is not so much the particulars of these cases, but rather the implication that similar schemas of identification can still be structured differently based on the particulars of their history. This point is clearly recognised by Descola, but in his cross-cultural focus on recognising schemas of identification could hardly be developed in-depth. In taking a comparative historical approach, the relation between generic schemas and the historical particulars of the Aegean and Maya lowlands can be incorporated in the analysis.⁵²³

These ideas will be further fleshed out in the next sections for issues such as the rendering of landscapes, different kinds of narratives, the notion of sacrificial offerings, and a number of others. All of these patterns are of course based on the metaphors of Mycenaean and LPC lowland Maya art. It is useful, therefore, to summarise the basic connecting features that can be recognised for metaphor in the art of both cases here:

- 1. In terms of basic patterns of skeuomorphism, a distinction can be made between the Mycenaean incorporation of different features from the environment that surrounded it in a 'natural background' and a Maya focus on contiguity between natural and artificial patterns.
- 2. With regard to materiality and colours, a difference can be seen between the role in this of reductive craft-work in the Maya case and for the Mycenaean one the transformation of materials through pyrotechnology. Furthermore, jadeite and related greenstones in the Maya case were related to a clear 'grid' of cosmology and an aesthetics of durability, which was different from the Mycenaean and Near Eastern conception of lapis lazuli and blue glass. Not only did this imply different roles as metaphoric 'connectors' in the two cases, but also a long-term impact can be recognised for the Postclassic conception of the materiality and colour aesthetics of metallurgy.
- 3. For the role of metaphoric 'connectors' used to signify personhood in the art of the two cases, it can be noted that they were structured in distinct ways. In the Maya case a generic notion of 'identity in difference' can be recognised for the relation between persons and the natural world around them, in particular maize and its cycle. Less detailed evidence is available for the Mycenaean case, but it is nevertheless clear that the metaphoric connecting roles of *ku-wa-no* and the use of lions in hunting and warfare similes implies a different kind of relation compared to that of the Maya case.

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⁵²³ Taking a historical perspective also allows one to mitigate the charge of geographical determinism that can easily be associated with the work of Hardicourt, as acknowledged by him (Haudricourt 1962, 43). As noted for the role of Mediterranean polyculture in section 3.4.2 viewed in its *longue durée* context this had a structuring role, but one that has to be understood in a 'possibilist' way rather than through geographical determinism. This means that other factors can modify and shape the geographical ones in the process of the formation of specific societies.

9.3.4: Comparing the semiotics of Mycenaean and Late Preclassic lowland Maya art

The next comparative category to be discussed is that of semiotics. Generally of course this refers to sign systems, but here the specific focus lies on iconography and its potential relations with other symbolic forms of expression such as writing and oral performance. One feature that both Mycenaean and LPC lowland Maya art share is that they depend upon a combination of structural analysis and outside sources to perform iconographic studies. That is, they cannot be seen as self-contained semiotic systems, although future work on LPC lowland Maya texts may in this regard allow for a different kind of interpretation than for the Mycenaean case. However, there are important differences with regard to the outside sources that are available. Without a direct relation to textual sources, including later ones, iconographic analyses of Mycenaean art remain more generic and are more dependent on structural analysis. By contrast for the art of the LPC lowland Maya it is possible to relate it more closely to later iconographic and textual sources, even if the insights from the sparse texts of the period itself remain limited. Through the application of the direct historical method, iconographic studies using structural analysis can be more specific for LPC lowland Maya art, and their cultural meaning can be more reliably ascertained.

Taking this into account, the analysis here will focus primarily on three aspects of semiotics. The first concerns the notion of 'naturalism' in the two art styles, and following from this treats the way the spatio-temporal environment is rendered in them. Secondly, the relation between words and images in Mycenaean and LPC lowland Maya art will be compared. These first two aspects form the basis for the third step of analysing the differences and similarities between the narrative microstructures of the two cases. Starting with the question of 'naturalism' in art styles, the brief discussion of the use of this term in Mycenaean and LPC lowland Maya art, respectively in sections 4.4.2 and 7.4.2, showed the problematic character of this term as a cultural category. In the art of both case studies the physical environment and animate beings are depicted in a way that can be readily recognised as having a broad correspondence to the world as perceived through human stereoscopic vision. Naturalism as understood in a more complex cultural sense, however, was quite distinct in the two cases. The 'bounded naturalism' and uses of geometric designs in Mycenaean art cannot be easily compared with the Maya notion of mythological templates of natural phenomena.

For this reason it seems inadvisable to use naturalism as a cultural category, even with regard to the Renaissance and post-Renaissance use of perspective in art.⁵²⁴ For the (rather loaded) assumptions that the use of this term would carry with it are incompatible with significant cultural variation, as it can be observed for pictorial depictions of the world that bear a broad correspondence to the conception of it in visual perception. Instead the generic basis of naturalism in the biology of human vision can be taken as the starting-point for an investigation of culturally-specific ways of rendering the world in art. The terms 'way of seeing' (Berger 1972) and 'period eye' (Baxandall 1988) capture very well the notion of visual perception being focused in distinct ways in different regions and eras. Basic to this is the way the spatio-temporal environment is rendered in different art styles. One important model for understanding this can be seen in the work of Hagen (1986), the application of

The difference with the position of Descola (2013, 57-63), who associates naturalism with the rendering of landscapes according to single-point perspective, has been noted a number of times already in this chapter. Unfortunately, this author has not been able to inspect a book in which Descola (2010) outlines the relevance of his ontological schemas of art, as reported in Shapland (2013). It should be stressed that it is not clear that Descola's four ontological schemas can be related to the four methods of projection discussed by Hagen (1986). Both Mesoamerican and Far Eastern cultures are grouped under the analogical schema of Descola, but their projective systems are quite different (Hagen 1986, table 9.1, pp. 154-255). From the same table Palaeolithic and Bushmen art would be grouped in its three-dimensional and projective focus with Renaissance art, but in Descola's system these would use animist ontological schemas rather than naturalist ones. Hence it seems unwise to conflate projective systems and ontological schemas.

which to the art of Mesoamerica was discussed in section 7.4.2. There it was specifically argued that Maya art had a general two-dimensional focus and used a 'metric' projective system. This metric system refers to a way of rendering pictorial surfaces in which both the surface plane and projection lines are parallel to the viewer. This creates a 'flat' surface without depth, and demands multiple viewing positions or 'station points' to fully grasp complex pictorial scenes.

Two-dimensional pictorial surfaces structured by the metric projective system were used in different ways to show the Mesoamerican cosmos, often including an explicit temporal dimension as well. This can be seen in the Classic Maya stelae that vertically show the three levels of the cosmos, while depicting the central scene (often involving a king) at the centre of the quincunx shape of the cosmic plane. The presence of a Long Count date then situated this scene within its overarching temporal framework. The situation for LPC lowland Maya art was different, since so far no Long Count dates can be recognised and the evidence from stelae is very limited. However, it is possible to recognise the quincunx shape of the cosmos in various guises, ranging from the *k'an* crosses in bowls from K'axob to the narrative settings of the San Bartolo wall-paintings. For these murals the metric system of projection proved sufficient to depict the quincunx outline in different ways, both horizontally and vertically, in a set of scenes based around a common theme of origins. As such, the generic properties of the metric system as based upon human visual perception were adapted for a specific 'way of seeing', literally a 'period eye' in the overall trajectory of Maya art. But as already noted in section 7.4.2, the metric projective system was not only used in different Mesoamerican cultures but in fact recurs in a number of independent cases around the world.

Hagen (1986, table 9.1, pp. 254-255) lists the occurrence of different projective systems and the styles associated with them in different areas of the world. Two notable patterns can be discerned in this, namely a clustering of styles in certain macro-regions and the recurrence of projective systems in cases that were independent of each other. For the metric system this can be seen in its use together with a two-dimensional focus in the Near East and Mediterranean (Egypt, Mesopotamia, and Etruscan) and in the Americas (Aztec, Maya, and Inka). Outliers can be seen in the petroglyphs from Hawaii and the art of Baffin Island. A key question is why this style recurs in different areas of the world. The ontological schemas of identification of Descola discussed in the previous section seem of little use here, for as noted earlier the cases that can be identified with the analogical schema show considerable differences in the kinds of projective systems that were used. More use can be made in this regard of the observation that most of the cases with a style of metric projection and a two-dimensional focus were what is defined in this thesis as early civilisations. The significance of this can be grasped when considering the cosmological ideas of the seven case studies of early civilisations compared by Trigger in his book *Understanding*.

The key similarities in cosmology for Trigger's cases are the flatness of the terrestrial plane and the central position of the early civilisation within it, and to a lesser degree also the presence of an underworld and sky-world (*Understanding*, 444-471). Conceptions of the origins of the cosmos and of time show more variation than this 'geographical outline'. Trigger notes that such conceptions derive from certain features, including pre-existing cultural ideas and the recurring tendency to establish analogies between the microcosm of the human body and the macro-cosmos (*Understanding*, 455). He also stresses the role of physical perception in this:

"Without minimizing significant variations in cosmography from one early civilization to another, many similarities can be attributed to parallel analyses of the natural world by people who viewed the universe from generally similar perspectives, including similar views of the supernatural. Such

⁵²⁵ Hence this kind of conception of cosmology is certainly not limited to early civilisations, if the notion of an elaborate hierarchy in supernatural beings mirroring socio-political hierarchies is (*Understanding*, 640-641).

an explanation also helps to account for the greater similarity of views about the terrestrial plane, which were controlled to a greater degree by direct observation, than of ideas concerning the sky world or the underworld. This conclusion accords with the materialist belief that observations of the natural world play a significant role in the development of some religious concepts." (Understanding, 455-456)

It is not surprising that a metric projective system is very suitable to depict this kind of cosmography. Viewed in a horizontal way the terrestrial plane of such a cosmological system appears as a flat surface, often defined by the four cardinal directions. When depicted vertically, the terrestrial setting will appear as the main cosmological space, potentially bounded by the underworld below and the sky-world above. This kind of cosmography is distinct from those of Greco-Roman antiquity and its medieval successors, as well as those from the later phases of the civilisations of the Far East. All of these cases use different projective systems in their art. ⁵²⁶ So far the discussion has served to extend the analysis of the rendering of the spatio-temporal environment in LPC lowland Maya art to a cross-cultural level, but the Mycenaean case has been left unaddressed. A key obstacle to considering this case is that practically nothing is known about Mycenaean cosmology. However, it can at least be noted that the projective system of Mycenaean art was a metric one, and also that it had a general two-dimensional focus. ⁵²⁷ This means that at a basic level it is possible to compare the Mycenaean rendering of space and time with that of LPC lowland Maya art, even if complex cosmological ideas here have to be left out of the equation.

As discussed in section 4.4.2, the spatial environment in Mycenaean art (predominantly in wall-painting) consists of hillsides and seascapes as boundaries for a landscape of marshes (where hunting activities took place), peaceful non-domesticated nature, and palatial architecture. The only indications of temporality can be seen in a few clues of seasonality. In basic terms what is depicted is the *Umwelt* of the palatial states, as they are located in a typical Mediterranean valley bounded by hills and facing the sea. These landscapes and seascapes would represent the terrestrial plane, even if the broader cosmological embedding of that plane remains unknown. The representation of the palatial *Umwelt* in Mycenaean art contrasts with the quincunx-shaped terrestrial plane in LPC lowland Maya art, which forms more of a basic template that can also be recognised in the outline of houses and *milpa* fields in ethnographic sources. This implies that even if there are clear similarities in the use of metric projection and a focus on two-dimensionality, the rendering of the spatio-temporal environment in the art of the two cases is by no means identical. To some degree the physiology of vision is similar in both art styles, but the culturally-specific 'way of seeing' is also distinct. As with the differences between the metaphors of art discussed in the previous section, this distinction derives from the specific cosmological and ontological 'grids' of the two cases.

A somewhat similar pattern can be observed for the next issue to be considered here, that of the relation between words and images. A distinction between the two cases can be inferred from the discussion of the incorporation of Maya writing in art, where as discussed in section 7.4.3 texts and images were used in a 'conjoined' way. Not only was this notably different from the autonomy of

⁵²⁶ The cases listed in (Hagen 1986, table 9.1, pp. 154-255) of Greco-Roman and Far Eastern as sharing a three-dimensional focus and 'affine' projective system all concern cases that succeeded the initial early civilisations that existed in these areas. The development of new cosmological models can be seen especially well for Classical Greece and later 1st millennium BC China, which reflect the different socio-political systems of these two cases (Lloyd & Sivin 2002, 243-244). These systems were quite distinct from the preceding early civilisations in these areas.

⁵²⁷ It is possible in such a projective system to suggest 'depth' by depicting the overlapping of elements, which can both be seen in Aegean and Egyptian Bronze Age art (Palyvou 2000, 185-186). As noted by Hagen (1986, 172), the emphasis in this lies on the depiction of the elements in a coherent way, rather than on three-dimensionality. The enormous difference with the three-dimensional focus and use of affine projective system can be clearly seen in the Japanese tradition of landscape painting (Hagen 1986, 141-156).

texts and images in the art of the Bronze Age Near East, some of the written signs also seem to possess an animacy of their own. This can be seen in some of the San Bartolo murals, even if it does not imply that the syntax of writing and of iconography are mixed. Rather, the relation between texts and images in Maya art can be understood as a combination of iconographic and glottographic (phonetic texts) modes. By contrast Mycenaean art uses an iconographic mode without any accompanying texts, as discussed in section 4.4.3. Given the earlier experimentation with Linear A signs in Minoan wall-painting this should be seen more as a cultural choice and less as implying a lack of semiotic sophistication. Instead it is likely that there was some relation of Mycenaean artistic images to the spoken word of oral tradition, through the use of similes and especially common *topoi* or stock-scenes. This points to the importance of grasping semiotic modes as part of broader 'interpretive communities', as also discussed for Maya art in section 7.4.3.⁵²⁸

This means that the semiotic systems of Mycenaean and LPC lowland Maya art are quite distinct. Yet at the same time the third topic to be discussed here, namely that of narrative micro-structures, shows that these two art styles are not incommensurable either. As discussed in sections 4.4.3 and 7.4.3, the notion of narrative micro-structures depended upon a structural (but not necessarily structuralist) reading of figural art scenes with narrative-like characteristics. The four analytic terms used for such analysis were the nucleus, catalysts, informants, and indices. The first of these terms, the nucleus, refers to the core action of a narrative scene. In both Mycenaean and LPC lowland Maya art nuclei were rather limited in scope, usually only involving a few figures interacting in a clearly circumscribed setting. There were also few catalysts (iconographic elements elaborating upon the nucleus) in both art styles. In the Mycenaean case it was possible to relate the defining characteristics of a nucleus to a broader set of *topoi* or stock-scenes, as can be seen especially well for warfare-related scenes in a variety of material forms of art. Although the LPC lowland Maya case also shows certain features that recur, notably also in the art of the later Classic and Postclassic periods, it is not yet possible to identify recurrent *topoi* for the art of this period.

This has something to do not only with the limited amount of evidence available for LPC lowland Maya art, but also with the different ways in which informants are used in this art compared to the way they were used in that of the Mycenaean case. It can be useful to briefly summarise these different uses of informants in both art styles here:

- 1. In LPC lowland Maya art texts were used in two ways to qualify scenes. The first is as a text block that provides more extensive information on the actions taking place in a scene. The second use can be seen in the function of captions to provide additional context to certain figures or other iconographic elements. Obviously no such informants can be seen for Mycenaean art, and as noted earlier the autonomy of text and image in the contemporary Near East also made this a very different case than that of the Maya.
- 2. The informants providing clues to the location in which narratives take place is quite distinct in Mycenaean and LPC lowland Maya art. This follows mostly from the different ways in which the landscape was rendered in the two art styles, as discussed earlier in this section.
- 3. The use of temporal markers as informants is even more distinct than those indicating location. For the LPC lowland Maya case a temporal marker can be discerned in the 3 'Ik date depicted on the west wall of the San Bartolo murals. In the Classic Maya period this kind of temporal marker would be greatly elaborated through the use of Long Count dates in art. Such a close integration with an elaborate calendrical system cannot be seen in the art of

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⁵²⁸ For the discussion of the Maya case in section 7.4.3, reference could be made to insights from ethnography into Maya conceptions of surfaces with iconographic and textual signs as 'instruments of seeing'. This was especially relevant for grasping the interplay of the senses (synaesthesia) in a ritual context. Unfortunately no comparable insights on the conceptualisation of artistic surfaces are known for the Mycenaean case.

- Mycenaean early civilisation, nor in Near Eastern or Greco-Roman art for that matter. At most Mycenaean art yields clues on seasonality and its relation to a yearly ritual calendar. 529
- 4. Attributes used as informants for qualifying the figures depicted in narrative nuclei, or as catalysts, differ for the two cases as well. In Mycenaean art such attributes are primarily useful to discern social roles in different kinds of narratives, such as hunting, warfare, and public ritual. The limits of LPC lowland Maya art do not allow for the recognition of a range of social roles, even if they are known for later Classic and Postclassic Maya art. Instead, the use of an attribute such as the Jester God motif (see the previous section) relates a figure to a broader set of metaphors, even if this can indirectly highlight a social role like kingship.

With regard to the last aspect of the use of attributes as informants to qualify figures, it was shown in the previous section that the kinds of associations indicated by these metaphoric 'connectors' were different. That is, the use of a Jester God motif on a figure relates it in a different way to other phenomena than do Mycenaean attributes such as a boar's tusk helmet or lapis lazuli and blue glass jewellery. Just as with the different locational and temporal informants of the Mycenaean and LPC lowland Maya art styles, this shows that the internal relations between iconographic elements in narratives were structured very differently in the two cases. The lack of textual informants in Mycenaean art makes it impossible to include that here as well, even if the differences in this regard between Maya and Bronze Age Near Eastern art can be noted. Moving on to the last analytic term for structural analysis of narrative scenes, that of indices, it is important to stress the limits of the evidence. Little in the way of an index could be recognised in Mycenaean art, but it should also be noted that the fragmentary state of wall-paintings (the main material form with narratives) are not conducive to recognising more subtle references. For LPC lowland Maya art it is possible to note the possible indices in the San Bartolo wall-paintings, as discussed in section 8.2.4.

Despite the differences in the narrative micro-structures of the two art styles, it is possible to see similar kinds of narrative extensions in them. Based on the discussions in sections 4.4.3 and 7.4.3, syntagmatic relations between narrative events can be seen for Mycenaean art in the vestibule procession scene from the Pylos palace, and for LPC lowland Maya art in the five San Bartolo scenes of the Principal Bird Deity and the raising of the world-trees. In each case two or more scenes were directly connected to each other in a narrative sequence. Of course, the temporal dimension of these scenes differed, given that the Mycenaean painting depicts a seasonal festival, while the Maya sequence is inaugurated by the specific date 3 'Ik. Here the different properties of narrative micro-structures like informants change the specifics of the way in which scenes are related to each other in a syntagmatic narrative. Other wall-paintings from Pylos and San Bartolo have also allowed for the recognition of paradigmatic connections between different scenes, relating them to a more general and common theme. Hence the vestibule procession scene from Pylos is related to other scenes depicting aspects of ritual activity in the central megaron area. The same can be said for the San Bartolo scene of the raising of the world-trees and other scenes from the west and north walls that are also concerned with a common theme of origins.

⁵²⁹ The most dramatic example of this, however, comes from Minoan Crete in the form of the Harvester Vase. As noted in section 4.4.2 the ritual depicted on this stone vase connects dramatically with the seasonal cycle of agriculture, something seen more generically in the Mycenaean calendar of ritual festivals and its expression in art. Even if they should not be directly related to the Bronze Age, the writings of the 8th century BC Greek poet Hesiod (certainly not lacking in cosmological sophistication) do not transcend the yearly rhythm of the seasons either (Strauss Clay 2003, 10). In a similar vein, Vico ([1744] 1948, # 407) notes the use of seasonal activities like reaping as metaphoric stand-ins for the year by the Tuscan farmers of his day. This is clearly a chronotope that is structurally different from that of the Maya and other Mesoamerican calendrical systems, based as it is on the particulars of the Mediterranean season as described so very well in Braudel (1972, 246-267).

Yet at the same time it should be noted that as for syntagmatic narrative extension, the specifics of the narrative micro-structures make the paradigmatic connections in Mycenaean and LPC lowland Maya art somewhat distinct. One way in which this can be seen is in the use of *topoi* or stock-scenes for nuclei in Mycenaean art. The 'bounded naturalism' style furthermore gives these *topoi* a more distinct character, even if they can be related to each other in a 'paratactic' landscape-like setting as for the hunting and battle scenes. In LPC lowland Maya art such clearly defined *topoi* cannot be easily recognised, despite the clear recurrence of important iconographic elements like the Principal Bird Deity in specific settings such as atop a tree. The difference is subtle but important, and can be more clearly understood from the earlier discussion of the use of attributes as informants. In the Mycenaean case attributes were used to highlight (social) roles within clearly defined contexts, although they could metaphorically connect different themes such as the boar's tusk helmet for hunting and warfare and the chariot for elite culture more generally. But attributes do seem to have been mostly contained within a specific *topos*, their use as metaphoric 'connectors' subordinated to acting as informants for a circumscribed set of social roles.

By contrast in LPC lowland Maya art an important attribute like the Jester God motif is hardly bound to such a circumscribed setting, recurring in a wide variety of guises in the San Bartolo wall-paintings. It can possibly be used to highlight a social role such as kingship, but is hardly limited to that role. As a result paradigmatic connections between different scenes can make use of informants that are much more flexible. Based on the broad set of metaphors associated with the Jester God image it would be possible to create a *topos* 'from the inside', meaning from within the narrative micro-structures. That is, the use of this attribute but also figures like the Principal Bird Deity and other motifs, could make it possible to show a common theme in a scene that can otherwise incorporate more idiosyncratic elements. Hence as long as certain elements acting as metaphoric 'connectors' would be incorporated in the narrative micro-structures of LPC lowland Maya art, there would be no need to render everything else in a standardised way in order to connect with a common theme. As a result paradigmatic connections between scenes are structured in a more flexible, overlapping way, quite different from the more clearly circumscribed *topoi* of Mycenaean art that are arranged either in a 'paratactic' sequence or architecturally in a common space.⁵³¹

In conclusion, it can be noted that both for the rendering of the spatio-temporal environment and for the narrative micro-structures and extensions in Mycenaean and LPC lowland Maya art, a dual pattern can be discerned. On the one hand it is possible to use cross-cultural models to analyse the projective systems used to render landscapes in space and time, as well as for grasping the narrative micro-structures of figurative art. Yet the specifics of the semiotic systems of Mycenaean and LPC lowland Maya art appear highly distinct. This is in line with the observations made in the previous section for metaphor, namely that while in a generic sense metaphors may derive from the human body, they are also embedded within a culturally-specific cosmological and ontological 'grid'. It is not surprising that this grid would have an impact on visual perception as expressed in art as well. At the same time, the physiology of vision and semiotic understanding as a universal human feature does allow for the development of cross-cultural models to grasp the basic structural properties of the art of different cultures. The terms 'way of seeing' and 'period eye' are very useful in this regard,

Of course this does not mean that these different *topoi* are completely sealed off from each other in the broader pictorial space, something that is clearly not the case in the miniature landscapes of the LC IA site of Akrotiri but also not in the later small-scale Mycenaean wall-paintings. But in terms of narrative micro-structures these broader

landscapes are containers for the different nuclei, and in themselves do not carry narrative connotations.

531 This may be one of the reasons why it is so hard to separate distinct themes from each other in LPC lowland Maya

art, unlike for the relatively clear divisions in Mycenaean art (despite some overlaps between hunting and warfare). Even for the later Classic and Postclassic periods it is hard to recognise distinct *topoi* or stock-scenes in Maya art, despite the greater variety of different kinds of scenes (such as battles and courtly scenes) and the possibility to discern different social roles in art.

linking a generic process of visual perception to different periods of the Western history of art. The analysis here has hopefully shown that these terms can be extended to understand the semiotics of prehistoric and non-Western art as well.

9.3.5: Comparing the praxis of Mycenaean and Late Preclassic lowland Maya art

The third aspect of Mycenaean and LPC lowland Maya art to be compared here is that of praxis, which concerns the practical ways in which the material forms of these two art styles were used. Of course, the more general interpretations of agency will have to wait to the next section. Few inferences can be made with regard to the actual perceptions of art in both cases. The only clues for this come from settings of wall-paintings that are suggestive of having a relation to ritual performance. This could be seen for Mycenaean wall-paintings from the central megaron of the Pylos palace discussed in section 5.2.4. There are also indications for the San Bartolo wallpaintings, as noted in section 8.2.4, that ritual activity took place in relation to them. A few additional insights into Maya conceptions of the praxis of art can be gained from ethnography, in particular for the notion discussed in the previous section of surfaces with texts and images as 'instruments of seeing'. But when taken together these clues are too limited to be used to gain indepth comparative insights into the praxis of Mycenaean and LPC lowland Maya art. Instead, the comparison of the praxis of the art of the two cases here relies mostly on the spatial distribution of material forms of art, in particular those that can be related to monumental architecture. By using this information on the spatial distribution of art, inferences can also be made concerning the distribution of specific kinds of art objects and iconographic themes and the implications of this for understanding praxis.

With regard to the architectural contexts of art in the two cases, it should be clear from the discussions in sections 5.2 and 8.2 that these are quite different. In the Mycenaean case the main focus of monumental art can be seen in the palatial complexes, but extending also to houses and secondary settlement sites, sanctuaries, and burials, as discussed in section 5.2.1. Portable art objects are known mainly from burials, but also from palatial hoards and to a lesser degree from settlement contexts. Palaces are not unknown for the lowland Maya, but they are less clearly defined (especially for the LPC period) and do not appear to function as central foci of art. Instead, as discussed in section 8.2.1, the main focus of both larger and smaller sites alike were the civic-ceremonial cores. The basic elements of this were a central plaza and for the larger sites pyramids, which could involve the more common E-group type and the less common Triadic group type. Other structures that could be associated with these civic-ceremonial cores were residential structures and palaces, as well as ballcourts. Monumental art is found only in the civic-ceremonial cores of the the larger sites. Portable art objects also tended to be concentrated in the caches and burials of the civic-ceremonial core, a pattern that can also be seen for the smaller sites.

For some of the larger LPC lowland Maya sites it is also possible to recognise *sacbeob* (causeways) that connected different parts of the site or even extended far beyond them to other sites, something that can be seen especially in the Mirador Basin. Apart from transport such causeways may also have facilitated ritual processions. Although an extensive road network has been reconstructed for Mycenaean Greece, no proposals have been made to suggest that it would have had a similar role in ritual movement. ⁵³² In general terms the basic difference between the praxis of Mycenaean and LPC lowland Maya art can be found in the distinction between a set of contexts focused on palatial

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⁵³² Given how little is in fact known about who or what travelled over the Maya causeways and Mycenaean road networks the difference in interpretation seems to derive more from the general cultural interpretations of both cases than from direct evidence. Yet, as noted in section 5.2.2, there are indications from the Mycenaean palatial centre of Thebes that a processional way was related to the burial monuments there.

complexes in the former case, and a set of contexts focused on civic-ceremonial cores in the latter case. There are many implications of this, but a central one concerns the fact that the Mycenaean palaces are closely identified with regional-scale city-states, while civic-ceremonial cores can be found both in sites that functioned as the centres of states and in small communities. This has consequences not just for understanding the distribution of art, but also provides the background to the ways in which art both reflected and structured social relations.

This can be grasped very well when considering the different patterns of the exchange, working, and deposition of Mycenaean lapis lazuli and blue glass and LPC lowland Maya jadeite and related greenstones. To start with the Mycenaean materials, the extensive discussion of lapis lazuli and blue glass in section 4.3 outlined how both had been imported from the Near East and in the Linear B term of ku-wa-no shared a similar aesthetics of colour and value. But the best information with regard to patterns of the exchange, working, and deposition contexts of materials comes from the more ubiquitous blue glass. Both the use of an ingot shape to transport blue glass and the focus of working contexts either in the palatial centres or in areas under their control point to a significant control of palatial administrations over these materials. In fact, as discussed in section 5.3.2, it is significant to note the use of blue glass in palatial art, including as an inlay in architecture and furniture. Based on the hoard contexts from Thebes, lapis lazuli can also be included in this palatial usage of ku-wa-no materials. By contrast, the discussion in section 5.2.2 showed that the find contexts of blue glass objects such as beads and seals were mostly in burial contexts in peripheral areas. Based on their connection to the palatial centres in terms of being shaped and in terms of the broader colour aesthetics implied by the use of ku-wa-no, these blue glass beads and seals can be seen as 'tokens' of Mycenaean identity.

This part-whole relation, in which the blue glass beads and seals acted as partible elements of the palatial whole, cannot be recognised for the LPC lowland Maya use of jadeite and related greenstones. First of all these materials were already deposited in caches and burials in the MPC period in the Maya lowlands, and earlier elsewhere, so before the first states emerged in this area. Secondly, even after the development of lowland Maya states there are no indications that they controlled access to jadeite and related greenstones, which as noted in section 8.2.6 could be found even at small sites like Chan. The discussion in section 7.3.2 showed furthermore that there are no indications that Maya states controlled the exchange, working, and deposition of these two materials, nor of more mundane ones like obsidian and chert. As can be inferred from table 7.2 in that section, however, there was a distinction in terms of the availability of materials and the degree of sophistication with which they were worked. For jadeite and related greenstones this can be seen in the association of larger art objects with complex iconography and writing with the office of kingship, and thereby with sites that acted as the centres of states. The most notable example of this is the Dumbarton Oaks plaque that carried both a text and depicted an *ajaw* (kingly) figure.

As discussed in section 7.3.2, the Dumbarton Oaks plaque itself was a heirloom from the preceding Olmec culture and can be conceptualised as a form of what was there called 'memory-work', which involved taking pre-existing iconography and also heirlooms and (re-)using them in new contexts. This can also be seen in the San Bartolo wall-paintings, with one of the accession scenes on the west wall showing a strong similarity to the Dumbarton Oaks plaque. Of particular importance in this is also the use of the Jester God motif, which can be seen not only on the Dumbarton Oaks plaque but also on other objects made from jadeite and related greenstones, including the mask from burial 85 at Tikal. Furthermore, as noted in sections 7.4.2 and 9.3.3 above, the Jester God can be seen in a variety of wall-paintings at some of the larger sites that acted as centres of states. The implication of all of this is that while the basic aspects of jadeite and related greenstones (exchange, working, and deposition contexts) can be seen in pre-state and non-state communities in the

lowland Maya area, the eventual emergence of states created important changes. For jadeite and related greenstones this involved the development of a new category of art objects with complex iconography and writing, as well as the use of symbols associated with them in wall-painting narratives.

Unlike in the Mycenaean situation of lapis lazuli and blue glass there is no part-whole relation for the use of jadeite and related greenstones in the caches and burials in the civic-ceremonial centres of non-state sites. Instead the use of these materials and the metaphors based on them in the memorywork of the larger sites that acted as the foci of states can be seen as an elaboration of pre-existing patterns. At the site of Cival, discussed in section 8.2.3, this can be seen in the shift from the MPC period use of jadeite for caching to the elaboration of monumental architecture in the LPC period. There is a clear contrast here also in terms of the trajectory through which the praxis of Mycenaean and LPC lowland Maya art was established. For whereas in the Maya case there was an elaboration of communal patterns, which persisted in those sites outside the direct control of states, in the Mycenaean case the praxis of art had its origins in the Shaft Graves and other elite burials. The early finds of lapis lazuli and other semiprecious stones and valuable materials in the Shaft Graves provides a clue as to how the value of these materials for adornment was first established. Rather than deriving from a communal context, this valuation of materials derived from the long-distance contacts of the members of the conical clan buried here. It was only with the shift from emergent polities centred on these clans to the palatial states, and the concomitant expansion of production of blue glass materials, that this aesthetic of adornment was extended to more peripheral communities.

Another part-whole relation that derived from the Shaft Graves can be seen in the artistic theme of warfare and elite culture (partially including hunting as well), if structured somewhat differently than for lapis lazuli and blue glass. As discussed in sections 5.2.3 and 5.3.2, the initial depiction of warfare-related scenes in the art of the Shaft Graves was reoriented in the Mycenaean palatial period. Here the complex narrative scenes of battles and ships, accompanied by the emblematic figure-8 shields and ikria ship cabins, could be found in the palatial complexes. The scribes using Linear B that were based in these buildings also administered military matters, including the fabrication of key military items like the chariot. This overarching palatial framework of warfarerelated art and control over military organisation and equipment was shared by elite groups based on their use of chariots and partaking in warfare-related art. The latter can be seen both in military themes in wall-paintings in non-palatial settings and in portable art objects, the latter potentially being shared more widely as was the case with the Mycenaean painted vases depicting chariots. A somewhat different part-whole relation can be seen for art depicting public ritual, as discussed in sections 5.2.2 and 5.3.2. In the central megaron of the Pylos palace, wall-paintings provided both a setting for the performance of specific ritual activities and in a narrative setting referred to the overall cycle of ritual events.

There was a spatial dimension to this too, as the procession scene located in the vestibule of the Pylos central megaron showed an outdoor ritual location, something also known from Linear B sources. This relates the palace as (ritual) centre not only spatially to outlying areas, but also to the seasonal rhythm of the ritual economy of Mycenaean religious festivals. Like the warfare-related art and the uses of lapis lazuli and blue glass, the depictions of public ritual can be grasped as part of the praxis of Mycenaean art that was centred upon the palatial complexes as housing the most complex iconography and controlling the production of portable art objects. In this way the earlier elite focus of the Shaft Grave era was extended through the 'palatial grid' to a wider sphere, which incorporated a greater range of communities. This is quite distinct from the LPC lowland Maya 'grid', where the praxis of art was initially focused on community-based civic-ceremonial cores in the MPC period. Only after the emergence of states can more complex iconography and writing be

recognised for the larger sites, but this was an extension of the praxis of the earlier civic-ceremonial centres. Furthermore, this praxis also persisted at smaller sites after the emergence of the LPC period states. The implications of these different relations between political centres and smaller communities will be further discussed in the next section on the agency of art.

9.3.6: Comparing the agency of Mycenaean and Late Preclassic lowland Maya art

In the previous three sections the comparison of the metaphors, semiotics, and praxis of Mycenaean and LPC lowland Maya art has resulted in the recognition of similarities and differences between the two cases, which are summarised in table 9.4 below. One recurring feature in these three topics was the observation that different aspects of the art styles of the two cases seemed to be structured according to different 'grids'. This was true of patterns of skeuomorphism and their extension to colour, materiality, and notions of personhood as they can be grasped in art, as well as in the rendering of the spatio-temporal environment and narratives. Even the praxis of art in the two cases followed distinct paths. The key question, then, is how this 'grid' can be understood in terms of the agency of art. It is argued here that it should not be seen as a kind of conscious 'master principle' of art itself. Not only would this need to involve the improbably presence of a Daedalus-like figure creating an art style wholesale though individual invention, it is also not clear to what degree the distinct patterns of skeuomorphism can be related to the distinct patterns of praxis. Instead, it seems more useful to relate the different patterns outlined in the three previous sections to the general patterns of early civilisations, for these form the contexts within which the agency of art played itself out. Hence the distinct 'grids' of art follow the distinct patterns of the Mycenaean and LPC lowland Maya early civilisations, as discussed in section 9.2.

	Similarities	Differences
material forms	material techniques of painted plaster, pottery, stone carving, weaving, knapping	Mycenaean/Near Eastern use of transformative pyrotechnology for metallurgy and glass
skeuomorphism	replication of artistic patterns across different material forms	Maya contiguity natural elements, Mycenaean incorporation of them
colour, materiality	dynamic, metaphoric conception of colour terms	different metaphoric connections of colour in terms of worldview and adornment
personhood	precious materials as adornment, metaphoric connectors humans	intrinsically different kinds of metaphoric connections
spatio-temporal environment	metric projection, overall two- dimensional focus	different kinds of spatio-temporal landscapes, especially with regard to the temporal dimension
narrative	applicability structural model to narrative micro-structures	different kinds of uses of informants (temporal, attributes)
praxis	central architectural foci of art	Maya civic-ceremonial cores, Mycenaean palatial complexes

Table 9.4: Similarities and differences of Mycenaean and LPC lowland Maya art.

One clear practical problem arises, however, in the strategy of comparing the agency of art of both cases as part of the structures of their respective early civilisations, namely that a great variety of

analyses have to be brought together. This involves not only the three previous sections and the overall comparison of the two cases in section 9.2, but also the respective analyses of the agency of Mycenaean and LPC lowland Maya art in sections 5.3 and 8.3. In order to streamline the discussion here somewhat, it is necessary to 'bundle' different aspects together in common themes, rather than provide another extended summary of the aforementioned sections. Fortunately, the separate analyses of the agency of art in sections 5.3 and 8.3 provide clues to such common themes. One of these concerns the important role of Mycenaean lapis lazuli and blue glass for understanding value systems, and something similar could be seen for Maya jadeite and related greenstones. At the same time, another aspect of the agency of art that could be noted for both cases was that of the way in which social relations were structured through art. For the Maya case this involved the notion of memory-work in relation to what was termed the 'moral community', while for the Mycenaean case the emphasis was on how the palatial framework incorporated different pre-existing and new roles of art. These commonalities between the analysis of the agency of Mycenaean and LPC lowland Maya art, can be used here to define the following two themes:

- 1. The first common theme concerns the material world as the basis for social life. This involves all the aspects of metaphors in the art of the two cases as discussed in section 9.3.3, but also the rendering of the spatio-temporal environment as treated in section 9.3.4 and parts of the discussion of praxis in section 9.3.5. Furthermore, the comparative discussion of agricultural systems and economic relations of section 9.2.4 are brought into the treatment of this theme as well.
- 2. Another theme to be discussed is that of art and socio-political relations. The aspects of art used for this are the treatment of personhood in section 9.3.3, of narrative in section 9.3.4, and of praxis in section 9.3.5. With regard to the overall interpretations of early civilisations covered in section 9.2.4, of relevance here are state form and class, as well as the *longue durée* frameworks of both early civilisations.

The theme of the material world as the basis for social life is not so much concerned with the agency of art itself, but can rather be seen as the pre-condition of that agency. Of special importance in this is the basic 'grid' of metaphor and its relation to overarching worldviews, for which the rendering of the spatio-temporal environment is also of relevance. These patterns can be related to the basic properties of agricultural systems, in that both reflect and help constitute a basic relation between humans and the natural environment. By extension this relation intrinsically also includes relations among humans themselves, as part of a specific cultural system. These different relations all come together into different kinds of the praxis of art, which relate humans, the natural world, agriculture and other forms of technology, and material forms of art to each other. More can be said about this theme of the material world as the basis for social life, however. For there is also the relation between the conception and uses of Maya jadeite and related greenstones and Mycenaean lapis lazuli and blue glass in art on the one hand, and the economic relations (both regional-scale and long-distance) characteristic of both early civilisations. This topic extends the earlier discussion of art and technology as mediating between humans and the natural world to more complex economic patterns and their impact on the structuring of social relations.

The basic relation between humans and the natural environment is the starting point for the theme of the natural world as the basis for social life. As noted in section 9.3.3, the basic patterns of skeuomorphism in Mycenaean and LPC lowland Maya art were distinct in terms of, respectively, incorporating and being contiguous with features of the natural world. Extending from this were the different patterns of personhood and the rendering of space and time in the art of the two cases. In the LPC lowland Maya case, personhood can be understood as being connected through a 'botanical substrate' to a landscape defined by the quincunx shaped cosmos. The temporality of this landscape,

of maize, and of human beings all formed part of a complex calendrical system. By contrast personhood in Mycenaean art is defined by attributes like jewellery and weaponry as well as by similes (as in those using lions). These cannot be directly related to the spatio-temporal rendering of the environment in the form of the *Umwelt* of the palatial complexes. The metaphoric 'connectors' are simply structured differently in the art of the two cases. It is now time to consider how these differences can be related to the comparison of the technological basis of the relation between humans and nature in these two early civilisations, as discussed in section 9.2.4. There it was argued that a contrast can be drawn between a Mycenaean focus on various kinds of labour-saving techniques (techno-tasking) to generate agricultural surpluses, and a Maya use of (labour) intensification (labour-tasking) for the same purpose.

Ultimately these differences derive from the different sets of domesticates, such as for the Maya maize and Mycenaean wheat, barley, and cattle and other domesticated animals, as well as from the very different conditions of terrain and climate. For the LPC lowland Maya case relating art to this pattern of agriculture is fairly straightforward. First of all there is of course the direct connection between maize as the main staple crop and Maya personhood. This can be seen not only in the notion of the 'botanical substrate' of human beings, but also in the use of the Jester God motif in narrative art. This makes it possible to create more complex metaphoric associations, such as the one between origins, maize, and the moral basis of social life (including rulership) inferred for the San Bartolo wall-paintings in section 8.2.4.⁵³³ Maize is also associated with cosmology, unsurprising given that the cycle of its cultivation is embedded in the landscape and the calendar. Particularly notable in this is the relation of maize to the materials of jadeite and related greenstones and to the colour term vax, which signify centrality in the quincunx outline of the cosmos. The implications of this can be seen in the praxis of LPC lowland Maya art, especially in caches with jadeite and/or greenstone art objects such as those of the plazas of Cival and Chan discussed in sections 8.2.3 and 8.2.6. This relates the cultivation of maize to the broader notion of 'earth offerings', the relation of which to the agency of art was discussed in section 8.3. Earth offerings in Maya caches and also in burials have to be understood within the 'moral community' that bound members of a certain community to deities, ancestors, and the landscape.

This landscape was furthermore conceived of as animated by different actors. The offerings were a means of 'feeding' the deities, ancestors, and landscape, as part of an on-going process in which the recipients reciprocated to these offerings by helping to sustain the community. In this process other offerings were important as well, such as the blood-letting sacrifices using stemmed macroblades discussed in section 7.2.4. Although the earth offerings and the moral community involved more aspects, maize cultivation can be understood as part of it. As such, the caches with jadeite objects can be seen as part of the 'social technology' of farming, regulating the labour relations within what was defined as a 'social economy'. Here the importance of the concept of labour-tasking also becomes clear, something that can be seen for the water-works both at small sites like Chan and sites that acted as the centres of states such as El Mirador. The ways of coordinating labour implicit in these works can also be seen for construction of civic-ceremonial cores, in particular for the large expenditures of equivalent working hours in the MPC period, prior to the emergence of the first

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⁵³³ Of special importance in this was the gourd birth-scene of the north wall of San Bartolo Pinturas Sub-1A, where a figure was shown in what was interpreted as an instructing pose, holding a *coa* digging stick and small maize bundle. As the birth-scene itself was interpreted in section 8.2.4 as representing the birth of maize-based humankind, the relation between instruction and maize cultivation here itself provides insights into the origins of social life (and thereby also of a primordial debt).

⁵³⁴ As a brief reminder of the discussion in section 6.4.2, the social economy refers to households and their interrelations within and between communities, while the political economy refers to the role of states and the elite groups that are closely associated with them. The relation between the two with regard to the agency of art will be further explored below for the theme of memory-work and its socio-political implications.

states in the Maya lowlands. In this way the practical work of agriculture becomes part of what may be termed a 'social landscape of sustenance'. The conceptual basis for this is provided by the praxis of LPC lowland Maya art, which itself derives from the basic metaphors of personhood and the conceptualisation of the spatio-temporal environment.

For the Mycenaean case it is also possible to recognise a social landscape of sustenance, but one based on wheat and barley as staple crops, animal husbandry, and techno-tasking. Unlike for the Maya case, however, this can be seen less directly in the depiction of the natural world in art, as it was discussed in sections 4.4.2 and 5.2.2. For example, there is no apparent relation between Mycenaean personhood, as it can be interpreted on the basis of art, and the cultivation of wheat and barley.⁵³⁵ Neither is there a clear relation between the depiction of the palatial *Umwelt* and agricultural activities. Quite the contrary, in fact, as predominantly those parts of the landscape not under cultivation and undomesticated species of animals are shown. This can be seen very well in the 'naturalistic background' in wall-painting, featuring undomesticated marine, plant, and animal species in non-narrative settings, but very few domesticated animals or plants. This in itself is interesting, and it allows for some insights into the perception of the palatial authorities of the relations with the natural world around them. One exception, however, should be noted to the pattern of exclusion of domesticated species, namely in ritual context. This concerns the depiction of bulls as sacrificial offerings, as known from Pylos and Ayia Triada on Crete. Another example of an agriculturally-related offering can be seen in the presentation of a figure holding sheaves of grain in a wall-painting from the Cult Centre at Mycenae.

From the Linear B tablets it can be inferred that the role of oxen in the ritual economy of a cycle of ritual festivals was very important, as was the provisioning of grain but this was also used for the distribution of rations. Of course, as noted in section 3.4.2, the oxen played a key role in agriculture as well, being used to save labour in the farming labour bottleneck of tilling the soil. It was this use of oxen that allowed for greater surpluses of grain to be mobilised by the palaces, and the importance of palatial administrative control for the management of large herds is also of great significance. Even if the animals themselves should not be seen as technology, the way in which they were used to save labour can be understood as part of the techno-tasking strategy discussed in section 9.2.4. The depictions of oxen as sacrificial offerings points to the broader set of social relations and the conceptual basis that regulated their use in ritual. In a generic way this pattern is rather similar to the offerings of the LPC lowland Maya, but structured around a very different set of sacrificial practices and the social obligations implied by them.⁵³⁶ These differences can be related to the different patterns of agriculture, based on the different domesticates and the use of distinct strategies of labour-tasking and techno-tasking. The Mycenaean use of a techno-tasking strategy extend beyond agriculture as understood in a narrow way, however, as can be seen for relations between humankind and the natural environment in art.

Of particular relevance here are the hunting scenes in Mycenaean art, which as discussed in section 5.2.4 can be seen in both wall-paintings and on portable art objects. Particular notable among the latter were the Shaft Grave daggers, which emphasise the relation between weaponry as instruments

There is some evidence from early historical Greek poetic sources such as Hesiod that a key attribute of the character of people is their diet, as in the notion of 'grain-eaters', something that may have had a broad correspondence to the Mycenaean situation (Palaima 2008, 384-385). But it should be noted that the notion of grain-eaters acts as a simile, as an attribute of personhood, not as in positing a contiguity between the human body and the cycle of grain cultivation.

⁵³⁶ Descola (2013, 228-231) has pointed to the widespread occurrence of sacrifice in societies structured by his analogical schema of ontology, putting forward some ideas that it can be understood as part of a praxis characteristic for these kinds of societies. Of particular relevance in this is the role of sacrifice in connecting together different features such as social life, sacrificial animals, and the divine, thus establishing metaphoric connections between them in a practical setting that is often structured by a regular time schedule.

and the violent tasks with which they were conceptually associated. Moreover, the wall-paintings of hunting scenes show this activity to be taking place in more marginal, marshy areas, and to involve the use of chariots as well. In basic terms this can be seen as an extension of techno-tasking, with instruments not being used to save labour but to project physical power and domination over undomesticated nature. This is reinforced by the master/mistress of animals scenes, as well as by the depictions of ship's hulls in wall-painting discussed in section 4.2.4. In very general terms this brings up the notion of the domination of wild landscapes and seascapes through instruments such as weaponry, chariots, and ships.⁵³⁷ There is a parallel here with the spatial extension of palatial control through military organisation, not least because of the metaphoric parallel between hunting and warfare discussed in sections 5.2.4 and 5.3. This extension of domination through instruments can also be understood as part of the conception of a social landscape of sustenance. For it provides a template not only for the relations between the palaces and their *Umwelt* of wild landscapes and seascapes, but also extends to the theme of domination to social relations. The use of seals as instruments in the administration of the movement of goods, including sacrificial bulls or oxen, can also be understood as part of this, in particular as many carry designs of wild animals.

It is important here to recall from section 2.3.5 that for class relations in a pre-capitalist setting, surplus needs to be extracted through 'extra-economic' means. One of these means is through political and military coercion, which puts more emphasis on the political part of the term 'political economy'. This does not necessarily imply the constant application of physical violence to achieve material aims, but rather can be seen as the underpinning of the ability of the palatial administrative framework to successfully impose order. In this sense the focus on domination through instruments such as weaponry, chariots, and ships, together with the sacrificial offerings of oxen, provide a conceptual basis for a specifically Mycenaean social landscape of sustenance. Despite sharing the notion of sacrificial offerings with the LPC lowland Maya case, it is clear that both the contexts of these offerings and the conception of social relations implied by them were very different. This can be related to the basic differences in the means through which surpluses were gained. For the Maya use of labour-tasking was shown earlier to be embedded in the offerings and use of labour for the civic-ceremonial cores of communities. In a similar way, the techno-tasking strategy of Mycenaean early civilisation is reflected not just in the labour-saving use of oxen, but also in the use of a variety of instruments as a means for the palatial centres to dominate their hinterlands.

Earlier in section 9.3.3, for the comparison of the agency of art, the specifics of the pattern of domestication in the Fertile Crescent (the basis of the later Mycenaean pattern) were discussed. In particular it was noted that the metaphoric connection here between humans and animals was extended to the relations among humans, especially in terms of hierarchy and domination. In very general terms this can be seen for the Mycenaean case as well, even if the lack of evidence means that the more specific semantics of such metaphors remain unknown. Of course, metallurgy extended the notion of domination more powerfully in the Bronze Age through weaponry, supplemented later in the Iron Age by labour-saving tools in agriculture. By contrast the Maya focus on maize cultivation and labour-tasking gave rise to a different conceptual template of social relations, one based upon the notion of the moral community of mutual obligations between the community, deities, the ancestors, and the landscape itself. This difference with the Mycenaean case derives from the different material conditions that sustain human communities in the Maya lowlands. The art of the two cases does not simply reflect the material basis of the two areas, however, but rather serves to regulate the social landscapes of sustenance by providing a conceptual

⁵³⁷ As noted in section 5.2.4 this is in contrast to the peaceful interaction between humans and undomesticated animals, such as deer in landscape settings that include shrine architecture.

⁵³⁸ Clearly this should not be taken to imply that relations of domination in some form were absent from the Maya case, for as noted in section 6.4.2 both inequality and military coercion were present.

framework for them. These conceptual frameworks in both cases were reinforced by the praxis of art, in particular with regard to the different kinds of sacrificial offerings.

In the preceding discussion the issue of economic relations was also implicitly addressed, but there is more to be said about this for the art of the two case studies than just as part of social landscapes of sustenance. Specifically, there is the use of Mycenaean lapis lazuli and blue glass as a material for adornment, a parallel for which in the LPC lowland Maya case can be recognised in jadeite and related greenstones. In both cases these materials were not only used for adornment, but also exchanged both in regional and long-distance networks. This means that the art objects that were crafted from them can also be connected to the comparative analysis of the elements of economic relations and long-distance exchange in section 9.2.4. Before doing so, however, it is important to recall the differences in terms of metaphor and praxis of Mycenaean lapis lazuli and blue glass and LPC lowland Maya jadeite and related greenstones. As discussed in section 9.3.3, especially in table 9.3, the kinds of metaphoric connections associated with these materials formed part of very distinct worldviews. The implication of this is that Maya jadeite and related greenstones have a different connotation when used as a material of adornment, for example in their relation to a breath-soul, than for the use of Mycenaean lapis lazuli and blue glass as a material of adornment. A similarly significant difference can be seen for the discussion in section 9.3.5 of the praxis of art objects of lapis lazuli and blue glass on the one hand, and jadeite and related greenstones on the other.

In the Mycenaean case there was a clear part-whole relation, with the palatial complexes acting both as a context for the display and hoarding of lapis lazuli and blue glass, and as administering the import, working, and distribution of these materials. This palatial domination can be grasped as a whole from which parts were distributed, primarily in the form of blue glass beads and seals. For the jadeite and related greenstones of the LPC lowland Maya no such part-whole relation can be recognised. Instead their exchange, working, and distribution, as well as the basic metaphoric associations in caches and burial contexts, can already be seen in the pre-state communities of the MPC period in the Maya lowlands. As noted in section 7.2.3, jadeite celts were a suitable form both for exchange and to act as a 'blanket' for creating more specific shapes through crafting. Their wide distribution to small sites like Chan, including after the emergence of the first states, suggested that they could be gained through some set of exchange relations that can be characterised as 'openloop'. Even for the better-known Classic period a similar wide accessibility of jadeite can be noted. As shown in table 7.2 in section 7.3.2, not only jadeite and related greenstones were widely available, but also chert, obsidian, and shell.⁵³⁹

At present it is hard to distinguish between regional and long-distance exchange relations for LPC lowland Maya jadeite and related greenstones. The term 'open-loop' can be used as a suitable place-holder to denote the wide accessibility and lack of centralised control over these materials, at least until more detailed evidence on exchange relations becomes available. This can be clearly contrasted with Mycenaean lapis lazuli and blue glass, for which the contexts of long-distance and regional economic relations can be sharply distinguished. With regard to long-distance exchange, both materials were acquired from other elite and/or state actors in the eastern Mediterranean. This can be seen as involving palatial interests but not full palatial control, since as noted in section 3.4.2 a certain degree of autonomy can be noted for the mercantile actors in the Late Bronze Age eastern Mediterranean. At the same time a number of factors can be observed, such as the high value of lapis lazuli, as well as the find of hoards of Near Eastern seals made from this material at Thebes, as well as the ingot shape of exchange units of blue glass. Taken together are all indicative of

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⁵³⁹ Furthermore, the technological styles of the large stucco masks and panels, as well as of wall-painting of the LPC period were argued to conform more closely to a 'corporate' pattern of collective labour mobilisation. The implication of this is that this art has no diacritical role, or at least a less clearly articulated one.

exchange between very powerful actors, most likely states given the Near Eastern propensity for political control over these materials discussed in section 4.3.3. The mercantile aspect of long-distance exchange, then, is not completely 'open-loop' but rather acts as an intermediary between a variety of state-based 'closed-loop' systems.

As noted earlier, the regional patterns with regard to lapis lazuli and blue glass were characterised by a part-whole relation dependent upon the palatial framework. In overall terms this effectively constitutes a 'closed-loop' system of economic relations, which as noted in section 9.2.4 was very distinct from the LPC lowland Maya pattern of 'open-loop' exchange relations. Partly this difference may be attributed to the distinct instruments for exchange in the Mycenaean case, as constituted by a nexus of weighing, sealing, and writing systems. As noted in section 3.4.3, this nexus could be closely related to the emergence of new metallurgical techniques and their long-distance exchange (together with semiprecious stones) in the middle of the 3rd millennium BC, in the area stretching from the Aegean to the Indus. One important characteristic of metals was their convertibility, not only in a technological sense for alloying and working but also for exchange relations. The ability to create standardised units in the form of the metal ingots allowed for sophisticated long-distance exchange relations, and underpinned the uses of large-scale metallurgy for such purposes as outfitting larger military formations. But this convertibility was not limited to metals, since it can also be seen for other materials produced through 'transformative pyrotechnology' such as glass.

From the discussion of the properties of Mycenaean blue glass in section 4.3.2, it is clear that while the vertical *chaîne opératoire* of glass-making was very distinct from that of making metal alloys, it nevertheless had a similar degree of convertibility. This can be seen in the ingot shape in which blue glass was exchanged. It can also be seen in the great variation of shapes into which the material could be worked, which included inlays in different material forms of art like architectural friezes, furniture, and weaponry. It was precisely this flexibility of blue glass as a working material that made possible the part-whole relation between the aesthetics and production contexts of lapis lazuli and blue glass within the palatial sphere, and the distribution of blue glass beads and seals to more peripheral areas. Important for these peripheral areas was that, as noted in section 5.2.2, these blue glass objects functioned as materials of prestigious adornment and markers of Mycenaean identities, thus providing a metaphoric 'connector' to the palatial centres. As discussed in section 5.3.3, this pattern can be related to a long-term development of materials of prestigious adornment and value systems in western Eurasia. This started with the use of naturally-occurring copper for adornment, before moving on to the use of gold and semiprecious stones like lapis lazuli as can be seen in the Varna cemetery and also in the Shaft Graves at Mycenae.

The working and distribution of blue glass in the Mycenaean palatial period represents another phase in this trajectory. On the one hand it is a material of prestigious adornment and through colour aesthetics closely related to lapis lazuli, but on the other hand it is also a commodity exchanged in ingot form (and as such defined by its weight). Because of its flexible working properties and the ability to reach a greater production volume through the use of moulds, blue glass as a material of adornment could be distributed to a much wider segment of society than lapis lazuli. The difference here with the LPC lowland Maya case could scarcely be more pronounced. Jadeite and related greenstones are not shaped through transformative *chaînes opératoires* that use pyrotechnology, but rather through reductive craft-work. Consequently these materials do not possess the convertibility that Mycenaean blue glass (and metals) have. This is important because it limits the 'promiscuity' of jadeite and related greenstones both in exchange and in cross-craft uses, as well as their ability to be produced in greater number through the use of moulds. Furthermore, while blue glass has both aesthetic and number value (in the weight-based ingot shape), in jadeite and related greenstones there is no dualism between these two aspects. As discussed in section 8.3.3 these materials were

been exchanged in the 'open-loop' system of the LPC lowland Maya, and may have functioned as some form of currency. While this currency role remains to be demonstrated, it is clear that in terms of their use function as wealth they formed part of a system of religious obligations within the framework of the moral community. This conception of wealth can be seen very well in the role of *ikatz* bundles both in exchange and in ritual contexts in the Classic period.

The implication of this is that Mycenaean lapis lazuli and blue glass on the one hand, and LPC lowland Maya jadeite and related greenstones on the other, formed part of two distinct nexūs. This could be seen for the role of these materials as metaphoric 'connectors' discussed in section 9.3.3, and also for their uses in the praxis of the art of the two cases treated in section 9.3.5. The different working and exchange characteristics can now be added to this. It is important to stress, however, that these nexus of lapis lazuli/blue glass and jadeite/related greenstones were not derivative from the different kinds of economic relations at the regional and long-distance scales of the Mycenaean and LPC lowland Maya early civilisations. Rather, the different 'grid' of metaphor, exchange/craftwork, and the praxis of art derives from the different material properties of the two sets of materials, as well as from the different kinds of instruments available to facilitate exchange. Their distinct nexūs can also be related to the different conceptions of the social landscapes of sustenance of the two cases discussed earlier. This can be seen very well for the embedding of Maya jadeite and related greenstones in the moral community through the praxis of depositing objects made from them in caches and burials, which as noted earlier in this section were closely connected to maize cultivation. Furthermore, the working properties of these materials in terms of reductive, labourintensive craft techniques, made it more suitable for household-based craft-work.⁵⁴⁰

This pattern of craft-work is similar to many other materials used in LPC lowland Maya art, as noted in section 7.3.2, and can be seen as one of the reasons for the 'open-loop' exchange through which these materials were widely disseminated. By contrast Mycenaean lapis lazuli and blue glass had to be procured through long-distance exchange in the eastern Mediterranean, which was under the control of state and elite mercantile actors. In part this control derived from the limited sources of semiprecious stones and rarer metal ores such as the tin and arsenic used for bronze alloys. Access to the blue glass used in Mycenaean art was also more circumscribed because it was only made in Egypt and in Syria/Mesopotamia. However, it is not just a question of more limited sources, for the same is true for jadeite in Mesoamerica. As noted earlier, the set of weighing, sealing, and writing systems formed the basic instruments of exchange in the Late Bronze Age eastern Mediterranean. These means of exchange also formed the basis for the palatial framework of administration, within which key resources such as metals, blue glass, and semiprecious stones were controlled. The part-whole relation of an overarching colour aesthetics and partible prestigious adornment of lapis lazuli and especially blue glass was made possible by the economic relations that came together in the palatial centres.

This pattern provides a parallel to the earlier discussion of the relation between techno-tasking and the artistic rendering of palatial domination of its *Umwelt*, through instruments such as weaponry, chariots, and ships. However, unlike for the Maya use of jadeite and related greenstones there is no clear connection to agriculture, or sustenance in broader terms, for Mycenaean lapis lazuli and blue glass. Yet these two materials can be understood as part of the same technologies and means of exchange that also formed the basis of techno-tasking and the political economy associated with it. This can be grasped as part of a specifically Mycenaean material world, which comprises a set of domesticates and raw materials, as well as the technologies and means of exchange required to use them. Mycenaean art of course was crafted from this material world, and at the same time fulfils a

⁵⁴⁰ There is no intrinsic technological need to gather together a larger number of craft-workers to work jadeite, nor are there clear advantages in doing so in terms of significant amounts of labour-saving.

key role in it by providing a conceptual (metaphoric) framework of the social relations within it. This can be seen for the depictions in art related to the social landscape of sustenance, as well as for the part-whole relation of materials of prestigious adornment. Something similar could be seen for LPC lowland Maya art, but structured according to a different 'grid'. Here, the rendering of the spatio-temporal environment, as well as the use of metaphoric 'connectors' such as the Jester God motif and the praxis of caching and burials, can be related to the different material world of the Maya lowlands. This material world used a different set of domesticates and raw materials than the Mycenaean one, something also reflected in technologies and the means of exchange.

The difference could be seen best for the craft-work, exchange, and use-contexts of Maya jadeite and related greenstones on the one hand, and Mycenaean lapis lazuli and blue glass on the other. Yet the broader metaphoric associations for which these materials were used in both cases should not be seen as a simple reflection of the Mycenaean and Maya material worlds. This can be readily grasped when considering the later pattern of metallurgy in Postclassic Mesoamerica. As discussed in section 9.3.3 this was characterised by a very different set of metaphors than metallurgy in western Eurasia, including specific accounts of creation and of Flower World and their moral connotations. In social terms this can be understood as part of an emerging social field between South America and Mesoamerica, with large balsa rafts being used for transportation (Dewan & Hosler 2008). This exchange can be recognised in material terms in the so-called 'axe-monies' that can be seen both in Mesoamerica and in South America, and which will be discussed in more detail shortly. To some degree the social field in which axe-monies were used can be seen as somewhat peripheral to the rest of Mesoamerica, or perhaps underexplored. But the uses of metals in western Mexico not only share a similar conceptual framework with the rest of Mesoamerica, their uses also show a broad coherence with the use of ritually valued materials like jadeite and related greenstones.

These axe-monies were objects made from arsenic bronze that were hammered into very thin layers and are found in Ecuador and the western Mexican coast, while a number of closely related forms were only found in South America (Hosler et al. 1990, 14-25). The focus on thin surfaces in axemonies can already be distinguished from the weight-based metal ingots exchanged in the Late Bronze Age eastern Mediterranean. It is more in line with the special valuation of colourful surfaces noted in section 9.3.3. Furthermore, the main find contexts of the axe-monies are in burials and caches, sometimes in bundles (Hosler et al. 1990, 14). Indeed, the evidence from western Mexico suggests that they were used as a currency in tribute and market exchange, alongside other currencies, but that their main use-function was for ritual and ceremonial purposes (Hosler et al. 1990, 38-42, 50). Overall this means that there are two key distinctions with western Eurasian metallurgy. The first of these concerns an exclusive emphasis on surfaces, and the metaphors associated with them, rather than on weight. Secondly, the focus on ritual uses and deposition contexts differs from the more wide-ranging use of metals in western Eurasia, especially for weaponry. Hence while in both areas standardised metal objects were used in exchange contexts, the metaphors and praxis of the material worlds of which they formed part differed considerably.⁵⁴³

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⁵⁴¹ The South American trading region seems to have been Ecuador, and the prime attraction of the western Mexican coast for its traders seems to have been the additional supply of spondylus shell (Hosler et al. 1990, 78-79). It is through this route that metallurgy was most likely introduced to Mesoamerica (Hosler 2009, 190-194).

⁵⁴² The situation is different for other kinds of metallurgical objects. This can be seen for the copper bells and other materials forms made of metal at Postclassic Mayapan in the northern Maya lowlands, which can be related to a broader world-system or social field inferred for Mesoamerica as a whole in this period (Paris 2008).

of course it is impossible to know what kind of impact the further development of metallurgy and other technologies would have had if Mesoamerica had not been conquered by the Spanish. As noted in section 9.3.3, metaphors related to metal were already somewhat different in that there was no close relation to maize cultivation (as for jadeite and related greenstones). The key point here, however, is that the initial framework of metallurgy in western Mexico was greatly influenced by pre-existing Mesoamerican (and even more generally Amerindian) conceptions of the material world.

Although certainly also important in its own right, the theme of the conception of the material world as the basis for social life is the prerequisite, the underlying basis of the actual agency of art of the two cases. These forms of agency of art will now be compared here, as part of the second theme of 'art and socio-political relations'. This theme relates those aspects of the art of the two cases to the broader comparison of socio-political patterns in section 9.2.4. Important findings of the comparison of Mycenaean and LPC lowland Maya socio-political structures were the similarities between the two cases with regard to state form, together with clear differences for class and inequality. Unfortunately, little can be said about similarities and differences with regard to the structures of states in the two areas, owing to the very limited evidence for the LPC lowland Maya case in this regard. However, it did prove possible to discern interesting patterns in the *longue durée* trajectories of states of the two cases. The strategy here is to start with the comparison of the differences for the element of class and inequality as it relates to Mycenaean and LPC lowland Maya art. Having compared these basic patterns, the next step is to relate them to the interplay between art and socio-political patterns with the *longue durée* framework of Aegean prehistory and the Preclassic period in the lowland Maya area.

As noted in section 9.2.4, the key difference with regard to class and inequality between the Mycenaean and LPC lowland Maya cases can be found in the basic social units of, respectively, modular households and extended household groups. In the Aegean the modular household had by the end of the Neolithic period become a potential unit for socio-political competition, something initially seen best in economic patterns in the Early Bronze Age on the mainland. By the period of the Shaft Graves, however, the burial evidence provides a new medium for the ideological articulation of socio-political distinctions. As discussed in section 5.3.3, the art of the Shaft Graves at Mycenae can be seen as the first coherent expression of a new Mycenaean style, in a social setting that was interpreted as that of a conical clan. This style focuses on the themes of warfare and hunting as depicted in the material forms of art found here, together with the use of certain materials (especially gold but also semiprecious stones like lapis lazuli) for prestigious adornment. The emphasis on highlighting socio-political distinctions through grave goods in the Shaft Grave period can also be seen in an expanded way in the Mycenaean palatial period. The burial evidence of that period shows what has been interpreted as patron-client relations between different households. As noted in section 3.4.2, this pattern is consistent within overall Mycenaean class relations as they were structured through economic and socio-political relations.

The burial evidence of the LPC lowland Maya case is structured in a very different way. Based on the discussions in sections 6.4.2 and 8.2.1, it can be noted that the burial evidence places an emphasis on ancestor ritual rather than on aggrandising individuals. This can be understood as part of an overall emphasis on lineages, something that can be seen very well in the discussion of the site of K'axob in section 8.2.5. Such burial practices can already be recognised for the MPC period in the lowland Maya area, especially in the civic-ceremonial cores of sites. These civic-ceremonial cores themselves were also significant, in that they required considerable amount of labour for their initial construction. A good example of this could be seen for the early development of the site of Cival, as discussed in section 8.2.3. Mechanisms for large-scale labour mobilisation existed here long before the emergence of the first Maya lowland states in the LPC period. As argued for in section 8.3.3, both the articulation of ancestors through special burials and the

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⁵⁴⁴ Abstracted into very general terms here, the different use of qualitative terms such as 'aggrandising' here might well appear somewhat subjective. For is not one's perception of a solemn and respectful ritual another's view of a manipulative use of commonly accepted ideas for cynical power purposes? The reason this statement on Maya ancestor ritual can be made here, however, is based upon the discussion of 'earth offerings' as related to burial ritual in section 8.2.1, and on the observations on the number of persons buried in section 6.4.2. These findings were incompatible with the notion of a social stratum distinguishing itself in an aggrandising way through the deposition of wealth in burials. Of course, it should also be noted that there also was considerable scope for internal inequality within Maya lineages.

mobilisation of labour to develop civic-ceremonial cores can be understood within the overarching context of the Maya 'moral community'. This moral community provided a template for sociopolitical relations at the communal level, and can also be seen in the praxis of art in civic-ceremonial cores at smaller sites, such as the case of Chan discussed in section 8.2.6.

It should be clear from this discussion that the Mycenaean conical clan and LPC lowland Maya lineage and moral community were quite distinct, even if unfortunately the evidence is too limited to go into more detail presently. Yet in both cases these basic social patterns had a pivotal role to play between pre-state and state organisational structures. This pivotal role can be seen in the impact of state formation in the two areas on the praxis of art. As discussed in section 9.3.5, the differences in terms of basic social patterns were reflected in the praxis of art as it can be seen both in the trajectories to statehood and in the role of art within the states of the two cases. In the lowland Maya case the MPC period praxis of art is not superseded, but rather elaborated in new forms of art such as wall-painting and stucco-work. Monumental structures are scaled up and more complex narrative art can be recognised, but the basic set of metaphors (the quincunx-shaped cosmos and maize symbolism) and practices (caching and burials) are not radically restructured. 545 By contrast the initial praxis of Mycenaean art in the Shaft Grave period is put into an entirely new grid, one structured by the administrative framework of the palatial states. This can be seen in new kinds of part-whole relations for materials of prestigious adornment, as well as for the themes of warfare and elite culture, and that of the rendering of the natural world. Furthermore, a new theme of public ritual is added as part of the new palatial cycle of religious public festivals.

These aspects of the praxis of art have already been discussed in section 9.3.5, but it can be useful here to consider also some of the features of metaphor and semiotics in the art of both cases that were compared in sections 9.3.3 and 9.3.4. For the LPC lowland Maya case, the use of basic metaphors in an elaborated form could be seen very well for the quincunx shape of the cosmos, as discussed in section 7.4.2. The basic use of this cosmological metaphor could be seen in the *k'an* crosses in bowls deposited in burials at the small site of K'axob. In a much more elaborate way it was also shown in a narrative setting in the San Bartolo wall-paintings. Given the characteristics of K'axob as a community this implies a broadly shared template, rather than the imposition of a certain worldview from an elite centre. The process through which such knowledge was shared was termed memory-work for the Maya, and it was closely related with the moral community and the civic-ceremonial core. Together these three factors formed a basic framework for the agency of art in the MPC period. With the coming of states in the lowland Maya area in the LPC period, some changes occur in the pattern of memory-work as can be seen in the art of this period. As noted in section 7.3.5, a good way to understand these changes is through the Jester God iconographic motif, which derives both from preceding MPC lowland Maya and Olmec maize symbolism.

The importance of the Jester God motif for understanding the agency of LPC lowland Maya art was discussed in section 8.3.3. First of all, its relation with jadeite and related greenstones can be seen in the actual use of such materials in the Tikal burial 85 mask and in the Dumbarton Oaks plaque, both of which carry a Jester God motif. This extends the basic association between jadeite and related greenstones on the one hand, and maize symbolism on the other, to more complex symbolic associations. These can be seen in the use of the Jester God motif on bundles in wall-paintings from

⁵⁴⁵ Of course this does not imply that there were no discontinuities at all, as can be seen for the example of the disappearance of figurines after the transition from the MPC to the LPC period in the Maya lowlands that was discussed in section 7.2.3. This could, on the basis of a parallel with Formative period Oaxaca, be related to a shift of ritual away from households to the state. Yet the dichotomy between household and state seems too great in the lowland Maya case, as the civic-ceremonial cores of non-state communities fulfilled a significant ritual role as well. This can be seen very well for the case of LPC period Chan, where MPC period figurines were curated in burial contexts of the LPC period, as discussed in section 8.2.6.

El Achiotal and San Bartolo, and also in the headgear of various important figures from Cival and San Bartolo. The extensive narrative programme of the San Bartolo murals, furthermore, allowed for a diverse set of associations of the Jester God within a broader theme focusing on maize, the maize god, and the origins of maize-based humankind. All of this is of importance for grasping the impact of state formation on the praxis of LPC lowland Maya art, for the Jester God motif was closely related to the office of kingship. The key point here is that this represents an elaboration of pre-existing metaphors and the praxis of art in MPC period communities, both in portable jadeite and greenstone material forms with complex iconography and writing, and in monumental art. This serves to create new kinds of distinctions, but not in a way that results in a wholesale reorientation of the praxis of art in smaller communities like Chan and K'axob.

The co-existence of state and community was argued in section 6.4.3 to have been one of the key *longue durée* patterns in the lowland Maya area. As such, it could be contrasted very clearly with the pattern in Aegean prehistory of a set of transformative, disjunctive periods that were structurally different from each other, as noted in section 9.2.4. This can also be seen for the agency of art, for as noted earlier the palatial complexes re-ordered the praxis of art onto a new grid of part-whole relations, binding different kinds of groups together in this way. As discussed in section 5.3.3 this praxis of art can be seen as creating different kinds of 'social legibility', with the palace acting to bring together different metaphors in what was termed there a form of *bricolage*. The use of this term *bricolage* meant that the palatial administration used different kinds of praxis of art for its purposes, which earlier did not form a coherent whole. It is precisely here that the difference with LPC lowland Maya art can be seen very well, for the memory-work there formed an elaboration of metaphors, rather than fitting them together in a new administrative framework as with the case of the Mycenaean palaces. The different *longue durée* frameworks of the Mycenaean and LPC lowland Maya early civilisations can in this sense be recognised for the agency of their art as well.

In the discussion of Maya memory-work by Hamann (2002, 2008b), and its role in the moral community and the state in section 8.3.3, the contrast with European conceptions and uses of the past was briefly referred to. Of particular interest in this is Hamann's (2002, 367-368) reference to the brief comments of Marx on the use of Greco-Roman templates by modern revolutionary movements, which deal with the way in which older ideas and cultural memory reassert themselves in moments of (revolutionary) crisis. Hamann uses this to point to a Western counter-example for Mesoamerican memory-work, similarly drawing upon ancient sources (including ruins) to fashion the present. But what is most fascinating in Marx's account, and left unaddressed by Hamann, is that this use of ancient templates in the Western case is as much about transformation as it is about a recreation in some form of the (imagined) past:

"Thus Luther donned the mask of the Apostle Paul, the revolution of 1789 to 1814 draped itself alternately as the Roman Republic and the Roman Empire, and the revolution of 1848 knew nothing better to do than to parody, now 1789, now the revolutionary tradition of 1793 to 1795. In like manner a beginner who has learnt a new language always translates it back into his mother tongue, but he has assimilated the spirit of the new language and can freely express himself in it only when when he finds his way in it without recalling the old and forgets his native tongue in the

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⁵⁴⁶ With the caveat that the internal structure of the LPC lowland Maya states are not very well-known. However, with regard to the praxis of art it is at least possible to note clear continuities with the MPC period in the three following elements of lowland Maya art. The first is that there are no part-whole relations in the praxis of art but rather more elaborate versions of memory-work in those sites that acted as the centres of states. Secondly, there are no indications whatsoever of state control over key materials used to create art, even for the later Classic period. Finally, the mobilisation of labour to create civic-ceremonial cores does not seem to exceed in relative terms (relative to the size of populations) that of MPC period communities, and the technological styles of wall-painting and stucco-work point to a corporate pattern of craft organisation as well rather than to an elite focus.

use of the new. Consideration of this world-historical necromancy reveals at once a salient difference. Camille Desmoulins, Danton, Robespierre, Saint-Just, Napoleon, the heroes as well as the parties and the masses of the old French Revolution, performed the task of their time in Roman costume and with Roman phrases, the task of unchaining and setting up modern **bourgeois** society." (Marx [1852] 1979, 104, emphasis in the original)

Yet it is important to recall here from section 2.3.3 that the Renaissance and later Western view of the Greco-Roman past is characterised by a very specific dynamic, one which in art was conceived through the notion of fantasia. Furthermore, this dynamic was also related to the specifics of capitalism and the Enlightenment. This qualifies the contention of Hamann (2008b, 157-158), that Postclassic Mesoamerican memory-work using Formative and Classic iconography is similar to the Renaissance appropriation of the Greco-Roman past. This is only true in a generic sense, in that in both the Renaissance and Postclassic Mesoamerica there existed a hermeneutic approach to the art of preceding periods. The societal frameworks for such hermeneutics differed considerably, however, and it is important to consider this as well. Something similar can be said for the distinct longue durée trajectories of the forms of agency of Mycenaean and LPC lowland Maya art. 547 Hence it is important to consider the factors behind these differences. Given the lack of insights into LPC lowland Maya state structures, and into the specific details of both Mycenaean and LPC lowland Maya basic social groups, it would be unwise to ascribe the different longue durée frameworks of the two cases to socio-political patterns. The fact that later Classic period Maya social structures seem to be somewhat different from those of the LPC period also argues against this. 548

More insights can be gained from the comparative discussion of the theme of the material world as the basis for social life earlier in this section. One aspect of this was the so-called social landscape of sustenance as actualised in the metaphor, semiotics, and praxis of art, and inseparably related to agricultural techniques and the social relations through which these were used. For the Mycenaean case this involved both an element of long-term stability in the biotechnological properties of wheat and barley, and an element more prone to changes in the form of techno-tasking. This technotasking referred not only to the use of labour-saving technologies, but also more broadly to the way technology structured relations within the political economy. Included in this for the Mycenaean case were instruments of power such as ships, chariots, and weaponry, by which the palatial centres could project their power to their hinterlands and beyond. This could be seen in warfare-related art and by parallel also in hunting and other expressions of domination over undomesticated nature. As such, these instruments of power can be seen as closely intertwined with the political economy of the Mycenaean palaces. Furthermore, as a political economy the palatial administration was structured by the use of a nexus of weighing, sealing, and writing.

However, this particular nexus is clearly circumscribed in space and time, as noted in section 5.3.3. Its starting-point can be located in the middle of the 3rd millennium BC and its end-point in the immediate aftermath of the collapse of the Late Bronze Age states in the eastern Mediterranean and Near East. As part of a broader social field stretching from the Aegean to the Indus, the nexus of weighing, sealing, and writing seems to have been associated with certain forms of metallurgy, in particular bronze alloys using tin and arsenic. Furthermore, the use of lapis lazuli and blue glass as materials of prestigious adornment, as part of a complex aesthetic of colour, can also be understood within this administrative nexus and set of technologies. As can be inferred from the sequence of

⁵⁴⁷ These two cases can also be seen as constituting the deep prehistory of Postclassic Mesoamerica and the Renaissance West, but no attempt will be made here to establish a connection at such a very long-term scale. The point of bringing them up was merely to highlight the contrast between the European and Mesoamerican macro-regions.

⁵⁴⁸ See for this especially the discussion of the technological styles of stucco-work and wall-painting in section 7.3.2.

materials used for prestigious adornment in relation to the 'commodity nexus' sketched in section 5.3.3, this trajectory was rather discontinuous in that it involved clear structural differences between phases. Much the same can be said about the overall trajectory of the Aegean. Even if some degree of continuity and memory-work can be inferred between Minoan Crete and the Cyclades on the one hand, and the Mycenaean palaces on the other, the framework of political economy reordered such elements of continuity into a new grid. This, as noted earlier, can be seen as a form of *bricolage*, which is based on the discontinuity inherent in a political economy based on techno-tasking and the trajectory of metallurgy characteristic of western Eurasia. 549

The LPC lowland Maya social landscape of sustenance was based on a very different set of domesticates, technologies, and means of exchange. Unlike the wheat and barley of the Mediterranean the biotechnological productivity of maize did increase over the long-term, even if the specifics of maize productivity are less clear for the LPC period. One element that can be seen in this period, however, is the use of a labour-tasking strategy for intensification, especially for the water-works that can be seen both at small and very large sites. This economic strategy was discussed in relation to the moral community and memory-work earlier in this section. One key aspect that is very important here is that the complex of maize cultivation, labour-tasking, the moral community, and memory-work are much less susceptible to radical alterations in structure than the political economy of the prehistoric Aegean and its relation to the agency of art. The same is true to some extent for the 'open-loop' economic relations, including long-distance ones, that characterised the LPC lowland Maya case. There was more continuity here in the kinds of materials used in exchange and the means used to facilitate this exchange. This is not to say that the Mesoamerican longue durée should be seen as stagnant, for important changes can be seen from the Formative through Postclassic in terms of state formation, market systems, and technologies like metallurgy.

The key distinguishing feature with Aegean prehistory, however, lies in the different kinds of material worlds, and by extension the distinct political economies, socio-political systems, and forms of agency of art. These differences allow one to grasp the reasons behind the specifics of the Mycenaean creation of 'social legibility' through art, as part of the palatial administrative state. They also allow for insights into why a similar pattern cannot be seen for LPC lowland Maya art, because this represented an elaboration of pre-existing communal ideology rather than the imposition of a new grid centred on the state. As noted by Hamann (2008b, 145-148) for the Postclassic period, Mesoamerican elites drew upon cultural ideas about origins and agriculture that were shared with commoner groups that were capable of memory-work in their own right. He rightly argues that charts tracing certain iconographic motifs from the Formative through Postclassic periods have to be understood as part of generically similar kinds of praxis of art (Hamann 2008b, 154-157). Of course this does not imply uniformity across all areas and periods of Mesoamerica, but rather points to a shared pattern of memory-work that recurs across the *longue durée*. The specific argument added to this here is that the persistence of this long-term conceptual pattern can be understood alongside a specific material world, and the economic and socio-political implications of that world.

9.3.7: Implications for general ideas about the agency of the art of early civilisations

The time has now come to turn to consider the implications of the comparison of Mycenaean and LPC lowland art for general theoretical ideas on the agency of art. Two distinct aspects of this will be discussed here, one dealing with the implications for ideas about the role of art in early civilisations, and the other with the notion of the agency of art in general. To start with the question

⁵⁴⁹ As can be seen very well in the broad front of innovations in the Iron Age, which apart from the spread of large-scale iron-working include alphabetic writing, coinage, and complex mathematics and philosophy, together resulting in a very different pattern of state formation compared to the Bronze Age.

of the role of art in early civilisations it is important to recall the most important ideas from section 2.4.4, in particular the work of Yoffee and Trigger. In his book *Myths*, Yoffee had contrasted the differentiated social power of social groups and the integrating political power of the framework of the state. He furthermore used the concept of 'legibility' to understand how states created new kinds of social relations between different social groups, whether through art or through law. Based on earlier work in collaboration with Baines, a nexus of order, legitimacy, and wealth also played an important role in this, with order being widely shared and wealth controlled by elites to gain legitimacy. As such, the creation of legibility is an elite project carried out by means of the state. As noted in sections 5.3 and 9.3.6, something like this can indeed be observed for the case of the Mycenaean palatial states, with their creation of legibility in social relations through art.

Yet as discussed for the *longue durée* framework of LPC lowland Maya early civilisation and its art in the previous section, a similar creation of legibility cannot be recognised here. Instead here the 'grid' for the agency of art seems to derive from the social power of communities, adopted for specific purposes by states but not wholly altered in a new framework of legibility. It seems that this focus on elite control is too specifically focused on the Near East (and eastern Mediterranean), for in Mesoamerica this nexus is likely to have worked in a different way (cf. Hamann 2008b, 143-149). Specifically, the notion of the state creating legibility among its subjects through part-whole relations in art (as noted for the agency of Mycenaean art) was lacking in the LPC lowland Maya case. The 'whole' was already present in the MPC period communities of the Maya lowlands, and was only elaborated for different socio-political ends in the civic-ceremonial cores of the larger sites. Similar qualifications have to be made for the treatment of art in Trigger's *Understanding* and related work, as discussed in section 2.4.4. Central to this was Trigger's idea that early civilisations were characterised by a pattern of surplus extraction based on a two-class system. This hierarchy in economic and political terms was also reflected in ideology, which projected human social relations onto the conception of the supernatural and ritual praxis.

Art, then, would reflect this ideology in Trigger's view, although it could also reflect more idiosyncratic values of particular early civilisations. Finally, an important role can be noted for 'conspicuous consumption': the display and consumption of wealth. According to Trigger such displays of wealth played a crucial role in the maintenance of inequality, and can to some degree be seen as rooted in human biology. Trigger's view of ideology was similar to that of Eric Wolf, who, as noted in section 2.4.3, used the concept of a 'tributary mode of production' to incorporate a range of societies characterised by a form of organisation that transcended kinship. This tributary mode was characterised by the projection of earthly social relations onto the supernatural realm. There are indications that in non-state cases of the tributary mode of production this projection can also be seen. This can be seen very well in the work of Mary Helms. Her studies started from her initial recognition of how indigenous cultures in Panama conceptualised the celestial realm as being embodied in artefacts from Columbia, and broadened to a cross-cultural investigation into the role of cosmology and ideology in non-state hierarchical polities (Helms 1998). She saw a similar kind of parallelism between social systems and cosmologies as Trigger and Wolf (Helms 1998, 8).

As noted in section 2.4.4, other strategies like gossip and certain forms of witchcraft could be used to maintain equality, with both tendencies to sociality and competitiveness being derived from human biology (*Understanding*, 678). Interesting in this regard is how Trigger sought to address his own political inclinations through this work. Although raised in a broader social environment that favoured the idea that people are inherently good (Trigger 2006b, 226-231), he came to recognise the problems inherent in such a position. Specifically, he noted the lack of a proper way to maintain equality in large-scale industrial societies, as he argued had failed in the USSR and the other major socialist states of the 20th century (Trigger 2006c, 26-27).

What is described in this work is precisely the process of setting up hierarchies within kin-ordered modes of production. ⁵⁵¹ In this regard it is also important to recall from the discussion in section 9.3.3 that Descola's analogical schema of ontological identification was closely related to the presence not so much of states but of hierarchies in general. The two cases of the Preclassic lowland Maya area and the prehistoric Aegean are precisely useful in this regard because they enable insights into such a trajectory from kin-ordered to tributary modes of production. Yet in terms of the agency of art, clear differences can be noted both for the initial trajectory to statehood and for the use of art in the developed states. Even if the Mycenaean and LPC lowland Maya cases can both be seen as city-state systems in the way defined by Trigger in *Understanding*, the discussion of section 9.2.4 made it clear that very different patterns existed for class and surplus extraction. Based on the discussion in section 9.3.6, the agency of art in the two cases could be closely related to the specific economic and socio-political patterns of both early civilisations. In that sense a clear parallelism between social systems and expressions of ideology, as argued for by Trigger, Wolf, and Helms, can indeed be discerned. But the key insight gained from the in-depth comparison of the agency of art in section 9.3.6, was that there was no strongly unitary pattern common to both cases.

Instead, the differences in economic patterns, as well as in basic socio-political patterns, between the Mycenaean and LPC lowland Maya cases is mirrored in the differences in patterns of the agency of art. The key argument in section 9.3.6 was, furthermore, that these distinctions between the two cases could to a significant degree be traced back to the different material worlds of the prehistoric Aegean and the Preclassic Maya lowlands. As noted earlier, this should not be seen as implying a determinism of some kind, for considerable variation between different regions and periods can be seen for the two areas. At the same time, however, the specifics of these distinct material worlds are behind some of the key differences in agriculture, urbanism, economic relations, and by extension also of the agency of art. This finding goes against Trigger's point in *Understanding* that there is a high degree of possibilism, which makes it not particularly relevant to look at differences in crops, technologies, and environments when comparing patterns of surplus extraction. With regard to the agency of art, the clearest impact of the difference of the findings of the present work and Trigger's *Understanding* can be seen for the notion of conspicuous consumption. The display and consumption of wealth was noted as a common occurrence in both cases in section 9.2.4.

At least in a generic sense this seems to confirm Trigger's idea that conspicuous consumption played a key role in the maintenance of inequality in early civilisations. This idea of his was based upon an earlier article that looked mainly at architecture (Trigger 1990b). Conspicuous consumption through architecture involved the use of energy in a way that ran counter to the 'principle of least effort', with extravagant buildings functioning as an index of the power of elites to subvert this principle (Trigger 1990b, 127-128). Yet as noted for the agency of Preclassic lowland Maya art in section 8.3, the labour to create the first MPC period civic-ceremonial cores cannot be related directly to state organisation or to a developed class system. Furthermore, the later LPC period 'technical styles' of pyramid construction and stucco-work also shows a more 'corporate' pattern, while the more elite-focused styles of the Classic period show more concern with efficient uses of energy. The model of Trigger works better for the Mycenaean case, not only for the palaces and elaborated houses but also for funerary monuments. The notion of conspicuous consumption in relation to architecture has been applied to Minoan Crete as well (Schoep 2004). One possible

⁵⁵¹ The comparative discussion of the art of non-state societies with hierarchical elements of Bronze Age Iberia and the southwestern USA also points to conspicuous consumption as an important feature, alongside labour mobilisation (Neitzel & Fairén Jiménez 2011, 225-227). Unfortunately in these cases there are no direct, sophisticated insights into the cosmological ideas as part of which art has to be understood.

⁵⁵² Another difference with the Trigger model can be seen in the Preclassic lack of investment of energy in royal tombs relative to the very elaborate burial monuments of kings in the Classic period. For Trigger (1990b, 127), elaboration of tombs would occur rather during the formation of states and lessen later on.

reason for this could be the modular household pattern characteristic of the Aegean since the Late Neolithic, which would create a greater impetus for distinctions in architecture.

In the Preclassic lowland Maya case there would be less of a stimulus for this, given the extended household groups and the notion of the moral community as associated with the civic-ceremonial cores. However, in both cases it should be admitted that there are important gaps in the evidence, in particular with regard to the absence of a large record of more basic architectural structures. This would make it easier to discern the difference between 'normal' and 'conspicuous' forms of architecture. Much more can be said instead about another form of conspicuous consumption noted by Trigger (1990b, 125), namely prestige goods made from high-value materials. Trigger also referred in this regard to the work of Clark (1986), who investigated the role of special, high-value materials in a cross-cultural setting. One of his conclusions was that these kinds of materials were closely related to the creation of social distinctions based on 'excellence' (Clark 1986, 105-106). The strong recurrence of materials signifying excellence in different cultures would point to a strong pattern of conspicuous consumption of prestige goods in complex societies, serving to maintain unequal social relations. Some important qualifications can be made about these generic models of Trigger and Clark, however, based on the comparison of Mycenaean lapis lazuli and blue glass on the one hand, and LPC lowland Maya jadeite and related greenstones on the other.

In a general sense, both sets of materials from the two cases can be seen as high-value and were used for adornment. This observation makes it possible to relate them to the notion of conspicuous consumption of wealth. Yet when considering the comparative discussion of metaphors of art in section 9.3.3 and more generally of the agency of art in section 9.3.6, it becomes clear that the conceptions of materiality and wealth differed considerable between the two cases. In the Mycenaean situation lapis lazuli and blue glass were used as materials of prestigious adornment in a way that signified not just prestige, but also identity. The palaces acted in this regard as 'storehouses of value' in terms of both displaying and storing these materials. In turn the palatial administration, through its control over key aspects of craft-work, also distributed portable art objects, especially of blue glass, to a broader hinterland. By contrast this part-whole relation could not be seen for the LPC lowland Maya use of jadeite and related greenstones. Instead the basic metaphors and forms of agency of portable art objects made from these materials can already be seen in the civic-ceremonial cores of pre-state MPC period communities in the Maya lowlands.

It should also be emphasised that a pattern of exchange, craft-work, and basic ritual uses of jadeite and related greenstones independent of state organisation persisted long after the emergence of the first states in the LPC period. This could be seen very well for the Classic period evidence. What changed after the emergence of the first states in the Maya lowlands was that jadeite and related greenstones were now also used for portable art objects with complex iconography and writing. Furthermore, these materials were associated with a notion of wealth in bundles. It is clear that some form of prestige was involved in this, but one that was clearly embedded within the specific set of metaphors of the lowland Maya area, which derived from the MPC period communities. The differences between the metaphoric frameworks of the Mycenaean and LPC lowland Maya cases were noted in section 9.3.3 and 9.3.6, but the discussion of the Leiden plaque in section 8.3 is of significance as well. The key point made there was that this portable jadeite artwork has to be understood as part of a specific notion of memory-work. This memory-work used the metaphors related to maize agriculture, cosmology, and the moral basis for the community and the office of kingship. The implication is that the generic pattern of conspicuous consumption has to be adapted to the specific cultural contexts of the two cases.

⁵⁵³ But perhaps not completely absent, as some form of distinction could very well be argued for the larger compounds at the site of El Mirador discussed in section 5.2.2.

All of this qualifies Trigger's model that conspicuous consumption constitutes a strongly crosscultural pattern in unequal societies, to be placed alongside a specific pattern of surplus extraction in a two-class system for early civilisations. Part of the trouble seems to stem from the very strongly universal causal pattern Trigger argues to exist for the relation between conspicuous consumption and inequality in early civilisations:

"In complex societies, conspicuous consumption is indeed universally understood and admired, if not always morally approved. It is recognized as a deliberate violation of the principles of least effort and the conservation of energy which shaped human relations with the natural environment in all low-energy societies and were therefore implicitly familiar to everyone living in early civilizations....These principles could be deliberately ignored only by individuals who controlled a disproportionate share of natural and human resources. The conspicuous waste of such resources served not only to manifest power but also to reinforce it." (Understanding, 405)

This reference to complex societies in general is argued here to be too oblique. For the role of wealth is very different in a capitalist setting of bourgeois social competition, than it is in a precapitalist context where surplus was extracted from commoners and converted into elite wealth by 'extra-economic' ways. 554 It is not readily apparent why in a pre-capitalist society commoners would a priori be impressed by the subversions of efficient energy use, in a way that caused them to submit themselves to a position of inequality. The cases of Mycenaean lapis lazuli and blue glass and LPC lowland Maya jadeite and related greenstones suggest that conspicuous consumption has to be understood within a sharply defined framework, respectively palatial administration and memory-work. Furthermore, it was not clearly the inefficient expenditure of energy or labour that can be seen as a common factor between conspicuous consumption in these two cases, but rather a complex colour aesthetic. These colour aesthetics were also used for adornment, especially in the jewellery that can be found in burials in the Mycenaean and LPC lowland Maya cases. The use of special material for adornment goes back far into prehistory, however, possibly even to the African Middle Stone Age as evidence from Blombos cave in South Africa suggests (Henshilwood 2007).

Adornment in this sense can be recognised long before any kind of complex society. Whether it can be seen as a 'biological handle' for social strategies to establish and maintain unequal social relations is an open question, deserving further investigation. ⁵⁵⁵ Certainly in relation to conspicuous consumption of high-value materials in the Mycenaean and LPC lowland Maya cases, prestigious adornment cannot be understood as part of the unitary pattern of class-based exploitation that Trigger recognised for early civilisations. Instead adornment and prestige in the art of the two case studies compared in this thesis has to be understood as part of distinct value systems. Paradoxically, given the disagreement with Trigger's notion of conspicuous consumption and the role of art. insights can be gained from another finding of his comparative work in *Understanding*. This concerns the recognition that the cultural ideals of the different early civilisations studied in his sample were much more variable (*Understanding*, 626-627). That such values could be much more idiosyncratic than other aspects of early civilisations for Trigger did not imply, however, that these

can be connected with various theories about the biological and social development of early humans (Knight et al. 1995; Watts 1998, 2009). This topic is unfortunately too expansive to consider in more detail here, but some suggestions to

connect debates on adornment for early humans and early civilisations will be discussed in section 10.4.

⁵⁵⁴ In a rather impressionistic way, Trigger (1990b, 128) even compares the modern-day skyscrapers of capitalist multinational companies to the monumental architecture of early civilisations, in the sense of signifying power. Perhaps it is dogmatic to take too much issue with such statements, which might be used as much to stimulate and provoke as to point to a pattern. Yet, in the strong argument in this paper for universal patterns over hermeneutic particularities (Trigger 1990b, 119), the specific economic and socio-political patterns of distinct kinds of societies seems to be lost. 555 There are very good indications that adornment and colour aesthetics go back far into the Palaeolithic, and that they

values should be considered as part of the class-based surplus extraction recognised by him:

"Yet, while all human behaviour is culturally mediated, culturally idiosyncratic solutions guided human behaviour only in those spheres where similar ecological constraints or universal considerations of self-interest did not directly constrain such behaviour. In these underdetermined spheres, cultural choices provided the cognitive and psychological structuring that was required for a society to function properly. Without adequate agreement about what constituted appropriate behaviour, disruptions, conflict, and personal disorientation would render a society dysfunctional." (Understanding, 636)

The recognition of this pattern in the seven cases is admirable, but the causal framework that would be required to bring together class, the state, and values together is unsatisfactory in this regard. It is hard to see how different spheres could be recognised that were determined by self-interest and that were not. In practical terms such spheres, if they existed at all, would always have mixed. Even more problematic is that Trigger rightly argues that values were not epiphenomenal because they structured behaviour, yet contrasts this with art as having "no practical impact on everyday life" (Understanding, 635). The notion that art would have played a key role in the transmission and reinforcement of value systems, especially in non-literate or low-literate societies, does not seem to occur to Trigger. Mostly this seems to be the result of a view of art as a passive reflector of elite ideology, functioning as one form of conspicuous consumption. It is argued here that a more satisfactory causal pattern can be recognised for these different features so admirably described by Trigger. This causal pattern centres on the recognition of the different material worlds of the Mycenaean and LPC lowland Maya cases, and the ramifications of these differences first of all for the different economic and socio-political patterns discussed in section 9.2.4.

In section 9.3.3, the differences between the material worlds of the two cases were also noted for the distinct kinds of metaphors used in their art, existing alongside other forms of metaphoric expression such as language. These metaphors and the cosmological and ontological frameworks of which they formed part can be seen as forming the basis for the kinds of value systems recognised by Trigger in *Understanding*. The economic and socio-political patterns were then combined with the discussion of metaphor, in order to compare the agency of Mycenaean and LPC lowland Maya art in section 9.3.6. In that section it was shown that art played an active role in shaping socio-political patterns, but according to distinct 'grids' of metaphor, semiotics, and praxis in the two cases. These different grids were argued to derive from the different kinds of material worlds. The impact of this on the distinct conceptions of conspicuous consumption in the two cases has already been noted in this section. However, it is also possible to extend this argument to narrative art. The use of the Jester God motif in LPC lowland Maya art is a good example of how basic metaphors can be used to express a complex value system. In the San Bartolo wall-paintings discussed in section 8.2.4, the various guises in which the Jester God image appeared situated it within a broader complex of maize, the maize god, origins, and templates of social life (extending to kingship).

Similarly, the discussion of the themes of public ritual, warfare and elite culture, and the relation of humans to the natural world in sections 5.2.2, 5.2.3, and 5.2.4, pointed to a similar use of narrative art to highlight a particularly Mycenaean value system. The distinction between these value systems of Mycenaean and LPC lowland Maya art were not just structured on a different grid, but as argued for in 9.3.6 this also led to a different role in structuring social relations. Maya memory-work in the civic-ceremonial cores of both small and very large sites was contrasted with the part-whole relations that could be recognised for the Mycenaean palatial framework. Hence based on this intensive comparison of two cases, a very different causal pattern can be provided for the role of art in early civilisations than the one offered by Trigger. This difference is based on two elements. The

first is that greater weight is given to the materialist basis of early civilisations, particularly with regard to basic agricultural staple crops, and technologies and their impact upon economic relations. This emphasis goes against Trigger's central focus on the class-based extraction of surplus, even if class relations are recognised here too. Another key difference is that art is treated as possessing active social agency, rather than as a passive reflector of generic class domination. ⁵⁵⁶

At the same time, the notion that art is inseparably related to the social structures of the society in which it was created is retained. By looking at art as an active force it can be evaluated more in its own terms, and also be related in a more coherent way to other elements of early civilisations. This coherence allows for the recognition of more variation, as between the Mycenaean and LPC lowland Maya cases compared here. It is precisely this variation, however, that also allows for causal patterns to be recognised that connect the different elements of art, economic relations, and socio-political patterns in more specific and subtle ways. The recognition of such specific patterns is of course crucial for a better understanding of the cross-cultural variation of Wolf's tributary mode of production. At the same time the active role of art in the Mycenaean and LPC lowland Maya early civilisations also can be understood as part of general ideas about the agency of art, especially those put forward by Alfred Gell. Of course, the analytical framework here had already taken into account some of the critiques of the work of Gell, as discussed in section 2.4.4. One of these critiques concerned the importance of ontological frameworks for understanding forms of agency of art in a specific cultural context. The discussion of the work of Descola in section 9.3.3, together with the particular Mycenaean and LPC lowland Maya ontologies (insofar as they can be known), served to address precisely the importance of culture-specific frameworks.

The best parallel in the work of Gell to the findings of the comparative study here can be found in his discussion of the *Kula* exchange network discussed in section 2.4.4. The use of painted canoe boards (and portable valuables) in the *Kula* created a form of 'extended cognition', allowing individuals to 'internalise' a specific schema of social relations. The agency of Mycenaean and LPC lowland Maya art can be understood in a very similar way, playing an active role in structuring social relations in both cases. Less clear is whether individual artworks can themselves be seen as possessing agency in the sense of being persons. This is a perspective put forward in a mild form by Gell, who argues based on a number of very specific ethnographic case studies that artworks can in certain (mostly ritual) cases be seen as persons in their own right. For a circumscribed set of Mycenaean figures and objects a similar point could be plausibly argued, even if the necessary background provided by ethnography is lacking here. The same kind of analysis is possible for LPC lowland Maya stelae and other material forms. Yet the most significant finding of both the analysis and comparison of these two cases concerns the role of metaphoric 'connectors' that related specific material forms of art to broader ideas. This is true in both cases for complex colour aesthetics, but also for the semiotics of iconographic motifs and their use in narratives.

The role of language and semiotic meaning in general can account well for the question as to why artworks are in some cases treated as persons, for this is primarily to be understood in a metaphoric sense. In many cases, however, the role of metaphor is more communicative and has little to do with any sense of personhood of a work of art. For example, it is not clear why the wall-paintings of the Mycenaean palace of Pylos or of Structure Sub-1A at San Bartolo should in any way be considered as persons. Their role is rather to act as metaphoric 'connectors' in a web of meaning that defines Mycenaean and LPC lowland Maya personhood. The focus on the role of language and semiotics here also can be used as an argument against the ANT framework. As noted in section

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⁵⁵⁶ In making this argument the notion of Vico and Spinoza that 'the order of ideas is intimately related to the order of things', as discussed in section 2.3.4, has never been far from the author's mind. No doubt this constitutes to some extent a bias, but arguably one honed by the analysis of the material of the two case studies.

2.4.4, in that framework both humans and things can be grasped as part of a network in which humans are not seen as prime movers. The ANT approach was already criticised on theoretical grounds in section 2.4.4, but the findings from the comparison of the two cases in this chapter also do not serve to support it. Nowhere in ANT is the central role of human perception adequately articulated, yet it is this that allows the 'orders' of things and ideas to work together. There is no doubt that the specifics of different material worlds are of crucial importance for the specific ways in which things and ideas are related to each other. Yet, the importance of material worlds should not obscure the role of art as a 'social technology', acting as a tool for human agency.

CHAPTER TEN: RETROSPECT AND PROSPECTS

10.1: Introduction

This final chapter looks both backward and forward, evaluating some aspects of the approach to comparison used in this thesis and formulating possibilities for further research based upon this. The retrospect part consist of a critical evaluation of the approach used for comparing the two cases, as well as a consideration of the implications of the thesis comparative findings for the philosophical-methodological framework. Section 10.2 provides the evaluation of the approach to comparison used here. The section focuses both on the issue of the comparability of the Mycenaean and LPC lowland Maya cases and on the specific interpretive framework used to compare the two cases. This is followed in section 10.3 by a discussion of the implications of the comparative analysis of the two cases on the philosophical-methodological framework of the thesis, as extensively discussed in chapter two. Of particular interest in this regard is the impact of the thesis findings on the ideas of Gordon Childe, not least since these also formed the basis of the approach to comparison taken in this thesis. Finally, in section 10.4 the prospects for further research, whether comparative or otherwise, will be discussed. This discussion is based upon the two preceding sections, and takes into account both the substantive findings of the comparison of the art of the Mycenaean and LPC lowland Maya cases and the methodological aspects.

10.2: Evaluating the approach to comparing early civilisations

In this section the approach for the comparison of the Mycenaean and LPC lowland Maya early civilisations and their art will be evaluated. The discussion will proceed through two successive topics, namely the comparability of the two cases and the approaches both to early civilisations in general and to their art in specific. To start with the issue of comparability, it was noted in section 2.4.2 that this remains a somewhat neglected topic in comparative studies in archaeology and those disciplines using archaeological sources. Based on the consideration of the comparability of the Mycenaean and LPC lowland Maya cases in sections 9.2.2, 9.2.3, and 9.3.2, two general aspects can be noted: that of synthesis, and that of the difference between specific sources. With regard to the first aspect, considerable caution was raised that the terminology and chronology, as well as the interpretive frameworks of the two cases would influence the kinds of synthesis. The implication of this, of course, would be that both early civilisations would be more self-contained in terms of interpretation and therefore less comparable. Specifically for art, it seemed that there would be a greater 'vertical' emphasis on interpretations of art favouring long-term continuity in the Maya case. This emphasis would derive from the specific chronological framework and the site-based focus of synthesis for Maya art, as well from the use of the direct historical approach to connect LPC period evidence to that of later periods (including recent ethnographic work).

By contrast for the Mycenaean case a 'horizontal' emphasis could be noted for synthetic accounts of art. Again, this emphasis would derive from the chronological framework and the focus on larger areas for general accounts of Mycenaean art, as well as from the evidence from the other contemporary early civilisations in the eastern Mediterranean and Near East. While there is no denying that this difference in emphasis in synthetic interpretation in Mycenaean and LPC lowland Maya art has some impact. This could be seen very well for the different structure of the analysis of the contexts of art of the two cases in sections 5.2 and 8.2. Yet it is far from a show stopper for the comparison of the two cases. For as was shown for early civilisations in general in section 9.2.4 and for art in particular in section 9.3.6, an actual causal framework can be discerned that accounts for the Maya emphasis on 'verticality' in synthesis and for the Mycenaean case on 'horizontality'. This causal pattern can be recognised for the different material worlds of the two areas, as well as for the

socio-political dynamics that resulted from these material worlds. As a result, the Mycenaean and LPC lowland Maya early civilisations and their art could be placed in very different *longue durée* frameworks, for which distinct kinds of synthetic accounts of art are suitable. ⁵⁵⁷ Even if this does not mean that all bias inherent in the chronologies and use of sources to create syntheses should be ignored, it certainly does mean that cases from Mesoamerica and the Aegean are not inherently incomparable at the level of cultural synthesis. ⁵⁵⁸

The biases for chronology and terminology can rather be understood as part of the second topic of comparability discussed here, that of specific sources. This is an issue that could unfortunately not be resolved with the same clarity as for the comparability of syntheses. There were important differences in the sources between the two cases. Apart from the Mycenaean 'horizontal' relations within the contemporary eastern Mediterranean and the LPC lowland Maya 'vertical' connections with later periods, there are also clear differences for survey techniques and the character of the available written sources. The result of this was that certain topics were practically incomparable, such as the structural properties of states that are well-known from Mycenaean Linear B but cannot be derived from the available LPC lowland Maya sources. For other topics like basic social patterns the limits of the evidence were such that the comparative analysis had to remain fairly oblique, not allowing detailed insights into kinship systems for example. The same can be said for the element of feasting and cycles of public festivals. Yet at the same time it was also possible to work around these obstacles by using multiple sources. For example, LPC lowland Maya texts at present do not give any insights into economic relations, unlike Mycenaean Linear B, but through other sources (including for craft-work, as discussed in section 7.3.2) this situation could partially be remedied.

As a result, the comparability of specific sources always depends upon a rather charitable view of the evidence, taking into account the limitations but not being afraid to abstract from sources of a very different character to a common category such as 'economic relations'. In this sense comparative studies can never be exact studies, since a direct comparison based on exactly the same controlled analysis of sources is not practical. Such control would involve a field project that used exactly the same methods in two separate culture areas. It would also need to cover such a wide range of topics so as to provide a complete overview not only of a single period, but the complete longue durée trajectory of these areas. Such a project would clearly be utopian, and even within distinct regions differences can be noted between projects and between the emphasis on different subjects by individual researchers. All of this makes it impossible for a comparative study that is informed by a source-critical approach to conform to what Wittgenstein termed the 'craving for generality of modern science' (Monk 1990, 338). 559 Instead, following the extensive discussions in section 2.3 of the work of Wittgenstein and others, family resemblances may be recognised between cases. The evaluation of similarities and differences between these kinds of family resemblances then have to be addressed in a qualitative way, without subjecting them to a common logical grid. This means that the use of abstractions to gather together different sources, as noted earlier, cannot be avoided, and if handled carefully and critically can be seen as a very suitable method.

⁵⁵⁷ Another factor that influenced the different way in which the contexts of art of the two cases were discussed (in sections 5.2 and 8.2) was noted in section 9.4.4 that compared the narrative micro-structures of the art of the two cases. It was found there that the different ways in which metaphoric 'connectors' were used in narrative micro-structures made it easier for Mycenaean art to be subdivided into distinct themes than for LPC lowland Maya art.

⁵⁵⁸ See in this regard also the brief remarks on the impact of modernism on the interpretation of art in the Mycenaean and LPC lowland Maya cases in section 9.3.2.

⁵⁵⁹ It can be useful as a brief reminder of Wittgenstein's central thrust in this regard, to quote here one of his basic arguments along these lines:

[&]quot;Philosophers constantly see the method of science before their eyes, and are irresistibly tempted to ask and answer questions in the way science does. This tendency is the real source of metaphysics, and leads the philosopher into complete darkness." (cited in Monk 1990, 338)

The use of abstractions is also very important for the second aspect of the evaluation here, that of the approach to early civilisations in general and to art specifically. As can be inferred from tables 2.4 and 2.5, as well as from the analysis in chapters three through eight, there are two levels of abstraction that were used in the thesis. The first of these concerns a level that is very close to the specific sources of individual cases. For early civilisations in general this kind of abstraction can be seen in the ten elements used to delineate the Mycenaean and LPC lowland Maya cases, respectively in sections 3.4.2 and 6.4.2.. A similar level can be seen for the analysis of art, consisting of the four elements of material forms, craft and materiality, iconography, and contexts of art. Being located closer to the sources and more specific, these abstractions have a more encyclopedic character. Yet at the same time it should be emphasised that the issue of the comparability of sources discussed earlier is relevant here as well. Elements such as feasting and cycles of public festivals were not very comparable, given the difference in extant sources. It is questionable, therefore, whether the use of the ten elements would have been the optimal format to analyse the cases individually. For in syntheses of each case separately a closer coherence between the available sources and specifically tailored interpretive framework could be achieved.

However, a second level of abstractions mitigated the seemingly more encyclopedic character of the first level of abstractions. In between them it is also possible to recognise an intermediate level in the form of the *longue durée* framework. This framework related the ten elements of the early civilisations to each other in the context of the long-term trajectories of the Aegean and lowland Maya areas, respectively in sections 3.4.3 and 6.4.3. The second level of abstraction proper can be seen very well for early civilisations in general, where the ten elements were grouped into the three categories of economic, socio-political, and worldview-related elements. These three categories were used to compare the patterns of the two early civilisations in section 9.2.4. One important advantage of using these three broader categories of abstraction is that their generality captures all aspects of early civilisations, and can in principle be used for comparison with other kinds of societies as well. In this way the encyclopedic character of the ten elements of the first level of abstraction is corrected somewhat, in the same way as could be seen for Trigger's *Understanding* (see section 2.4.2). Since the three general categories address the totality of each early civilisation, charges of arbitrariness against the specifics of the list of ten elements are also less important.

Of course, by being further removed from the data the general categories of economic, socio-political, and worldview-related elements are also more oblique. Because of this the two levels of abstraction depended upon each other, with the first level providing encyclopedic solidity and source-critical insights, and the second level the required generality and coherence. The same can be seen for the relation between the first and second levels of abstraction for the analysis of art. Here the second level was formed by the aspects of metaphor, semiotics, and praxis of art, each drawing in different ways upon the first level elements of material forms, craft and materiality, iconography, and contexts of art. The relation between these two levels of abstraction was the same as for early civilisations in general, except that there was no intermediate level of the *longue durée* framework of art. For lation was the success of this kind of approach has to be evaluated through the coherence of the patterns that emerge from the successive levels of abstraction from sources to specific interpretations to general patterns. Indeed, a number of coherent comparative patterns for both early civilisations in general and art in specific were discussed in chapter nine, even if also clear limitations in terms of the available evidence could be noted.

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⁵⁶⁰ This is because art constitutes only one element out of the ten used to investigate the structures of the two early civilisations in general. As such, it makes little sense to look at its long-term trajectory separate from the other elements, with which it was inseparably intertwined.

It is possible to argue that the comparative approach followed in this thesis could have been made simpler. This simplification would be made possible by cutting out the first level of abstractions, those of the ten elements of early civilisations and the four elements of their art (material forms, craft-work and materiality, iconography, and contexts of art). Instead the comparison would proceed directly from the sources to the general patterns (economic, political, and worldview-related) of early civilisations and the patterns (metaphor, semiotics, and praxis) of their art specifically. In order to do so it would be necessary to strengthen the discussion of the comparability of sources further, by focusing in more detail on the specifics of sources and their impact on interpretation. From this robust evaluation of the archaeological record, it would then be possible to move directly to the second level of abstractions used in this thesis. This use of two levels of analysis instead of three would result not necessarily in a better framework, but certainly in a more simplified and less encyclopedic account. One potential benefit of this would be that comparing more than two cases would be much easier.

At the same time, it should also be noted that it was the extensive discussion of the ten elements of the Mycenaean and LPC lowland Maya early civilisations that allowed for more subtle insights into the *longue durée* frameworks of the prehistoric Aegean and lowland Maya area. Yet it would not be impossible to consider the temporality of the different kinds of sources, such as writing and survey. Similarly, for the economic, socio-political, and worldview-related categories it would also be possible to address the *longue durée* aspect. Using these three more general categories could furthermore make it easier to move beyond the confines of early civilisations as units, for the ten elements together are tied very specifically to these kinds of societies. ⁵⁶¹ In particular it would be easier to consider the relations of the Mycenaean and LPC lowland Maya cases to the social fields of the eastern Mediterranean and Mesoamerica. For the use of broader analytical categories makes it possible to incorporate more variation within what would still be a coherent discussion. ⁵⁶² These critical comments here should not be seen as a refutation of the approach used in this thesis, however, for this approach was able to recognise various patterns both for early civilisations in general and the agency of their art in specific. These patterns, furthermore, were supported by an indepth analysis of the sources and the kind of interpretations they allowed.

10.3: Implications for the philosophical-methodological framework

The later theoretical work of Gordon Childe was crucial for the approach to comparison used in this thesis. His concept of cultures as historically defined 'social worlds of knowledge', which cannot be reduced to a single template, formed a basic impetus behind the drive to recognise as much differences between the Mycenaean and LPC lowland Maya cases as similarities. Yet as discussed in section 2.3 (especially in section 2.3.5), Childe's ideas of progress led him to view art and religion not as forms of knowledge but as akin to dreams, potentially (but not necessarily) adapted to create a false consciousness to buttress class interests. Even language could for Childe be a hindrance to progress, as the major world languages were initially formed in periods of low scientific development. Based on the work of Vico, Wittgenstein, and other thinkers, an alternative was proposed in section 2.3.7. This alternative held that language intrinsically is rooted in bodily metaphors, and posited that different cultural areas have developed distinct kinds of 'stockpiles of mimetic intuitions'. Given that these ideas formed the basis for the approach to comparison developed in section 2.4, it is not surprising that such patterns could indeed be recognised in the two case studies. The methods used for this were evaluated in the previous section, here the implications

⁵⁶¹ As deriving from their close, almost functionalist interrelations in Childe's concept of the 'urban revolution', which will be addressed in the next section.

⁵⁶² For example, it would be possible to consider the diversity in socio-political terms of Crete, the Cyclades, and the Greek mainland in the Neopalatial/Shaft Grave period, as part of the overall social field of the Aegean.

of the comparison for the broader philosophical-methodological background will be discussed.

The key point of section 9.3.7, incorporating the extensive preceding discussion, was that the art of the Mycenaean and LPC lowland Maya cases can be seen as a 'social technology'. That is, as a tool for human agency. This use as a social technology was based on distinct material worlds, as well as on the worldviews and socio-political patterns associated with them. In the LPC lowland Maya case this material world was based upon maize as a staple crop, as well as upon a set of stone-based technologies. While these material factors should not be seen as determining Maya culture in detail, they certainly did structure the kinds of economic relations (especially labour-tasking) that were possible, together with socio-political patterns and worldviews. All these factors combined created a very specific *longue durée* dynamic in the Maya lowlands, one that can be seen to share a strong family resemblance with other regions of the broader social field that was Mesoamerica. The 'stockpile of mimetic intuitions' that was generated over this long-term trajectory to a great degree depended upon the memory-work carried out through art, writing, and oral performance. To highlight that this 'stockpile' had a structuring role, the discussion of the particulars of Postclassic metallurgy in sections 9.3.3 and 9.3.6 served as a reminder of how this particular technology was moulded by a pre-existing grid of metaphoric associations.

By contrast, the material world of the Bronze Age Aegean was based upon metallurgy, as well as on a distinct nexus of weighing, sealing, and writing associated with it. These tools for structuring economic relations had a clear impact on the administrative framework of the Mycenaean palatial states. Furthermore, the specifics of metallurgy, the means of structuring economic relations, and more broadly the techno-tasking economic logic can also be recognised as having had an impact on the longue durée trajectory of the Aegean. This trajectory was characterised by discontinuities, which in very broad terms can also be related to shifts in metallurgical technologies and tools for structuring social relations. Although many of the details of interpretation have been changed because of the availability of new sources of evidence, in its basic sense this long-term pattern corresponds to Gordon Childe's sociological interpretation of metallurgical ages discussed in section 2.3.5. Yet in what he termed progress, distinct stockpiles of mimetic intuitions were also built up. The best illustration of this was discussed in section 5.3.3 for the trajectory of different phases in the development of materials of prestigious adornment. These phases were furthermore related to Renfrew's notion of the 'commodity nexus' that was specific to western Eurasia. In this way the value system of prestigious adornment was closely related to the nexus of weighing, sealing, and writing, both deriving from the transformative pyrotechnology of metallurgy (and glass-making).⁵⁶³

The distinction of the lowland Maya and prehistoric Aegean materials worlds, and their impact upon the Mycenaean and LPC lowland Maya early civilisations, can now be used to return to one of the key problems encountered by Childe in his comparative work. As discussed in section 2.3.5, there was a clear tension in his work between the detailed historical synthesis of the prehistory of western Eurasia on the one hand, and the notion of general stages in human development on the other. Although he never resolved this tension, Childe seems to have come down more on the side of general stages in the last phase of his life. Based on the comparison here there seems to be good reason to reverse this, and instead emphasise more the particularities of different social fields and the material worlds associated with them around the world. A similar case along these lines was made by heterodox Marxist scholars for China and its *longue durée* trajectory. ⁵⁶⁴ One example of

⁵⁶³ Adornment and measurement were mutually reinforcing each other, but this does not mean that adornment can in any way be measured by weight. As noted in section 8.3.3, blue glass could be both a weight-based commodity and a material of adornment, but not at the same time.

⁵⁶⁴ This cannot be altogether surprising, for Marx held the materials-based approach of prehistoric archaeologists to be superior to conventional approaches to history, and especially the uses made of materials through labour:

this approach to China can be seen in the work of Haudricourt (1962), already discussed in section 9.3.3. This brief but important article is, however, dwarfed by the enormous *Science and civilisation in China* project initiated by Joseph Needham in the 1950s (which is still ongoing). This project involves a comprehensive study of science as part of the *longue durée* trajectory of Chinese civilisation. Clearly any substantial discussion of these Chinese subjects matters is out of reach in the limited space here. Yet it is notable that in the synthetic discussions of this project aspects of the specifically Chinese material world were important as well (Needham 2004).⁵⁶⁵

China, then, constitutes another material world that was characterised by a specific set of metaphors and socio-political relations.⁵⁶⁶ As noted by Renfrew (2012, 252), one of the key characteristics of the early trajectory of China was that it adopted metallurgy at a later stage, with the early trajectory exerting some influence on the later conceptions of materiality. A central role in the initial material world of Chinese civilisation was played not by metals but by jade,⁵⁶⁷ which was used extensively from the later stages of the Neolithic onwards. The position of jade was also valued in later Chinese texts such as the *Yuejue Shu* of the 1st century AD. In this text, as well as in others, jade was conceptualised as part of a historical sequence of uses of materials comparable yet different from Greco-Roman material-based stages such as those of Hesiod and Lucretius (Demattè 2006, 203-205). Based on this indigenous Chinese conception of the materials worlds of the past, together with the archaeological evidence the term 'Jade Age' has been proposed for the last phase of the Neolithic (roughly the third millennium BC):

"What makes an 'age' is how a material, a technology, an idea, or an institution defines a period. The achievement by the ancient Chinese of the technological level necessary to work efficiently this hard stone, the birth of a jade industry, the acquisition by jade of the status of valuable, the institutionalization of jade shapes, the sublimation of jade into a symbolic material embodying the loftiest human qualities and its transformation into an emblem of socioeconomic distinction, make jade a worthy candidate for age-naming, showing that the Yuejue Shu classification was no mythic construct. When, over 2000 years ago, the author of the Yuejue Shu reported that in making weapons of a certain material the sages followed the 'spirit of the age' and obtained 'moral power', he acknowledged that material advances do not come alone but are part of complex ideological structures." (Demattè 2006, 221)

This all too brief reference to Chinese civilisation and its material world enhances the argument made for the comparison of the Mycenaean and LPC lowland Maya cases, namely that cross-cultural comparison needs to take into account the *longue durée* trajectories of distinct macroregions. By taking this position there should be a shift away from paradigms favouring universal

[&]quot;Relics of bygone instruments of labour possess the same importance for the investigation of extinct economic formations as do fossil bones for the determination of extinct species of animals." (Marx [1867] 1976, 286)

The use of a single fossil bone to reconstruct entire animals can be seen in the 19th century work of Cuvier, upon which Engels drew but about which Marx expressed reservations (Krader 1972, note 19, p. 364). The key point of Marx's critique here concerns the inappropriateness of conceiving of society as an organism. This is not a minor point, for to take the instruments of labour as the key fossil bone to reconstruct societal organisms, is immediately to invite the economic determinism that plagued Marxism so much. If on the other hand the organic analogy is avoided, it would be possible to place the instruments of labour alongside other kinds of 'fossil bones' such as art.

⁵⁶⁵ In particular the relation between 'bureaucratic feudalism' and wet-rice agriculture (Needham 2004, 21). This idea was based on the work of Francesca Bray (1984) in the project book series. Incidentally, her work also formed part of the impetus behind the notions of techno-tasking and labour-tasking economic logics of Scarborough (2003), which were used in section 9.2.4 to compare Mycenaean and LPC lowland Maya agriculture.

⁵⁶⁶ Of course, unlike Mesoamerica, China was always connected to western Eurasia (cf. Goody 2012), and despite colonialist efforts retained the ability to shape its own course.

⁵⁶⁷ The term jade is used here as Chinese jade is technically nephrite, which is distinct from Mesoamerican jadeite.

stages of development (however diversified) to a more thoroughly historical approach, albeit one open to comparative studies. A key question then concerns the status of the urban revolution, for this itself can be seen as something of a universal stage. As discussed in the general comparison of the Mycenaean and LPC lowland Maya cases, there was some convergence between the two cases for state form. This convergence could be seen specifically for the recurrence of a city-state pattern in both cases, which was argued to be in line with the arguments by Trigger and others for a limited range of state forms. To account for this recurrence of forms, reference was made to the constraints of the human capacity to process social information, as well as to the constraints of communication relevant to the scale and population density of the Mycenaean and LPC lowland Maya cases. These constraints explain why settlement patterns and state organisation tends to follow rather similar lines in distinct macro-regions. In this way some of the similarities between the different versions of the urban revolution around the world can be explained.

Yet the similarities in state form are scarcely sufficient to define a universal stage in cultural development in a very detailed and specific way. What it does point to, however, is that certain aspects of human societies are more strongly universal than others. Hence it would be unwise to do away with the notion of early civilisations as a comparative concept. 568 What is required is a different framework to situate these kinds of societies in. It is not altogether surprising that the social aspects of human interaction share more universal features, as these derive from a common historical origin in the process of the development of early humans in Africa. The common biological heritage of humankind can in fact be used to refigure the view of the position of early civilisations in global history. Rather than focusing on the trajectories of different macro-regions as units in themselves, they can be understood as part of a very long-term process of the migration of early humans out of Africa to settle the world. In fact, it has been argued that the same biological possibilities for social extension that allowed for complex societies to emerge, also allowed humankind to migrate to almost all areas of the earth (Gamble 2013, 279-283). The processes of migration and the development of complex societies should be studied together, as part of the recognition of a universal historical process. This could potentially allow for stimulating new insights into the formation and dynamics of larger social fields (and the material worlds associated with them), such as those of western Eurasia, Mesoamerica, China, and others.

10.4: Prospects for further research

In this final section some suggestions for further research will be discussed, based on the experience gained in the comparison of the Mycenaean and LPC lowland Maya early civilisations and their art. These suggestions concern first of all the comparison of early civilisations, but also involve the relation of these complex societies to the overall historical process discussed in the previous section. To start with the specific cases compared here, it is natural that the 'known unknowns' but also the simple 'unknowns' of the Mycenaean and LPC lowland Maya archaeological records will in the (near) future require revisions of the interpretations offered here. In terms of comparative approach, it was argued earlier in section 10.2 that it might be a good idea to simplify the framework used in this thesis somewhat. The advantage that such a slimmed-down framework would bring is that more cases could be added to the comparison. These added cases could either be independent ones, for example from East Asia, South America, or Africa, or they could be from the macro-regions of Mesoamerica and the eastern Mediterranean and Near East. The latter strategy would shift the comparative unit away from early civilisations as defined by a set of traits, to the broader macro-regions and their material worlds explored by Kohl and Chernykh (2003).

⁵⁶⁸ In particular as there is much more to be said about the socio-political patterns of the state, a topic which has received some very interesting recent analysis (Routledge 2014; A. Smith 2011).

Adding independent cases of early civilisations or extending the range of cases to include their broader social fields would be highly useful, and can be accommodated within the tradition of comparative studies in archaeology that stretches back to Childe. In this sense the Childean approach still has much to recommend it, not least because the available data from different world regions that lends itself to these kinds of comparative studies keeps increasing. While it is clear that much work is to be done to interpret and compare the datasets from different macro-regions, they do not require an approach that is radically different. One clear exception of course can be noted for the study of art, for which this thesis used models that focus on the active agency of art and the role of metaphors. This approach to the agency of art differs from that of Childe, but on the other hand it can be understood as a different emphasis within the overarching paradigm of history-based conceptions of human nature. The extensive discussion of the work of Vico on the role of metaphors in section 2.3.3, underlines the point that there are precursors to the models of art used in this thesis. As such, the prospects of comparative research of early civilisations requires more work, both in terms of adding cases and in extending their range in a geographical and temporal way, but no great innovations in terms of paradigms and models are required for doing so.

Whereas further comparative studies of early civilisations will mostly require interpreting more data, investigating the relation between these complex societies and the biological development of early humans raises more theoretical challenges. As noted in section 2.4.2, the use of biological models to account for complex societies is often marred by a lack of attention to the specifics of the archaeological record of these kinds of societies, as well as by the application of biological analogies to intrinsically different phenomena. However, the work done in this thesis suggests some ways of moving forward to investigate the relation between biology and social and cultural phenomena like early civilisations. One aspect of this related could be noted for the impact of the constraints on processing social information on the limited range of state forms, as discussed in sections 9.2.4 and 10.3. More research along these lines is needed, including for patterns of kinship. For it has been argued that is was the specific human capacity for 'kinshipping' (Gamble 2013, 195-196) that allowed for complex societies to emerge. As more detailed information becomes available concerning the basic social patterns of the Mycenaean and LPC lowland Maya early civilisations, it will be possible to relate these patterns to the work done on 'kinshipping' for early humans. The 19th century speculations of Lewis Henry Morgan and others in this regard would be replaced by solid data for individual complex societies, as well as by a rigorous biological understanding of the role of kinship in human social life.

Based on the discussion in section 9.3.7, a very specific topic for investigating the relation between early humans and early civilisations can also be suggested. In that section it was noted that the notion of adornment using coloured materials could already be seen for the African Middle Stone Age. Interesting hypotheses have been put forward that argue that the use of ochre in that period can be related to distinct social processes (Knight et al. 1995; Watts 1998, 2009). Given the strong emphasis on colour aesthetics in adornment in the Mycenaean and LPC lowland Maya cases, it would be worthwhile to consider the biological impetus behind recurrent patterns of adornment. Such an investigation would not only include early humans and early civilisations, but also psychological research on the perception of colour and its relation to adornment in contemporary society. For early humans, the contribution to this research topic would be the evidence of the use of ochre, as well as biological models to account for its social uses such as 'costly signalling theory' (Knight et al. 1995, 76). The evidence from early civilisations would provide a set of cases in which the basic impetus behind adornment is actualised in different value systems. These systems involve different kinds of linguistic and artistic metaphors, as well as distinct political economies. Finally, contemporary psychology provides a way for testing hypotheses related to the subject of adornment and colour aesthetics in cognitive experiments.

APPENDIX: OVERVIEW OF THE NARRATIVE MICRO-STRUCTURES IN THE SAN BARTOLO WALL-PAINTINGS

Overview

In this appendix the basic elements of the narrative micro-structures of the wall-paintings from Pinturas Sub-1A at the site of San Bartolo are outlined. The reconstructions on which this analysis is based can be found in the two primary publications, dealing respectively with the north and west wall murals of this building (Saturno et al. 2007; Taube et al 2010). Further references are only given when certain iconographic elements need further elaboration, which is done only when relevant for understanding the narrative micro-structure. With regard to the explication of the four categories (nucleus, catalysts, informants, index) used, the reader is referred to section 5.4.3. The sequence in which the scenes are discussed is from the right to the left, starting with the north wall. The outline presented here forms the basis both for the discussion of LPC lowland Maya narrative in section 7.4.3, and for the broader cultural interpretation of the San Bartolo wall-paintings in section 8.2.4. The table below gives an overview of the different scenes that will be analysed.

Scene	Description nucleus	
North wall		
Flower Mountain and procession	presentation of sprouting gourd to maize god	
gourd birth-scene	explosive birth of five humanoid babies from gourd	
West wall		
accession scene #1	figure seated on scaffold receives headdress	
diving maize god	maize god with serpent diving into water	
maize god in turtle quatrefoil	dancing maize god with two deities in quatrefoil-turtle	
infant maize god	infant maize gold held by unidentified figure	
accession scene #2	maize god seated on scaffold receives headdress	
maize god and tree	maize god holding stick faces a tree	
descending PBD	descent PBD from skyband	
tree and sacrificial scene #1	sacrificing youth facing tree/PBD in a floral setting	
tree and sacrificial scene #2	sacrificing youth facing tree/PBD in a sky-related setting	
tree and sacrificial scene #2	sacrificing youth facing tree/PBD in an earth-bound setting	
tree and sacrificial scene #4	sacrificing youth facing tree/PBD in a watery setting	

Scenes of the San Bartolo wall-paintings (north and west walls, both listed from right to left).

Flower Mountain and procession scene (north wall)

Basic reference: (Saturno et al. 2007, 59-71).

Nucleus:

The presentation of a gourd by a kneeling humanoid figure to what has been interpreted as a maize god. The project team interpreted the gourd as holding water (Saturno et al. 2007, 31), but this has been called into question as it is a sprouting gourd (Van Akkeren 2006, 49). Instead, it may well have carried maize seeds, acting as a metaphoric womb. This constitutes an interpretation that can be be further supported by the U-shape depicted on its surface in a band (Tate 2012, 242).

Catalysts:

- 1. One kneeling female figure coming out of Flower Mountain carrying a basket, possibly containing tamales (Saturno et al. 2007, 50)
- 2. Five figures facing into the direction of Flower Mountain. Two of these figures carry bundles that emit breath volutes, which are interpreted as ancestral bundles with mask ornaments, including a schematic version of the Jester God motif (Saturno et al. 2007, 38).
- 3. One of the female figures facing in the direction of Flower Mountain is interpreted as the wife of the maize god, while the three young women and three young men can be seen as ancestral couples (Saturno et al. 2007, 50).

Informants:

- 1. Textual informants can be seen in the use captions with the two figures carrying the bundles, but these texts so far have not been deciphered.
- 2. Locational informants are Flower Mountain itself and the plumed serpent that acts as the platform for the humanoid figures. The latter also has footprints on its surface that lead into the direction of Flower Mountain.

Index:

One possible index is the small serpent with breath volutes that emerges from a hole in the lower-left corner of Flower Mountain. This has been related to the 'lok sign that refers to the transit between different spheres or the emergence from caves (Saturno et al. 2007, 48).

Gourd birth-scene (north wall)

Basic reference: (Saturno et al. 2007, 58-59).

Nucleus:

The explosive birth of five humanoid baby-figures, with umbilical cords still attached, from the gourd. This gourd carries the same band with U-sign as in the Flower Mountain and procession scene, but no sprouts can be seen on it. Also part of the nucleus is the humanoid figure facing this birth event from the right, which has been interpreted as an early version of the plumed serpent (Saturno et al. 2007, 11-12). Regardless from the identity of the figure, it can be noted that it held what seems to have been a digging stick (*coa*) and a small bundle with a trefoil. Parallels for the latter motif can be seen on larger bundles in Olmec art (Taube 2000, fig. 15, p. 312), and is related

to maize symbolism. Furthermore, the figure makes a gesturing movement toward the figures emerging from the gourd, which may reflect an instructive role.

Informant:

The platform atop of which the gourd is placed provides a locational context, even if it is less clear how this should be qualified further.

Index:

The presence of the gourd may not only have a role in the birth-scene itself, but can also refer back to the sprouting gourd presented to the maize god in the Flower Mountain and procession scene. It can also be noted that the band with the U-shape symbol is similar (if not exactly identical) on the gourds depicted in both scenes.

Accession scene #1 (west wall)

Basic reference: (Taube et al. 2010, figs. 67-68, pp. 106-107).

Nucleus:

The nucleus of this well-preserved scene consists of the presentation of an elaborate headdress to a figure of authority, clutching a bundle of some sort to his chest and seated on a platform. Behind this platform is a tree in which what appears to be a jaguar hangs. The headdress has the trefoil variant of the Jester God image, and can be related to various LPC lowland Maya artistic depictions and objects (see section 8.4.2). The figure presenting the headdress may be compared, owing to his own costume and headdress, to the *ebeet* functionary of the Classic period (Taube et al. 2010, 68). Especially well-visible in the San Bartolo wall-paintings (Miller & Brittenham 2013, 155), these figures acted as messengers, including the delivery of tribute, and seem to have taken care of royal insignia as well. Overall, a scene involving the coronation of a human ruler appears as a distinct possibility. This may also be supported by the last glyph in the accompanying text that can be read as *ajaw*, even if the project team leaves open the question whether this refers to a human ruler or to a deity (Taube et al. 2010, 68).

Informants:

- 1. Textual information is present in a text block placed between the attendant and seated figure, but apart from the noted *ajaw* sign it is not yet completely understood.
- 2. The platform on which the figure of authority is seated is notable is a locational informant, possessing both a tree with breath volutes and a lattice-work with nine *k'an* signs. The latter can, on the basis of analogies with later Maya art, be related to the establishment of new dynasties (Taube et al. 2010, 60-61).
- 3. It is possible that the red paint on the nine *k'an* crosses in the lattice-work of the platform, as well as on body parts of both the attendant and seated figure, refer to this scene as being of a historical rather than of a mythological character (Taube et al. 2010, 63-64).

Diving maize god (west wall)

Basic reference: (Taube et al. 2010, fig. 67, p. 106).

Nucleus:

Although only partly preserved, the core figure of a diving maize god, together with a serpent, can be seen diving into water, resembling fairly closely a Late Postclassic wall-painting scene from the site of Tulum (Taube et al. 2010, 81-83).

Maize god in quatrefoil (west wall)

Basic reference: (Taube et al. 2010, fig. 66, p. 105).

Nucleus:

The maize god in the centre is drumming and dancing, flanked at the left by the rain god Chakh and at the right by the deity of terrestrial water (Taube et al. 2010, 75).

Informant:

The basic locative informant is the quatrefoil within which the three deities are depicted. In this case the quatrefoil is an animate creature, emitting breath volutes and with a saurian head and clawed feet, which can be most plausibly interpreted as a turtle (Taube et al. 2010, 71-72). A wave comes up to one of its flanks, which is also related by the project team to the creation of rainbearing clouds (Taube et al. 2010, 70). This quatrefoil may well represent the earth turtle, one of the multiple ways in which the earth was represented in Maya art (Taube 2010a, 214, 216), see also section 8.4.2. Quatrefoils, not necessarily representing turtles, can also be seen in a fragment from the east wall of San Bartolo Pinturas Sub-1A (Taube et al. 2010, fig. 17a, p. 29), as well as in many other Preclassic artistic representations in the Maya lowlands and other areas (Guernsey 2010). From these contemporary parallels a broad association between quatrefoil shapes, caves and enthroned deity figures can be made (Taube et al. 2010, 74-75).

Index:

One possible and somewhat hypothetical index may be seen outside iconography proper. At a later stage multiple blows were made precisely to this portion of the mural, which could refer to the idea of cracking open the earth turtle to release the maize god (Saturno 2009, 125-126).

Accession scene #2 (west wall)

Basic reference: (Taube et al. 2010, fig. 64, p. 103).

Nucleus:

This scene is not as well-preserved as the accession scene #1 to its right. The attendant figure presenting the headdress to the seated maize god can be seen, on the basis of its attributes, as an avian version of the maize god (Taube et al. 2010, 65).

Informant:

The platform on which the maize god is seated is different from that of the accession scene to the right, and can be related in terms of material to knotted elements used in the four trees and sacrificial scenes to its left (Taube et al. 2010, 64). The deity is seated on a jaguar pelt.

Maize god and tree (west wall)

Basic reference: (Taube et al. 2010, fig. 63, p. 102).

Nucleus:

This scene is also partly damaged, but from what is visible it is possible to discern another maize god pointing a stick in what appears to be a strike on something (sadly lost) in front of it. This figure also faces a tree, atop of which sits a peaceful bird.

Descending Principal Bird Deity (west wall)

Basic reference: (Taube et al. 2010, figs. 61-62, pp. 100-101).

Nucleus:

The basic element of this scene is the descent of the Principal Bird Deity (PBD), which appears to be welcomed by a dancing, dwarf-like figure that gestures toward it. This figure has been connected to a variety of similar representations in Maya art, and, owing to its duck-like appearance, can be related to the bidding of Itzamnaaj by animals through sounds (Taube et al. 2010, 49).

Catalysts:

Three birds with song scrolls emanating from their mouths may be seen as catalysts, being connected to the dwarf-like figure, as can also be seen in other cases (Taube et al. 2010, 48-50).

Informants:

- 1. A text block placed in a central position in the scene, as yet not fully understood.
- 2. The day sign 3 'Ik provides an important temporal marker, placed in a central position just above the textual block.
- 3. Informants on locational aspects can be seen in the upper skyband, which emits what has been interpreted as rain (Taube et al. 2010, 45-47), and also in the flowers on the ground surface. These form a continuum that extends into tree and sacrificial scene #1, for which the flowers, which emit substantial breath volutes, have been interpreted as part of a floral paradise (as in the preceding scene).

Tree and sacrificial scene #1 (west wall)

Basic reference: (Taube et al. 2010, fig. 60, p. 99).

Nucleus:

A youth performs self-sacrifice in front of a tree with a PBD perched atop it. The aroma indicated

by the breath volutes of the flowers present here, may be interpreted as providing sustenance for ancestors and deities (Taube et al. 2010, 27-28).

Informant:

The flowers present here would indicate a location that is reminiscent of a floral paradise.

Tree and sacrificial scene #2 (west wall)

Basic reference: (Taube et al. 2010, fig. 59, p. 98).

Nucleus:

This scene is only partially preserved, but clear in its outlines. Another youth performs both self-sacrifice and the sacrifice of a turkey on a tripod, in front of a tree atop of which a PBD is visible. This youth wears a headband with Jester God motif, as likely did the three other youths for which this is not visible. Somewhat unclear in this scene is the role of the medallion with an *ak'bal* sign in it, which is usually on the PBD but is here shown separately and as emitting breath volutes. The sacrificed turkey has three stones in it from which breath volutes arise. These stones are interpreted as hearthstones, referring to the raising of the world-trees in the quincunx pattern of centre and cardinal directions (Saturno 2007, 23-25).

Informant:

The presence of the turkey and fluttering birds indicate a location related to the sky.

Tree and sacrificial scene #3 (west wall)

Basic reference: (Taube et al. 2010, fig. 58, p. 97).

Nucleus:

In this scene, a youth performs self-sacrifice and sacrifices a deer on a tripod in front of a tree with a PBD perched atop it. Like the turkey in the preceding scene the deer also has three hearthstones in its stomach from which breath volutes arise.

Informant:

This location has been interpreted as earth-bound, which is mainly based upon the sacrifice of the deer (Taube et al. 2010, 27).

Tree and sacrificial scene #4 (west wall)

Basic reference: (Taube et al. 2010, fig. 57, p. 96).

Nucleus:

Part of this scene is not preserved, but enough is present to infer a self-sacrificing youth that also sacrifices a fish on a tripod, positioned in front of a tree with a Principal Bird Deity (PBD) on top. In the fish are five hearthstones from which breath volutes arise, in contrast to the turkey and deer

sacrifices with three hearthstones each.

Informant:

The sacrificial scene clearly takes place in a watery realm.

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FIGURES

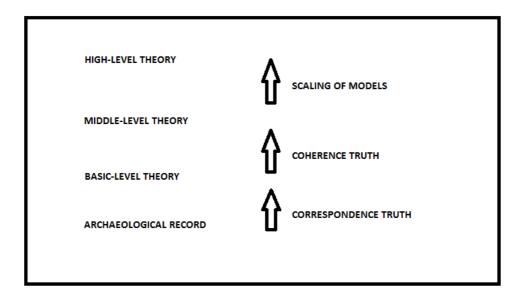


Fig 1: Levels of archaeological theory, derived from (Myths, fig. 8.1, p. 187; Trigger 2006a, fig. 1.1, p. 31)

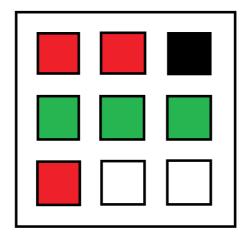


Fig 2: Wittgenstein's colour language game, based on (Investigations, #48)



Figure 3: The eastern Mediterranean and Near East in the Late Bronze Age (Feldman 2006, map 1, p. 3).



Figure 4: Map of the major Mycenaean sites on the Greek mainland (Dickinson 2006, fig. 2.1, p. 26).

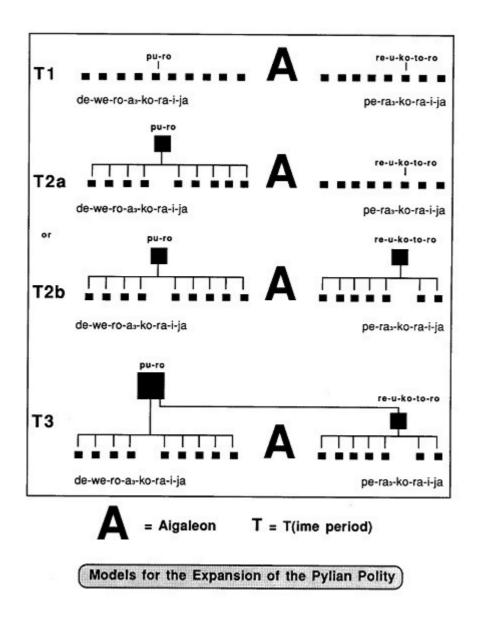


Figure 5: A model for the regional expansion of the Pylian state (Bennet 1995, plate LXXI).

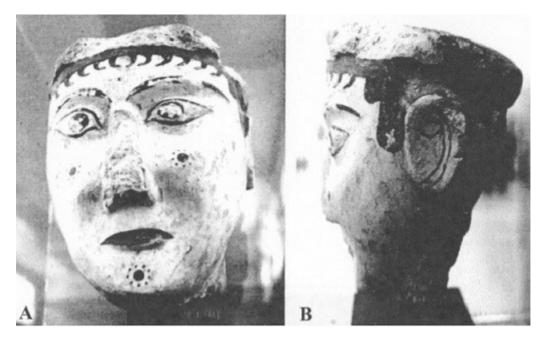


Figure 6: Painted plaster head from Mycenae (Rehak 2005, fig. 1, p. 272).

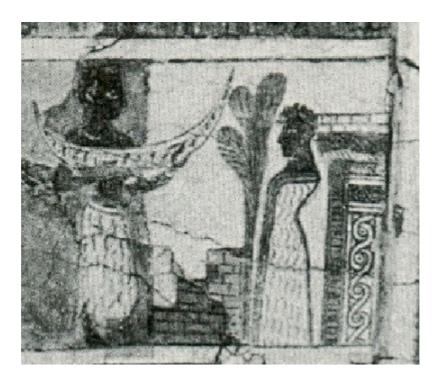


Figure 7: Armless figure on the Ayia Triada sarcophagus (Aegean Painting, plate 50).



Figure 8: The 'Lion Gate' at Mycenae (Shaw 1986, plate 3b).

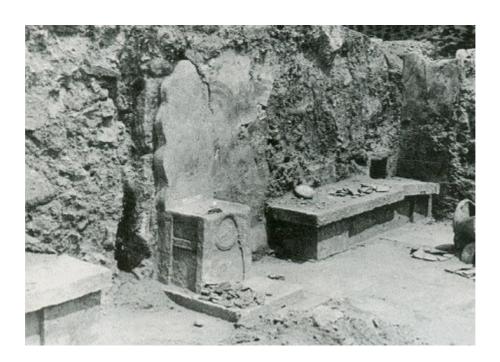


Figure 9: The throne installation at Knossos (Aegean Painting, plate 48).

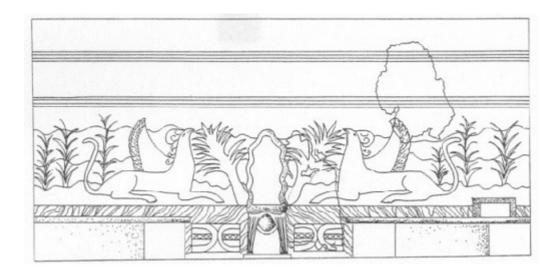


Figure 10: Reconstruction throne area installation wall-paintings at Knossos (Shank 2007, fig. 19.5, p. 164)

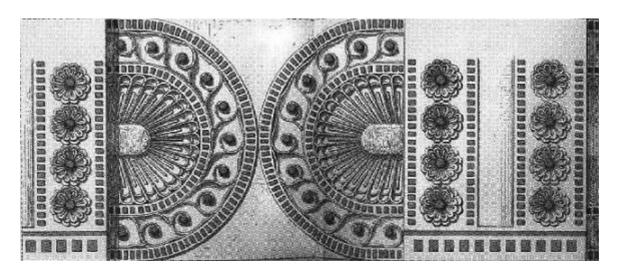


Figure 11: Stone block with blue glass inlays from Tiryns (Panagiotaki et al. 2005, fig. 1, p. 16).

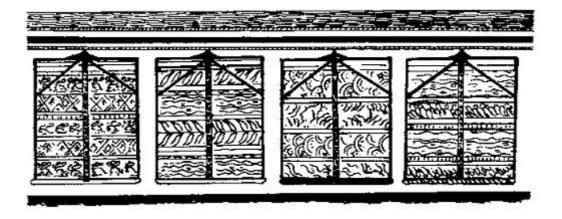


Figure 12: Reconstruction of wall-painting frieze of *ikria* at Mycenae (Shaw 1980, ill. 7, p. 170).



Figure 13: Detail of a ship's hull in a wall-painting from the Akrotiri (Doumas 1992, plate 37).



Figure 14: Griffin with blue wing in a wall-painting from Akrotiri (Doumas 1992, plate 32).



Figure 15: Landscape with blue elements in a wall-painting from Akrotiri (Doumas 1992, plate 30).

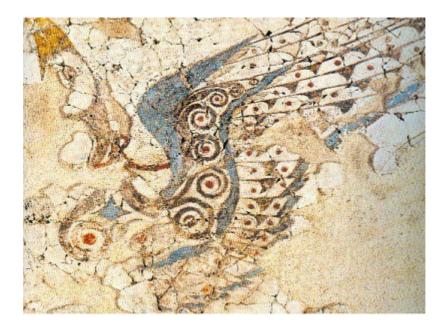


Figure 16: Second griffin with blue wing in a wall-painting from Akrotiri (Doumas 1992, plate 128).



Figure 17: Beads used as jewellery in a wall-painting from Akrotiri (Doumas 1992, plate 80).

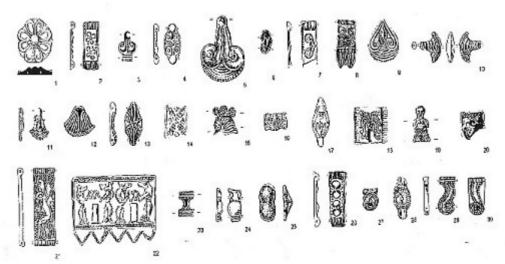


Figure 18: Shapes of Mycenaean blue-glass beads (Nightingale 2000, fig. 1, p. 8)



Figure 19: Lyre from the Royal Cemetery at Ur with lapis lazuli beard (Woolley 1934, plate 107).

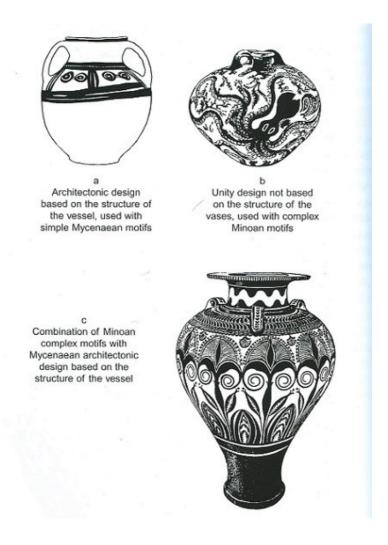


Figure 20: Changes in naturalism from Minoan to Mycenaean vase-painting (Betancourt 2007b, fig. 7.4, p. 136).



Figure 21: Repetitive frieze of nautili in a wall-painting from Pylos (Lang 1969, plate R).



Figure 22: Repetitive frieze of bluebirds in a wall-painting from Pylos (Lang 1969, plate R).



Figure 23: Leaping dolphins in a wall-painting from Gla (Iakovidis 2001, plate VIII).

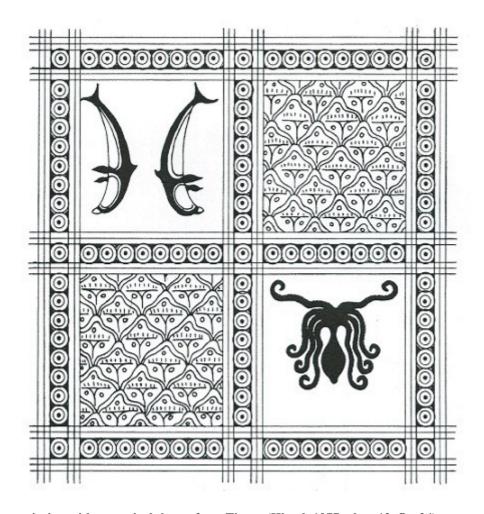


Figure 24: Floor-painting with a nautical theme from Tiryns (Hirsch 1977, plate 12, fig. 24).

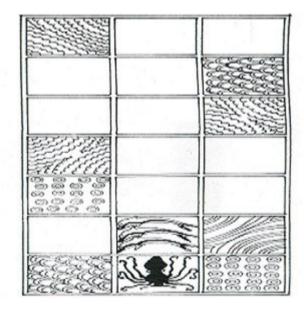


Figure 25: Floor-painting with a nautical theme from Pylos (Hirsch 1977, plate 9, fig. 21).



Figure 26: Figure holding a lyre in a wall-painting from Pylos (Aegean Painting, plate XVIII).



Figure 27: Griffin and lion in a wall-painting from Pylos (Lang 1969, plate P).

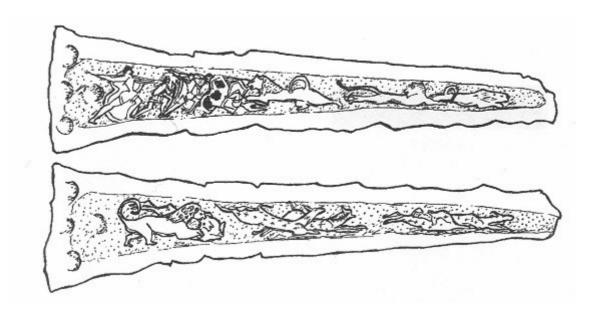


Figure 28: Two sides of a 'black bronze' dagger from Shaft Grave at Mycenae (Thomas 2004, fig. 9.15, p. 174).

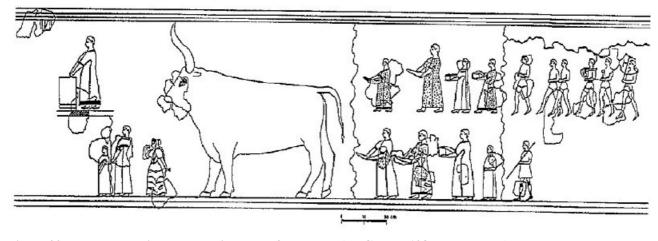


Figure 29: Megaron vestibule procession scene from Pylos (McCallum 1987, plate VIIIa).

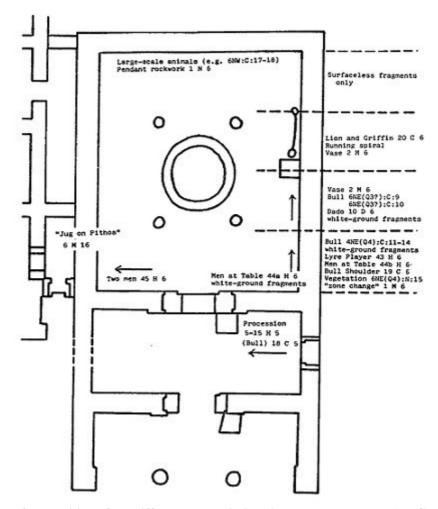


Figure 30: Outline of the position of the different wall-paintings in the Pylos megaron (McCallum 1987, plate VII).

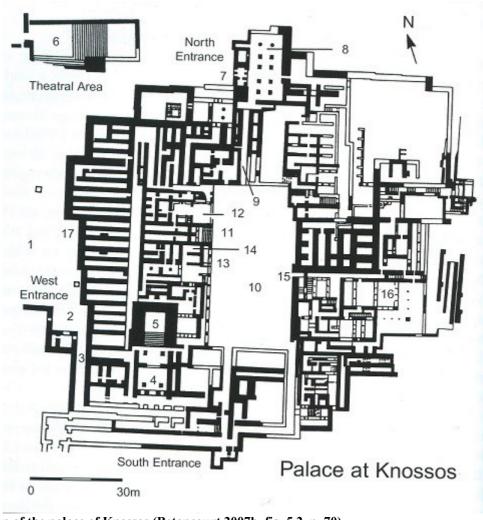


Figure 31: Plan of the palace of Knossos (Betancourt 2007b, fig. 5.2, p. 70).

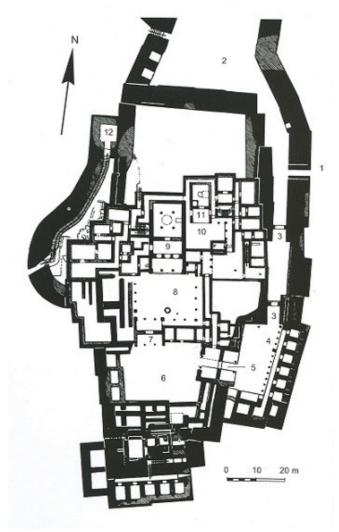


Figure 32: Plan of the palace of Tiryns (Betancourt 2007b, fig. 8.12, p. 166).

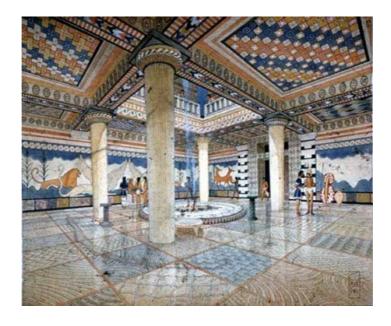


Figure 33: Reconstruction of the interior of the Pylos megaron by Piet de Jong (Betancourt 2007b, plate 8B).

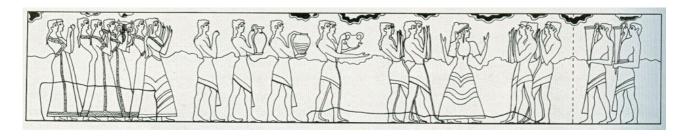


Figure 34: Reconstruction of a procession scene from the palace of Knossos (Aegean Painting, plate 40).

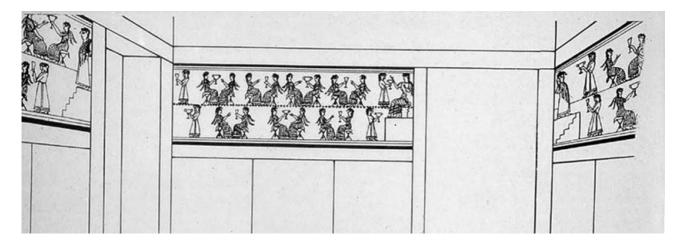


Figure 35: Campstool wall-painting from Knossos (Driessen & Langohr 2007, fig. 16.5, p. 183).

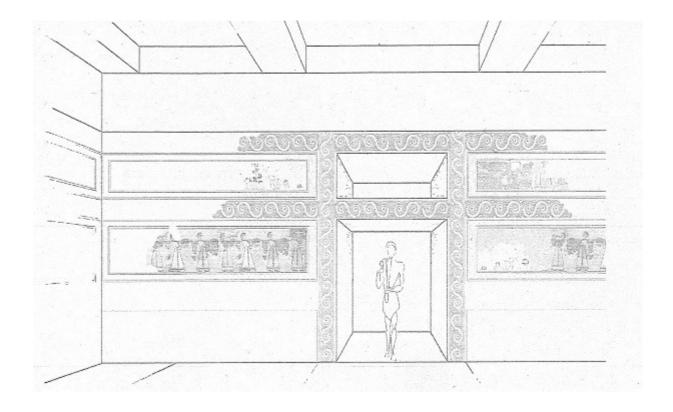


Figure 36: Reconstruction of procession scene in its architectural context from Ayia Triada (Militello 2006, fig. 12, p. 199).

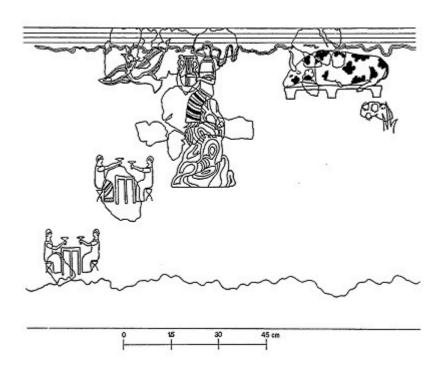


Figure 37: Toasting pairs of men at tables in a wall-painting from Pylos (McCallum 1987, plate X).

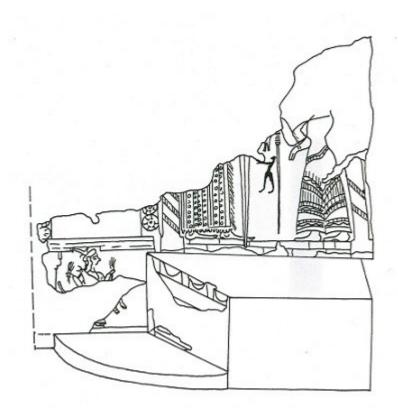


Figure 38: Drawing of a wall-painting from the Cult Centre at Mycenae (Marinatos 1988, fig. 1, p. 249).

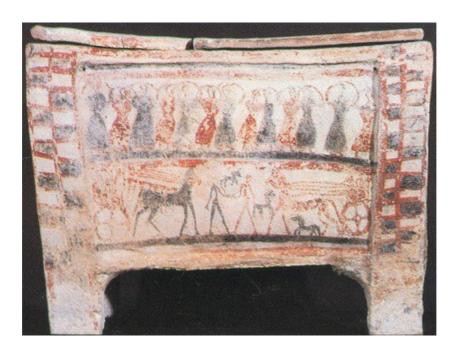


Figure 39: Mourning scene on a larnax from Tanagra (Aegean Painting, plate XXII).

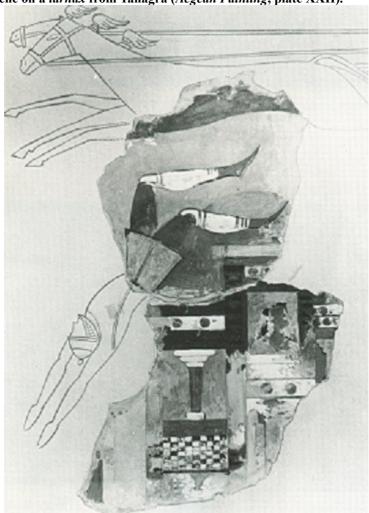


Figure 40: Reconstruction of a part of the battle-scene wall-painting from Mycenae (Aegean Painting, plate 65).

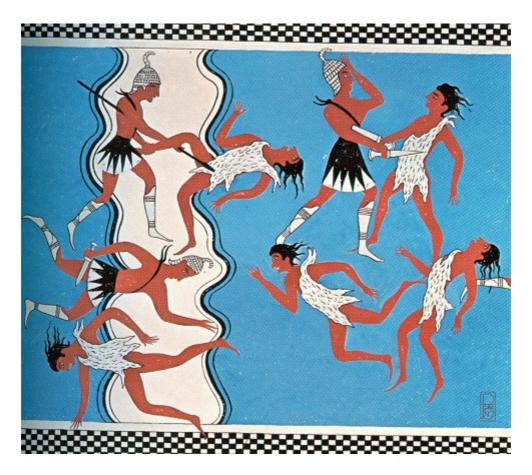


Figure 41: Reconstruction of a part of the battle-scene wall-painting from Pylos (Lang 1969, plate M).



Figure 42: Reconstruction of a figure-8 shield frieze in a wall-painting from Tiryns (Aegean Painting, plate XIX).

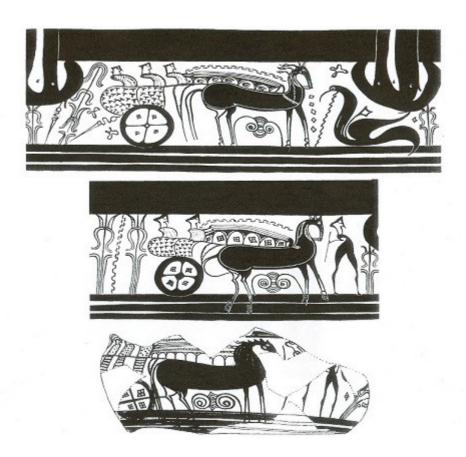


Figure 43: Chariot scenes on exported Mycenaean painted vases (Rystedt 2006, fig. 4, p. 127).



Figure 44: Bull-leaping wall-painting from the Knossos Taureador panel (Aegean Painting, plate 41).

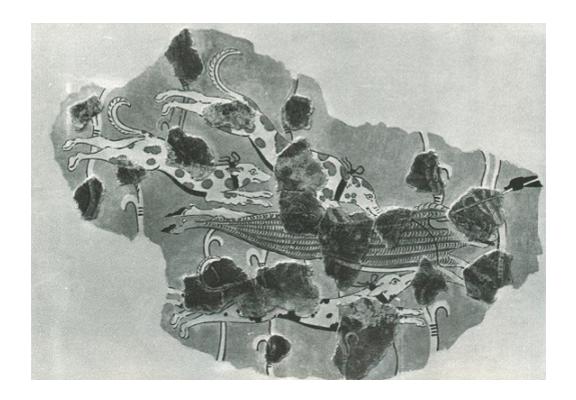


Figure 45: Reconstruction of a part of the hunting-scene wall-painting from Tiryns (Aegean Painting, plate 70).

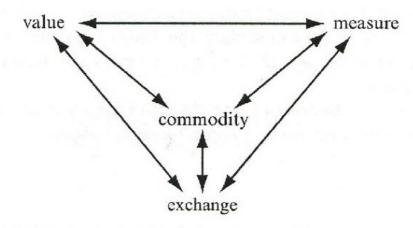


Figure 1. The commodity nexus: the cognitive relationships from which the economic system of early Western Asia and of Europe was constructed.

Figure 46: The proposed commodity nexus characteristic for western Eurasia (Renfrew 2006, fig. 1, p.).

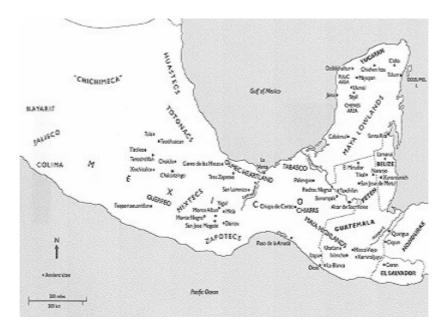


Figure 47: Map of Mesoamerica (Joyce 2004, fig. 1.1, p. 2).

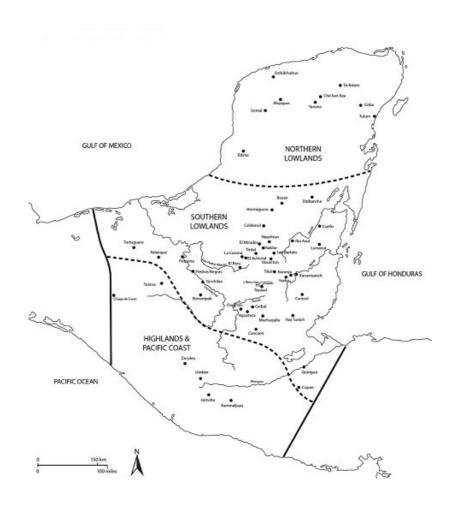


Figure 48: Map of major sites of the Maya area, adapted from Acuña (2013, fig. 3.1, p. 62).

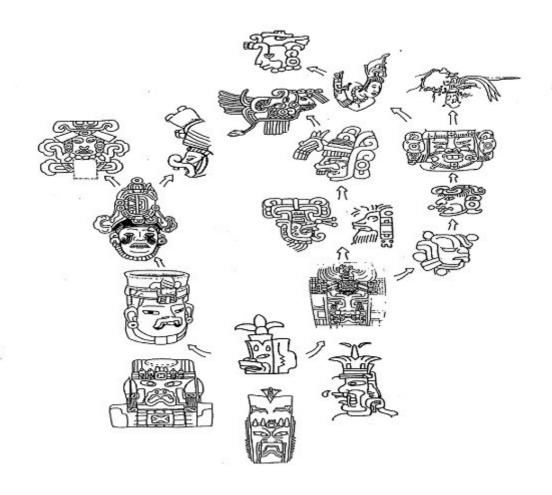


Figure 49: Evolution of the Mesoamerican maize god from the Formative through Postclassic periods (Taube 1996, fig. 23, p. 70).

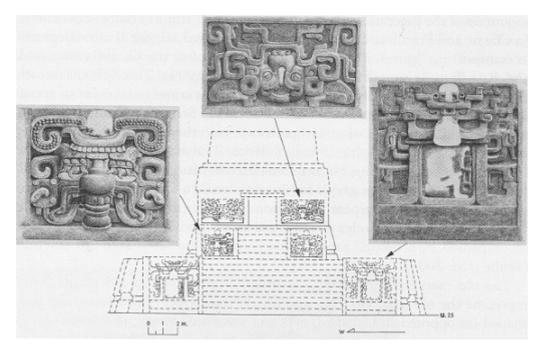


Figure 50: The arrangement of stucco-masks on Structure 5D-33- 2^{nd} of Preclassic Tikal (Estrada-Belli 2011, fig. 5.14, p. 97).

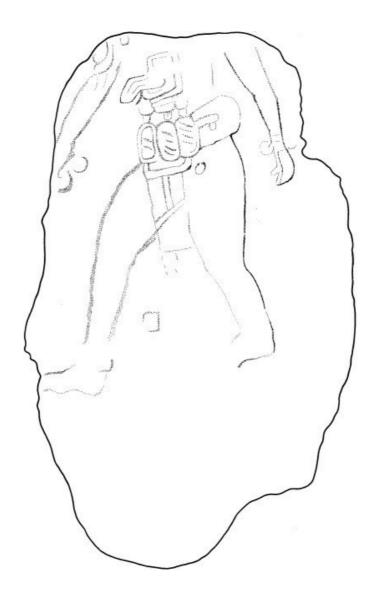


Figure 51: Stela 2 with striding figure from Preclassic Cival (Estrada-Belli 2006, fig. 6, p. 64).



Figure 52: Fuchsite mask from Burial 85 at Tikal (Acuña 2013, fig. 6.8, p. 262).

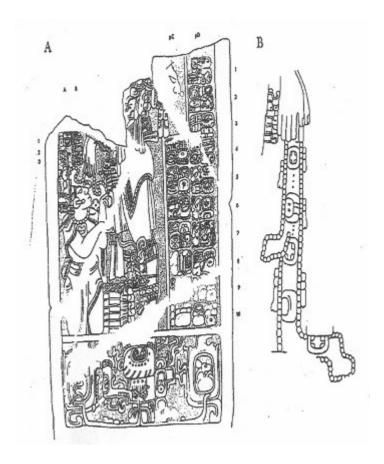


Figure 53: The flow of k'uh in a royal sacrifice depicted on Stela 7 from Classic-period Yaxchilan (Stuart 2005a, fig. 11.5, p. 276).



Figure 54: Reconstruction of the gourd birth-scene in a wall-painting from San Bartolo (Saturno et al. 2007, 58).



Figure 55: Detail of 3 'Ik sign in a wall-painting from San Bartolo (Taube et al. 2010, fig. 62, p. 101).

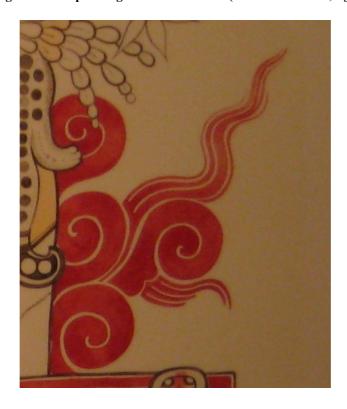


Figure 56: Breath volutes in a wall-painting from San Bartolo (Taube et al. 2010, fig. 68, p. 107).

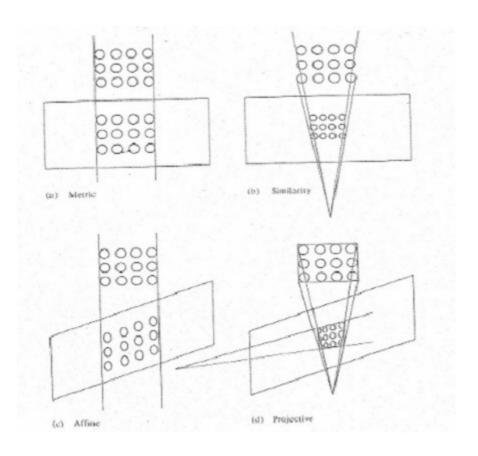


Figure 57: Margaret Hagen's four types of projective system in representational art (Hagen 1986, fig. 9.1, p. 241).

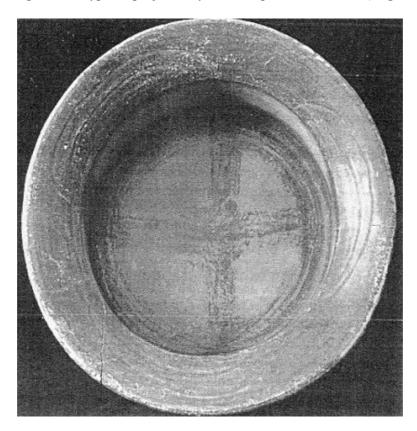


Figure 58: Painted k'an cross on a bowl from K'axob (Headrick 2004, fig. 16.2, p. 369).



Figure 59: Detail of the lower skyband in a wall-painting from San Bartolo (Taube et al. 2010, fig. 57, p. 96).

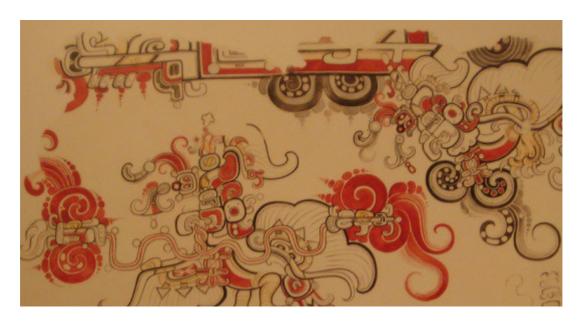


Figure 60: Detail of the upper skyband in a wall-painting from San Bartolo (Taube et al. 2010, fig. 61, p. 100).



Figure 61: Jester God on Nakbé Stela 1 (Hansen 1992, fig. 113, p. 343).

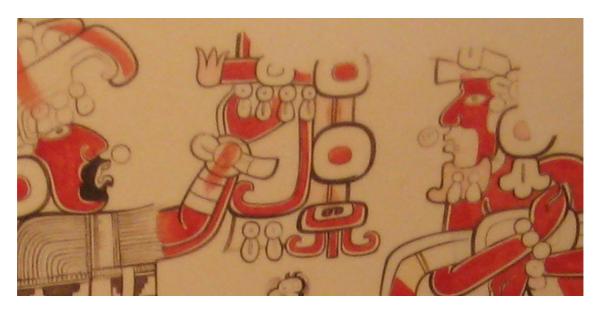


Figure 62: Jester God headdress in a wall-painting from San Bartolo (Taube et al. 2010, fig. 68, p. 107).

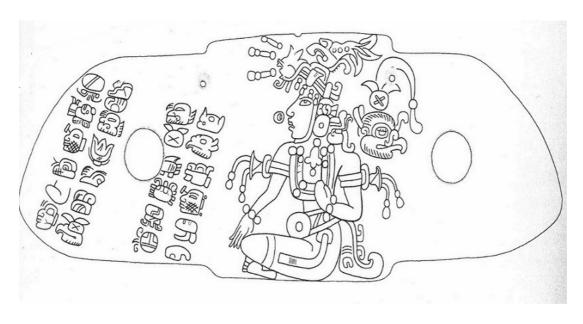


Figure 63: Jester God in headdress of the figure on the Dumbarton Oak plaque (Fields & Tokovinine 2012, fig. 86, p. 156).

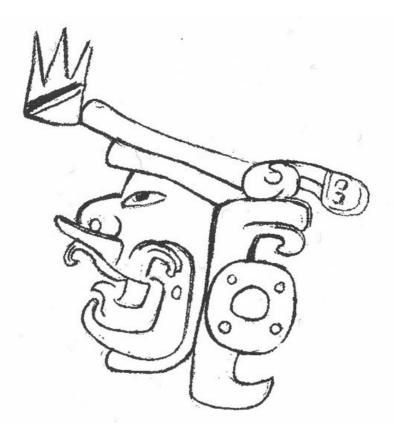


Figure 64: Jester God in a wall-painting from Cival (Estrada-Belli 2011, fig. 5.24, p. 108).



Figure 65: Jester God in a wall-painting from El Achiotal (Acuña 2013, fig. 6.7, p. 260).



Figure 66: Text accompanying sacrificing figure in a wall-painting from San Bartolo (Taube et al. 2010, fig. 59, p. 98).



Figure 67: Muut birds in a wall-painting from San Bartolo (Taube et al. 2010, fig. 62, p. 101).

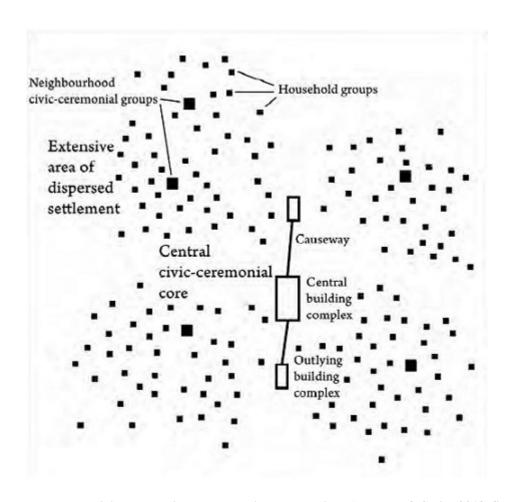


Figure 68: Ideal type Maya civic-ceremonial centre and its surroundings (Isendahl & Smith 2013, fig. 2, p. 134).

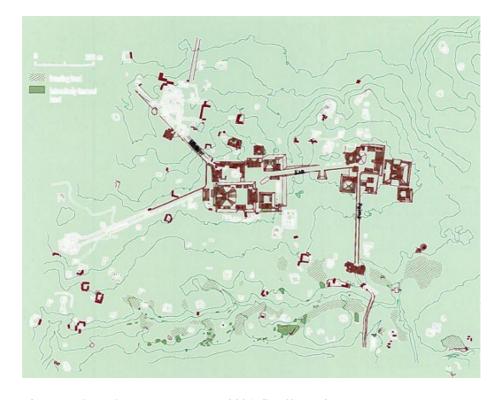


Figure 69: Map of Preclassic period Nakbé (Hansen 2001, fig. 60, p. 52).

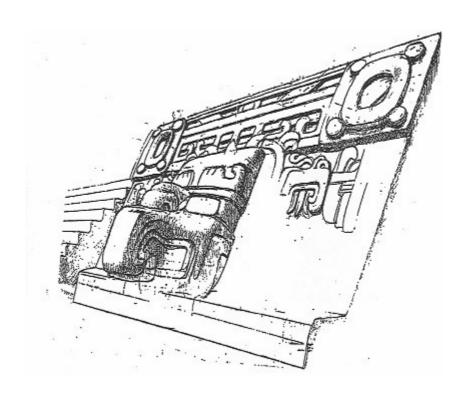


Figure 70: PBD on Structure 1 at Nakbé (Hansen 1992, fig. 63, p. 293).

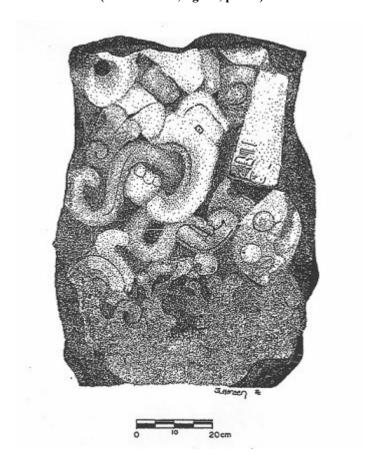


Figure 71: Stela 2 from El Mirador (Hansen 1992, fig. 96, p. 326).

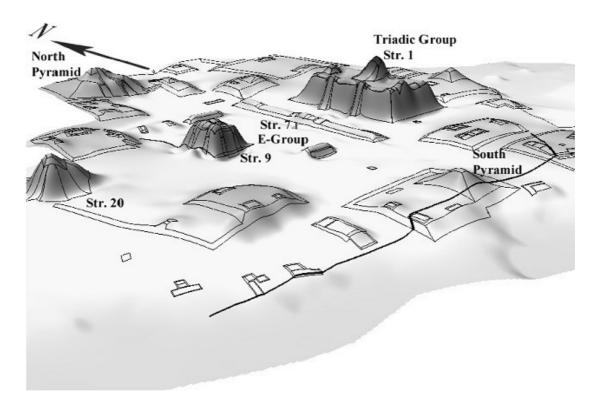


Figure 72: Reconstruction of the civic-ceremonial centre of Cival (Estrada-Belli 2006, fig. 2, p. 59).

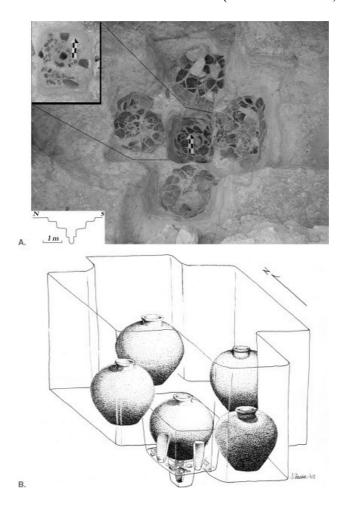


Figure 73: Cache 4 at Cival (Estrada-Belli 2006, fig. 3, p. 60).

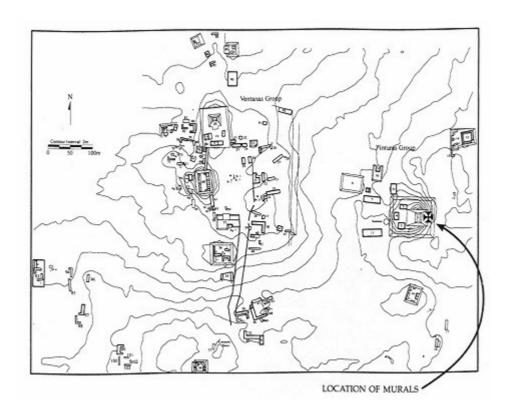


Figure 74: Map of San Bartolo (Saturno et al. 2007, fig. 3, p. 4).

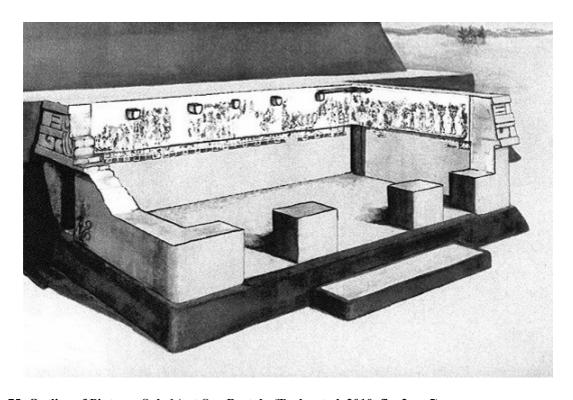


Figure 75: Outline of Pinturas Sub-1A at San Bartolo (Taube et al. 2010, fig. 2, p. 5).

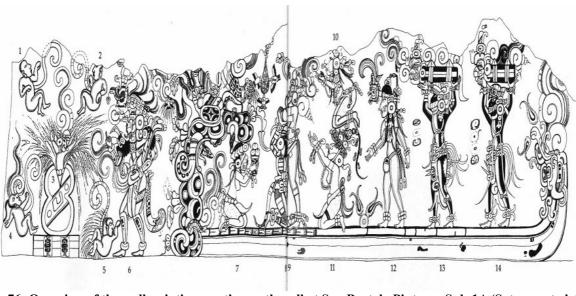


Figure 76: Overview of the wall-paintings on the north wall at San Bartolo Pinturas Sub-1A (Saturno et al. 2007, fig. 5, pp. 8-9).

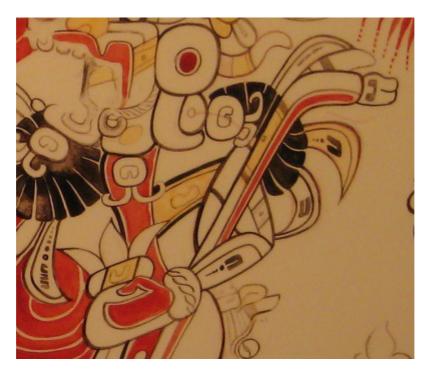


Figure 77: Detail of the figure from the gourd birth-scene in a wall-painting from San Bartolo (Saturno et al. 2007, 58).

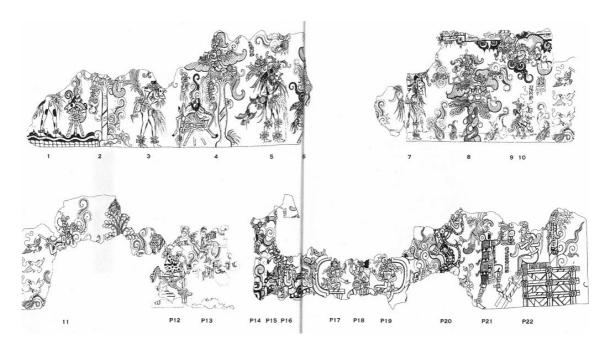


Figure 78: Overview of the wall-paintings on the west wall at San Bartolo Pinturas Sub-1A (Taube et al. 2010, fig. 7, pp. 12-13).

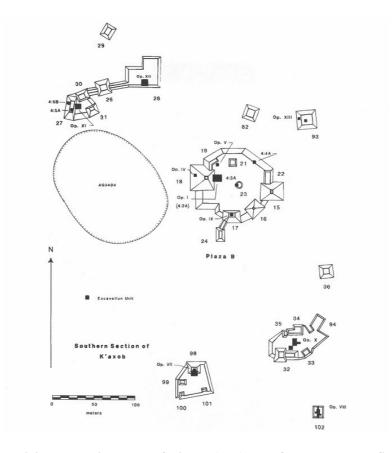


Figure 79: Outline of the civic-ceremonial centre of K'axob (McAnany & López Varela, fig. 2, p. 149).

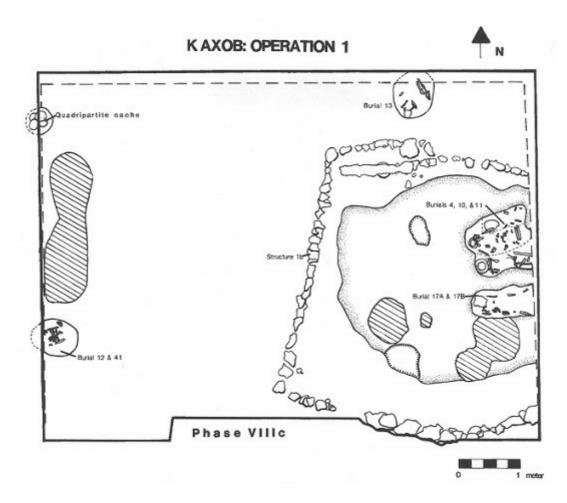


Figure 80: Detail of operation 1 at K'axob at the start of the LPC period (McAnany & López Varela, fig. 10, p. 161).

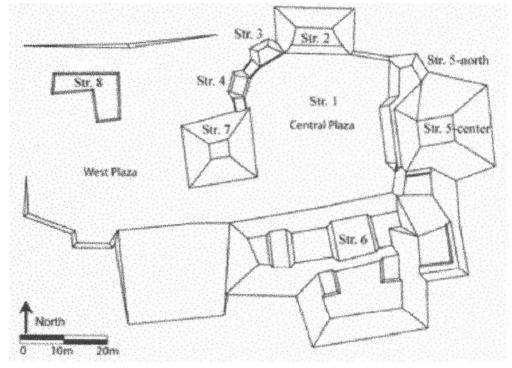


Figure 81: Outline of the civic-ceremonial centre of Chan, adapted from (Kosakowsky & Robin 2010, fig. 1, p. 45).

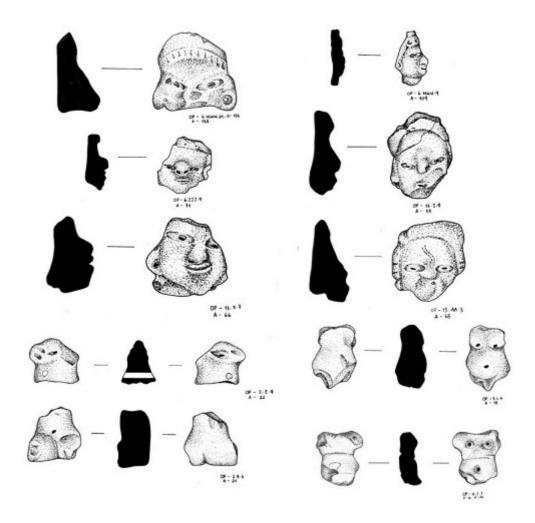


Figure 82: Preclassic figurines from Chan (Kosakowsky & Robin 2010, fig. 2, p. 47).

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CURRICULUM VITAE MARCUS BAJEMA

Marcus Jan Bajema was born on November 16, 1979 in the town of Gouda in the Netherlands. His secondary education (VWO-B) took place at the Goudse Scholen Gemeenschap in the same town, graduating in 1999. He then went to Leiden University, enrolling at the Faculty of archaeology in September 1999. After obtaining the propaedeutic diploma in archaeology he specialised in classical archaeology. In August 2006 he obtained his doctoraal diploma, equivalent to the Master of Arts, in archaeology (cum laude).

In 2007 he was admitted as a PhD in the Graduate School of the Faculty of Archaeology of Leiden University, initially focussing on the topic of surface survey in the Aegean. By the start of 2009, however, he shifted the topic of his thesis to a comparative study of Mycenaean Greece and the Preclassic lowland Maya. This work involved a close interaction with both the classical and Mesoamerican research communities at the Faculty of Archaeology. This topic allowed him to develop his research interests in classical archaeology, Mesoamerican archaeology, and comparative studies together in a comprehensive research effort. Finally, as an extramural PhD he worked in various companies and government agencies in Leiden and the Hague.

NEDERLANDSE SAMENVATTING VAN HET PROEFSCHRIFT 'EEN VERGELIJKENDE BENADERING VOOR DE INTERPRETATIE VAN DE MYCEENSE EN LAAT PREKLASSIEKE LAAGLAND MAYA VROEGE BESCHAVINGEN DOOR HUN KUNSTVORMEN'

Het onderwerp van dit proefschrift betreft een vergelijkende studie tussen de vroege beschavingen van Myceens Griekenland en het Preklassieke laagland Maya gebied. De nadruk ligt specifiek op de rol van verschillende kunstvormen in de ontwikkeling en sociale structuur van deze samenlevingen. Het doel van het onderzoek is drieledig. Ten eerste is er de theoretische kwestie van het vergelijken van culturen die volledig geïsoleerd van elkaar bestaan hebben. Hoofdstuk twee behandelt een belangrijk probleem in de theorievorming omtrent dit onderwerp, namelijk de vraag of de menselijke natuur als een statisch of als een flexibel fenomeen dient te worden beschouwd. Gebaseerd op het werk van de Australische archeoloog Gordon Childe volgt het onderzoek de positie dat de menselijke natuur begrepen moet worden als bepaald door de historische context. Vanuit dit perspectief vormt de wetenschappelijke reconstructie van de geschiedenis als geheel de basis voor het vaststellen van de variatie in menselijk gedrag, waarbij vergelijkend onderzoek noodzakelijk is om deze variatie te begrijpen.

In het proefschrift worden twee wijzigingen aangebracht in het filosofische perspectief van Childe. De eerste wijziging is een grotere waardering van de rol van metaforen in het sociale leven van mensen, zowel in taalkundig als in artistiek opzicht. Hiervoor wordt teruggegrepen op het werk van de Italiaanse filosoof Giambattista Vico. De tweede wijziging volgt deels uit de eerste, in de zin dat een grotere rol wordt toegedicht aan culturele verschillen zoals deze zijn vormgegeven in tradities van taal en kunst. Mede geïnspireerd door het werk van de Oostenrijkse filosoof Ludwig Wittgenstein is het uitgangspunt dat culturele verschillen niet ingepast moeten worden binnen een normatief kader van vooruitgang. Dit heeft tot gevolg dat in deze vergelijkende studie niet zozeer de stadia van ontwikkeling een hogere prioriteit krijgen, maar juist dat een globaal terugkerend fenomeen als vroege beschavingen ingepast wordt binnen de specifieke lange termijn geschiedenis van gebieden als Griekenland en Mesoamerika.

Het aldus verkregen theoretische perspectief wordt vervolgens toegepast voor het formuleren van een specifieke methodologie. Opnieuw is het werk van Childe hier een belangrijk uitgangspunt, vooral omdat hij een van de eersten was die vergelijkend onderzoek tussen culturen uitvoerde op basis van archeologische bronnen. Bovendien was het werk van Childe van doorslaggevende invloed op de latere vergelijkende studies van Robert Adams en Bruce Trigger. Het raamwerk van een puntsgewijze vergelijking van tien karakteristieken van vroege beschaving van Childe wordt in een aangepaste versie ook gehanteerd in dit proefschrift. Deze aanpassingen zijn het gevolg van de inzichten van latere archeologische studies en de gelaagde benadering van historische tijd van de Franse *Annales* school van geschiedschrijving. Dit laatste aspect helpt met name om de generieke samenlevingsvorm van de vroege beschaving in te kaderen in de specifieke regionale geschiedenis. Het uitgangspunt van het proefschrift is dat de empirische patronen een beeld genereren dat zowel een uiting is van de onderliggende historische werkelijkheid als van de beschikbare bronnen. Daarom is het ook van belang dat bij een vergelijkende studie ook gekeken wordt naar de verschillen in de aanwezige bronnen van de gevallen die vergeleken worden.

De voor het bestuderen van kunstvormen gehanteerde methodologie is afgeleid van meer recente studies naar de actieve rol van kunstvoorwerpen, en dingen in het algemeen, in samenlevingen. Het werk van Alfred Gell is bijzonder relevant hiervoor en wordt aan een kritische analyse onderworpen. De methodologie die hieruit volgt is gebaseerd op een analyse in twee fasen. Als eerste worden de materiële vormen, concepten van materialiteit, iconografie en contexten van

kunstvormen bestudeerd. De analyse op dit niveau blijft dicht bij de bronnen. Daarna volgt een analyse op een meer abstract niveau, waarbij de concepten van metafoor, semiotica en praxis gebruikt worden om de rol van kunst te begrijpen. Tenslotte wordt kunst als een element in relatie gebracht met negen andere elementen van vroege beschavingen. Bij het vaststellen van die relatie vervult het *Annales* inzicht in de complexe historische causaliteit van de menselijke geschiedenis een belangrijke rol.

Het tweede doel van het proefschrift betreft de analyse van de rol van kunstvoorwerpen in relatie tot de ontwikkeling en structuur van de samenlevingen van Myceens Griekenland en het Preklassieke laagland Maya gebied. Dit wordt uitgewerkt in hoofdstukken drie tot en met vijf voor Myceens Griekenland en hoofdstukken zes tot en met acht voor het laagland Maya gebied, waarbij de in hoofdstuk twee uitgewerkte methode wordt gehanteerd. De volgorde van de analyse loopt van een bespreking van de chronologie, beschikbare bronnen en een inleiding in de algemene patronen van de betreffende samenleving naar de discussie van kunstvormen zelf. Na een introductie van de specifiek voor kunst belangrijke bronnen volgt de analyse de volgorde van materiële vormen, concepten van materialiteit, iconografie en contexten van kunstvormen. Vervolgens worden deze op een meer abstract niveau bijeengebracht in de eerder genoemde concepten van metafoor, semiotica en praxis. Ook wordt een terugkoppeling gemaakt naar de algemene patronen van de twee samenlevingen.

De analyse van de twee gevallen vormt de opmaat tot de derde doelstelling van het proefschrift: de vergelijkende studie tussen Myceens Griekenland en het Preklassieke laagland Maya gebied. Dit wordt uitgewerkt in hoofdstuk negen, waarbij de bevindingen ook gerelateerd worden aan die van eerdere vergelijkende studies. Dit hoofdstuk start met een algemene vergelijking van de twee gebieden, om te beginnen de vergelijkbaarheid van de beschikbare bronnen om ze te interpreteren. De verschillen hierin zijn groot, echter niet groot genoeg om een vergelijking uit te sluiten. Ook worden economische, sociaal-politieke en ideologische patronen vergeleken. Het naar voren gebrachte argument is dat de grootste overeenkomsten tussen beide vroege beschavingen op sociaal-politiek gebied te vinden zijn, terwijl de economische en ideologische patronen meer verschillend zijn. Een andere conclusie is dat de ontwikkeling van samenlevingen in beide gebieden een ander patroon volgde. Dit wordt vooral gerelateerd aan de verschillen in economisch en ideologische opzicht tussen de twee vroege beschavingen.

De vergelijking van de rol van kunstvoorwerpen in de ontwikkeling en structuur van de eerste beschavingen in Griekenland en het laagland Maya gebied is het volgende onderwerp van de vergelijking in hoofdstuk negen. Na de vergelijkbaarheid van de beschikbare bronnen voor de interpretatie van kunst in beide gebieden besproken te hebben, worden de aspecten van metafoor, semiotica en praxis vergeleken. De patronen die hieruit naar voren komen duiden erop dat kunstvoorwerpen in deze twee vroege beschavingen op een andere manier gestructureerd waren. Vooral op het gebied van metafoor was dit het geval, een patroon dat in het proefschrift in verband wordt gebracht met de verschillende materiële condities in beide gebieden en de weerslag hiervan op de ideologie. Ook de praxis van kunstvoorwerpen verschilde in de twee gebieden, iets dat gerelateerd kan worden aan de algemene patronen die eerder in hoofdstuk negen besproken waren. Tenslotte wordt in hoofdstuk tien de gevolgde methodologie van het proefschrift geëvalueerd en worden suggesties gedaan voor verder onderzoek.