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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.⁴⁷¹ 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'.⁴⁷⁷ 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.⁴⁷⁸ 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 well-developed 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).⁴⁸¹ 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,⁴⁸² 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.

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 techno-tasking 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 yields 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.⁴⁸⁴ 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 Maya 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 large-scale 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 better-known later Maya societies it may be supposed that the raw materials and finished craft products were exchanged through markets.⁴⁸⁷

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 'open-loop' exchange will be used instead. Such 'open-loop' economic relations extended to the long-distance 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 high-density 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'.

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.⁴⁹⁰ 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.

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 socio-political 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 socio-political 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 a 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.⁴⁹³ 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.

⁴⁹³ 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

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.⁴⁹⁵ 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'

⁴⁹⁵ 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

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 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

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 in-depth 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.⁵⁰¹ 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 (Pasztor 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.⁵⁰⁴ 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.⁵⁰⁵

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.

⁵⁰⁵ It would be incorrect, despite his great influence, to ascribe the notion of the Maya as a peaceful society solely to 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 (Pasztor 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.⁵⁰⁷ 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:

*"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.⁵¹⁰ 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

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 non-human, 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 modest 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

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.

⁵¹³ As noted in section 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:

*“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 <i>ku-wa-no</i>), gold	greenstones (fuchsite, serpentine)
colour conception	<i>ku-wa-no</i> , as darkish, lustrous surface, kinetic phenomenon	<i>yax</i> (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.⁵¹⁶ 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

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 co-existence 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).⁵¹⁸ 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, age-old, 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.

⁵¹⁸ 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).⁵¹⁹ 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 an 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 *kyanos* 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 *χλωρός* (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.

⁵²³ Taking a historical perspective also allows one to mitigate the charge of geographical determinism that can easily be associated with the work of Haudricourt, 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 micro-structures 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

⁵²⁴ 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).⁵²⁵ 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

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.⁵³⁰ 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,

⁵³⁰ 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 wall-paintings, 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 in-depth 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

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 memory-work 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 warfare-related 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 *yax*, 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'.⁵³⁴ 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

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

⁵³⁵ 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.⁵³⁸ 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 'open-loop'. 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 placeholder 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

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 nexūs 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/craft-work, 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, labour-intensive 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).⁵⁴¹ 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.⁵⁴² 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 axe-monies 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

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).

⁵⁴³ 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.⁵⁴⁴ 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

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 socio-political 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.⁵⁴⁶ 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

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 techno-tasking 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.⁵⁵⁰ 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).

⁵⁵⁰ 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.⁵⁵² 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.⁵⁵³ 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 considerably 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 cross-cultural 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 pre-capitalist 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

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 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.

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

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.