CHAPTER SEVEN: GENERAL CHARACTERISTICS OF LATE PRECLASSIC LOWLAND MAYA ART

7.1: Introduction

7.1.1: Chapter overview

In this chapter the general characteristics of LPC lowland Maya art will be discussed, though with extensive references to relevant information from later periods that help to put it in its proper context. The structure of the chapter in overall terms mirrors that of chapter four on the general characteristics of Mycenaean art. In the next section the available sources for interpreting LPC lowland Maya art will be discussed, while the next three main sections will deal with material forms (7.2), craft and conceptions of materiality (7.3), and iconography (7.4). However, compared to chapter four the content of many of the individual sections will be structured differently, given the specifics of the material and its interpretation in the LPC lowland Maya case. In the introductions of each of the three sections the basic points from the Mycenaean case on this topic will be listed, in order to remind the reader of the structure of that chapter in relation to the different sources available for the LPC lowland Maya. Through this the reader should be able to gain an appreciation of how the analysis presented here is structured according to the sources specific to the Maya case.

7.1.2: Sources for the interpretation of Late Preclassic lowland Maya art

The archaeological record of Maya art has been described as the richest and most complex of the pre-Columbian early civilisations of the Americas in terms of its size and complexity (Miller 1999, 11). Ever since the start of scientific exploration in the 19th century the record has expanded considerably, and this is true especially for the Late Classic period, for which dozens of larger sites with complex artistic and textual records are known. Yet there still exists the potential for single discoveries to overturn or at least greatly modify established interpretations, and this is especially true for the LPC period under consideration here. This point is easily understood when considering the rather contingent discovery of the San Bartolo wall-paintings (Saturno et al. 2007, 1-3). The understanding that there may still be many important discoveries to be made, makes an account of this period by definition of a tentative character. Indeed it seems as if the further one goes back in the trajectory of the Maya, the greater the potential of paradigm-shifting discoveries becomes, something corroborated by the recent finds from Ceibal (Inomata et al. 2013). Yet at the same time the number of sites and the amount of material available from them make it possible to sketch at least the broad parameters of art and its agency in the LPC Maya lowlands. This is the minimum requirement for the type of comparative research carried out in this thesis.

There are over a dozen sites with records of LPC period art in the Maya lowlands (see for a map figure 48), most of which are located in the Petén and Belize. In many of these sites the LPC phase is obscured later architectural construction in the Classic period. But this is not the case, or to a much lesser degree, at the important sites of Cerros, Cival, El Mirador, and San Bartolo, among a number of others. The implication of this is that at these sites it is easier to develop an overall interpretation of the artistic record in relation to its surroundings. In the sites with considerable Classic period construction the LPC period finds are more difficult to contextualise. Another characteristic of the record is the variability in the amount of evidence available for different material forms of LPC period art. Some material forms can be found at many different sites, especially the large stucco masks attached to architectural structures, while others cases such as the stelae or the wall-paintings are comparatively more rare. Hence for these material forms new discoveries are more likely to overturn established ideas. In some cases the existence of such

'unknowns' is already known in principle, as is the case for the wall-paintings from the site of Wakna in the Petén that are still to be fully documented (Estada-Belli 2011, 52).[334]

The application of scientific techniques to analyse the material record of Maya art is starting to be more fully developed. A good example of the usefulness of such methods can be seen in their application to new reconstructions of the Late Classic period wall-paintings from Bonampak (Miller & Brittenham 2013) and the analysis of the painting techniques used to create them (Magaloni-Kerpel 2004). Similar techniques are now being applied to the San Bartolo wall-paintings, which has allowed for the recognition of different 'hands' of individual painters (O'Grady & Hurst 2011). This also makes possible *chaîne opératoire* approaches for the further interpretation of these wall-paintings (Hurst 2009, 13-19), which are increasingly being used in Maya archaeology in general. A good example of this is the study of the craft-work involved with jadeite and other high-value materials at the Classic site of Cancuén (Kovacevich 2007). Such studies have not yet developed to their full potential, especially for the LPC period, but given the amount of jadeite, obsidian and other materials for this period the insights to be gained are likely to be highly significant. This approach will be discussed further in section 7.3.2.

The potential of the textual sources, the parameters of which were discussed in section 6.3, to shed more light on LPC art seems rather low, given the state of the presently available evidence (Houston & Taube 2008, 127-128). Not only are the available texts often illegible, in part due to the signs being small and not incised very deeply (Houston 2012a, 198), but when they are legible they are not as readily understandable as texts from the Classic period (Fahsen & Grube 2005, 75). Nevertheless, writing is known from a variety of LPC contexts, including both monumental and non-monumental art, and from the Loltun cave as well (Houston & Inomata 2009, 92). The discovery of the incorporation of glyphs in the wall-paintings at San Bartolo has already proven insightful, and indeed many other revelations may follow from this site. Their significance derives not so much from what is known from the decipherment of the limited texts in themselves, though these are by no means insignificant, but rather what they reveal about the relation between texts and images. In this case it is possible to draw parallels with the relation between texts and images in the Classic period, as will be outlined in section 7.4.3.

Turning now to the connection of LPC lowland Maya art to that of contemporary and preceding cultures in Mesoamerica, it is important to note how studies of Mesoamerican art tend to be able to trace cultural elements over long periods and broad geographical areas. In some cases these even extend beyond Mesoamerica itself (e.g. Taube 2000). Notable studies in this regard are Covarrubias' tracing of the development of the depictions of the rain and storm deities through different periods and regions of Mesoamerican history, and Taube's study of the afterlife of the Olmec maize god. Both have shown the ability to use the direct historical method to connect cases (Houston & Taube 2008, 134), see figure 49.[335] The latter case has proven influential for the interpretation of the San Bartolo wall-paintings, to be discussed in detail in section 8.2.4 of the next chapter. Furthermore, as will be explored in section 7.3, such connections exist not only for iconography but for craft and conceptions of materiality as well. Indeed, the notion of memory-work may prove to be a useful way to explore in more detail how such continuities could possibly have existed for periods and geographical areas far extending beyond any individual Mesoamerican culture.

[334] Here thousands of wall-painting fragments from San Bartolo also need to be included, which, contrary to the scenes that have remained *in situ*, have not yet been analysed and published (O'Grady & Hurst 2011, 879). Another case is that of the as yet unpublished sculptures showing war captives from El Mirador (Houston & Inomata 2009, 96).

[335] The present work has also received much inspiration from the hermeneutics of interpreting of the Mixtec or Nuu Dzaui codices in the light of sources from contemporary descendant communities, as developed by the group of Leiden researchers on Mesoamerica (e.g. Jansen & Pérez Jiménez 2011, 181-215). Particular thanks go to the participants in two seminars on the San Bartolo wall-paintings in the Summer of 2014.

Naturally these contemporary and past connections of the LPC lowland Maya extended into the future Classic, Postclassic, colonial, and contemporary periods as well. This can be seen in the connection made between ethnographic studies of contemporary Ch'orti ritual and Classic period Copan (Looper 2009). Apart from similar challenges and opportunities with regard to the application of the direct historical approach, there exist the additional issues of linguistics. As noted in section 6.3 of the previous chapter, Maya texts are more than containers of information but have to be understood as 'literature' in the sense of being located in communities of performance. In his study of the history of Maya literature, Tedlock (2010, 25-30) notes how hard it is to trace this back to the LPC period, even for regions outside the Maya lowlands where better sources have been found. Hence efforts to trace back specific features of literary works such as the Popol Vuh have met with some controversy, despite the successes in this for the Classic period.[336] This shows that when considering the notion of memory-work broader cultural phenomena than only the transfer of symbols have to be taken into account, in particular the specifics of the contexts of art within specific cultural periods like the Preclassic.

7.2: The material forms of Late Preclassic lowland Maya art

7.2.1: Introduction

In this section the material forms of LPC lowland Maya art will be discussed, based on the same basic categories that were used in chapter four on Mycenaean art. It is useful therefore to briefly recollect those categories:

1. Monumental-scale containers, with art that is often embedded within fixed spatial contexts.
2. Non-monumental containers, often portable.
3. Instruments, rarely of monumental scale.
4. Potentially cross-cutting the different forms are recurring surface-patterns.

It should be reiterated once again that the purpose is not to give an encyclopedic overview of these material forms, much less of the entire LPC period archaeological record, but rather to highlight the main characteristics as well as details of special significance. Also, as has been pointed out in chapter four on the general characteristics of Mycenaean art, these divisions are used solely for the purposes of exploring the generic properties of specific material forms of art and the relations between them. They do not imply that this categorisation was shared by the Maya, instead it is necessary to consider the specifics of that record in detail. In this regard the LPC lowland Maya record presents different challenges than the Mycenaean one. For example, in both areas textiles have generally low survival rates and are usually only recovered in very small fragments. But the Mycenaean information on textiles from depictions on other art forms, also seen in contemporary Egyptian art, is much better than that of the Preclassic Maya. Conversely, the Maya record in some ways is more durable as for this period there exist no metal objects, and hence there was no chance of art objects being scrapped or melted down for reuse in other contexts. Such subtle differences should always be considered, and not only for addressing gaps in the record but also as providing an insight into the properties of the different material worlds of both early civilisations.

[336] A major contribution in this question was made by Coe (1989), who connected different iconographic themes from pre-Columbian Maya art to aspects of the Popol Vuh. These questions will be addressed specifically in the relevant sections on iconography in section 7.4 of this chapter, and in the next chapter for specific scenes at sites such as San Bartolo and Nakbé.

Table 7.1 below outlines the main material forms of the art of the LPC lowland Maya, according to the three main categories of monumental and non-monumental containers and instruments. It is important here to note also some of the basic materials that were used to make these forms. As outlined in (Miller 1999, 72-87), these include jadeite and related greenstones,[337] limestone and other kinds of stone used for architectural purposes, granite, obsidian, chert and flint, iron-ore (pyrite, haematite), cinnabar, and even mercury.[338] Also used were organic materials such as wood, unfortunately very susceptible to decay, human and animal bones, as well as marine-derived elements. With regard to fabricated materials ceramics and stucco were very important. The earliest metal objects were not found until the Late Classic period, and metallurgy as such seems to have been developed properly only in the Postclassic. Little is known about designs on textiles from the Preclassic period, nor about the bark-paper that may also have been used for clothing. Both materials have survived only in insignificant quantities that prevent substantial further analysis, and the information from LPC artistic depictions is much less informative than from the Classic period vases and wall-paintings. This also holds true for the quetzal feathers so well-represented in the Late Classic period wall-paintings from Bonampak (Miller & Brittenham 2013, 123-124). Because of the decipherment of the Maya script, some of the terms used for different materials are known, including different forms of ceramics, shell, obsidian, and chert (Houston 2014, 89).

[337] Although often referred to by the umbrella term jade, the more specific and correct term is jadeite and can be distinguished from the more common nephrite, which was the material used for Chinese jade (Taube & Ishihara-Brito 2012, 136). Strictly speaking some objects should be referred to as jadeitite (Taube 2004a, 20), but here jadeite will be used consistently to encompass all such materials, and to distinguish them from the nephrite variant. Although jade is sometimes used to describe a variety of green minerals (e.g. Mora-Marin 2001, note 106, p. 157), here these will be referred to by the more generic term greenstone, to avoid any conflation with the blue-coloured Olmec jadeite and other variants.

[338] Mercury is usually extracted from cinnabar but also occurs naturally, and it has been argued that rather than extraction from cinnabar, the more labour-consuming collection of naturally-occurring mercury was used in the Maya area at this time (Pendergast 1982, 534). The material was already handled in the LPC period, as a cache from Caracol demonstrates (Chase & Chase 2006, 51).

Material form	*Technique(s)*
Monumental containers	
stucco façade masks	modelling
stucco friezes	modelling
wall-paintings	painting
stelae	carving
Non-monumental containers	
figurines	moulding, carving
pottery	moulding, incisions
textiles	weaving
jewellery	carving
bones	carving, incisions
mirrors	polishing
Instruments	
stingray spines	unworked
eccentrics	knapping, carving, painting

Table 7.1: Categories of the material forms of LPC lowland Maya art.

7.2.2: Monumental containers in Late Preclassic lowland Maya art

The first indications of the presence of monumental art in the Preclassic Maya lowlands came from the discovery of large stucco head-masks and panels on the LPC period façade of Structure E-sub VII at Uaxactún (Ricketson & Ricketson 1937). This early discovery has in the following decades been joined by many other Maya lowland sites with stucco head-masks and friezes on architectural façades (R. Hansen 1992, 27-29).[339] With the exception of those at El Mirador and Nakbé, most cases of stucco-adorned architectural façades were buried under later constructions. For some of them this was seemingly for preservation, but others were intentionally damaged as part of termination rituals. The technological development of the lime-plaster required to construct these material forms of LPC lowland Maya art has been traced at the site of Nakbé. By the end of the MPC period the repertoire of lime-plasters at this site was broadened from a rough version used to cover walls and floors to include more fine-grained, higher-quality ones that were used to make stucco masks and panels (E. Hansen 2000, 210-211). Different colours were applied to the stucco work: initially only red, black, and white or cream paints, but from the LPC period onwards

[339] Stucco-work has also been found at the site of Chiapa de Corzo in Chiapas (Hansen 1992, 32-33), where there are a number of close architectural parallels with the Maya lowlands (Houston & Inomata 2009, 98).

including orange, yellow, brown, pink, and grey-green (Houston et al. 2009, 72, 75). The evidence from Nakbé suggests that the paint was of high quality and applied in a single effort (E. Hansen 2000, 229).

One distinguishing characteristic of the stucco masks and panels are their grandiosity. The normal size of the art-works was already larger than life-size, but one outsize mask of the so-called Principal Bird Deity from Nakbé measures 5 metres in height and 11 metres in width (R. Hansen 1998, 82). The technical possibility to create large stuccoed surfaces with complex iconography was also used to create larger friezes, as can be seen at Calakmul Structure II/Sub II c-1 where one with a length of 20 metres and height of 3.5 metres has been found (Rodriguez Campero 2008, 47-48). Apart from their great size, the stucco masks are also characterised by their placement. Quite often they were deployed flanking the central stairways of pyramids, see figure 50 for an example, resulting in a number of cases with a symmetrical arrangement. A good example of this are the four stucco masks on the opposite sides of the stairway of Cerros (Freidel & Schele 1988, fig. 4, p. 554). The number of stucco masks and panels on buildings could be quite numerous, as was the case for Structure E-sub VII at Uaxactún, for which as much as 18 masks are known (Hansen 1992, 33-34). As will be explored in section 7.4.3 below, there may have been some narrative potential in the deployment not just of the frieze panels but potentially for the stucco masks as well.

Another form of LPC monumental art was that of wall-painting. Ethnohistoric sources indicate that mural art was very common in contact-period Mesoamerica, and elements of it were adapted for the wall-paintings of early colonial monasteries (Hurst 2009, 1-2). This tradition dates back to the earliest known paintings from the cave of Oxtotitlan, located in the modern Mexican state of Guerrero, that are dated to 800-500 BC (Grove 2007). Although the environmental conditions in the Maya lowlands are not especially conducive to the survival of wall-paintings, the establishment of the craft required to make it can be traced back to 400 BC. This can be inferred on the basis of fragmentary evidence from the site of Holmul, with a handful of sites with material known from the LPC period proper (Hurst 2009, table 1, p. 7). LPC period wall-paintings seem to have used a combination of *secco* and *fresco* techniques,[340] as is known for the later mural art of the Maya and Teotihuacan as well (Hurst 2009, 176, 183, 186, 191). As already noted in section 7.1.2, much of the material has not been published or even studied, resulting in a reliance on the well-published in-situ wall-paintings from San Bartolo (Saturno et al. 2007; Taube et al. 2010). Hence, perhaps to a much greater degree than for the larger corpus of stucco masks and panels, even the extant record of LPC period mural art might very well still harbour considerable surprises.[341]

Nevertheless, from what is known the basic properties of this material form can be established. The first of which concerns the fact that, as for later periods, murals were located both in external and internal settings (Hurst 2009, table 2, p. 22). In the later part of the LPC period cave paintings, as well as carvings, are also known from the cave site of Loltun in the northern Maya lowlands (Stone 1995, 56-61).[342] The size of the paintings was variable, as can be seen for the San Bartolo case where both life-size figures (Hurst 2009, 64) and a frieze with a height of about 80 centimetres

[340] See for a full explication of these terms section 4.2.2 of chapter four.

[341] A good example of this is the case of LPC structure 5C-01 from El Achiotal in the western part of the Petén, where, together with typical stucco masks, parts of multiple wall-paintings in an unusual style were found (Acuña 2011 figs. 3.13 & 3.18, pp. 58 & 61). The peculiarity of these murals is the way in which geometric and rectangular designs are used, in contrast to the usually more free-flowing calligraphy of Maya wall-paintings. According to the excavator, while it used Maya symbols it also contained direct references to Olmec conceptions of ancestry and its ideological implications (Acuña 2013, 344).

[342] At present Loltun stands isolated in the LPC period, although it was preceded by significant cases of Olmec cave art (Stone 1995, 46-51), and many of the major LPC lowland Maya sites do not have caves in their vicinity (Stone 1995, 235). This issue will discussed further in section 8.2, on contexts of art, of the next chapter.

(Taube et al. 2010, 4) were found. On the basis of the present-day evidence it seems that paints were initially rare, allowing only for small wall-paintings, but that after 100 BC there was an expansion of the colour palette used for creating murals (Hurst 2009, 163-165). Although so far no Maya blue has been found, the range of colours used at LPC San Bartolo rivals that of Bonampak, as documented by Magaloni-Kerpel (2004), in complexity and is more sophisticated than other later sites with wall-paintings like Palenque and Chichen Itza (Hurst 2009, 227). Although different in some ways, the LPC period techniques for making wall-paintings were therefore as developed as those of the succeeding Classic and Postclassic periods.

In contrast to the abundant Classic period record of stelae, the LPC evidence for them remains rather problematic. This is partially the result of the later relocation of a number of the Preclassic stelae (Hansen 2001, 57), which in many cases makes it impossible to determine their original context. Another potential distorting factor is that wood may have been used to make stelae as well, thereby obscuring part of the originally existed record through its decomposition, creating another potential distortion in the record (Miller 1999, 79-80). However, it has long been recognised that there did exist stelae in the LPC Maya lowlands with likely ritual functions (Hammond 1982; Justeson & Mathews 1983). Yet so far no Long Count dates have been found on the Maya lowland stelae, unlike on contemporary stelae from the southern Maya area, as noted in section 6.4.2.[343] The use of Long Count dates and stylistic similarities to Classic period Maya stelae can be used to infer a relation between the stelae in the southern Maya area, like those at Izapa, and those of the Maya lowlands of the Classic period. However, internal developments in the Maya lowlands in the LPC are not insignificant, especially with the impact of the stucco masks on the LPC period stelae in this area (Awe et al. 2009, 184-186).

The lowland stelae that can be ascribed to the LPC period show considerable variation. There is a plain stela from Cuello that was found in situ and dated to around AD 100 (Hammond 1982, 402).[344] Other cases had more complex iconography, including evidence that seems to suggest a kingly figure, as can be seen for stelae from Cival (see figure 51) and El Mirador (Estrada-Belli 2006, fig. 6, p. 64; Houston & Inomata 2009, fig. 3.12, p. 91). The evidence from Cival is especially interesting, as the stela mentioned both seems to have been preceded by an uncarved one and is argued on stylistic grounds to have pre-dated the monumental architecture of Nakbé and El Mirador (Estrada-Belli 2006, 59, 63). It has been proposed that a stela from El Mirador carrying text was carved in the LPC period as well (Hansen 1991). Finally, it should be mentioned that there may have been a conceptual contiguity between stelae and naturally-occurring rock, with the former being akin to 'portable bedrock' placed in human-made analogues to natural features such as mountains, caves, and pools (Stuart 2010, 286-288). In this sense the carved relief of an entrance to the Loltun cave (Grube & Schele 1996), can be mentioned here as a parallel to the stelae.

7.2.3: Non-monumental containers in Late Preclassic lowland Maya art

The discussion of non-monumental containers in LPC lowland Maya art will start with ceramic-based forms. The role of typology and classification in Maya pottery studies has already been discussed in section 6.3 of the previous chapter. There it was stated that the LPC period is usually characterised by the so-called Chicanel ceramic sphere, with its many regional and site-based

[343] It has recently been suggested that the San Bartolo stone block with writing dated to circa 300 BC may have contained an indirect reference to the use of the Long Count at this site even at this early date (Giron-Ábrego 2012). As the author notes, however, each step in his chain of reasoning has to be further substantiated. If ultimately proven, it would make for an interesting contrast with the calendrical information from the wall-paintings, to be discussed in section 8.2.4 of the next chapter, which do not seem to indicate the use of the Long Count.

[344] There have been suggestions that some of the plain stelae may have had stucco on them for decoration rather than being carved (Awe et al. 2009, 185), but not everybody is convinced of this (Stuart 2010, 285).

complexes, although debates on typology and chronology continue. Here the focus lies not on types and the variation between them, but rather on the decorative and functional aspects of LPC lowland Maya pottery. First of all, however, it is important to consider basic techniques. Maya pottery in general was hand-made, involving a variety of techniques, and the initial shapes may have been derived from gourd-derived containers (Miller 1999, 190-192).[345] Pots could also be shaped in distinct forms, such as zoomorphic ones, though these are not common in the LPC period (e.g. Powis 2002, 183). One interesting feature is that the use of volcanic ash as a tempering material for ceramics, well-known for the Late Classic period, appears already to have been present in pre-Mamom or Cunil pottery (Cheetham 2005, note 5, p. 38; Sunhara et al. 2006). As this material is lacking in the Maya lowlands itself, and thus had to be imported, its use is one more indication of long-distance trading even at this early phase (Cheetham 2005, 34).

Turning to decoration, painting Maya ceramics was done through clay slips (Miller 1999, 192), and another decorative technique was through incisions. Although a variety of regional and site-based complexes existed, the Chicanel sphere was dominated by the so-called Sierra Red group (Sharer & Traxler 2006, 244), named after the red slip applied to its surface. The monochrome focus of most LPC period pottery can be contrasted to the well-known polychrome shapes with their richly figurative iconography from the Classic period (e.g. Reents-Budet 1994). This is not to say, however, that LPC period ceramics are blanks in terms of meaning. First of all the aspect of surface colour and finish are of importance, as will be discussed further in section 7.3.3 below. Secondly, there are also cases of iconographic motifs on LPC period pottery, for example the cross on the interior base of a bowl from the site of K'axob in Belize (Berry et al. 2004, 244-245). More examples of very simple decorative designs on vessels come from caches and burials at Tikal, which include imported pots (Culbert 1993, figs. 4-13). But the repertoire is much simpler and less coherent than that of pre-Mamom or Cunil pottery (Cheetham 2005, figs. 3.5-3.6, p. 33), let alone the revolutionary contrast that can be inferred from even a cursory look at the Early Classic Tikal vessels illustrated in Culbert (1993).

Another aspect of LPC period ceramics are the different functions of pots. In section 6.4.2 the analysis of ceramics to study maize consumption and feasting with cacao-based beverages was noted. The key issue at hand here is whether or not certain vessels were used intrinsically as art objects, or whether artistic expressions were an inseparable aspect of a wider range of ceramic forms. From the limited evidence it seems that for LPC period pottery the prime distinction in decoration and form can be seen for those pots used for ritual purposes (Powis 2002, 484), as can be inferred from their occurrence in burials and caches (see the discussion in section 8.2.1). Another form often made from clay, but by no means exclusively so, was that of the figurines, which were fairly common in domestic contexts in the MPC period but go largely out of use thereafter (Ringle 1999, 190, 193). Although there are different interpretations about the early use of figurines, their disappearance has been linked to a shift from portable to monumental art at the start of the LPC period (Hammond 1989). The shift away from figurines parallels the disappearance of the decorative repertoire from pottery. Even so, there does not appear to have been a decisive cultural break, which can be seen neither in the archaeological record overall, nor in the basic constitutive concepts of art. Instead the shift from one kind of medium to another is more likely to have been due to socio-political changes.[346] Finally, at a later stage of the LPC period new kinds of figurines

[345] Later cases of painted gourd containers are known from the archaeological record, however (McAnany 2010, 242-243), see for example two possible cases from burial 167 from LPC Tikal (Coe 1990, 231). Rather than being limited to the origin of pottery, there seems to have been a continuous process of skeuomorphism between gourds and a variety of ceramic forms (Houston 2014, 40-41).

[346] Just as with the early decorated pottery, figurines have been connected with emerging socio-political inequality in Formative period Mesoamerica (Lesure 1999). A tempting scenario would be to attribute the shift away from pottery and figurines to monumental art to the change from chiefdom-like polities to early states. But as will be discussed in

known as 'Charlie Chaplins' are increasingly found in cache deposits (Lomitola 2012).

Using lapidary techniques jadeite and related greenstones like serpentine and fuchsite were transformed into a variety of art objects, although celts as naturally-shaped forms were also included in this category (cf. Taube 2004a, 20). These include plaques, earspools, pendants, statuettes, figurines, carved heads, and beads, see the catalogue in Taube and Ishihara-Brito (2012). An outstanding case is the serpentine mask from burial 85 at Tikal (Coe 1990, 219), see figure 52. The most frequently found forms, however, are the celts. Almost all of these objects have been recovered from caches or burials. The presence of broken jadeite artefacts in abandoned architecture suggests that in some cases they may have been used in termination rituals as well, as at LPC Cerros (Garber 1993). Based on research on the Olmec uses of jadeite it has been suggested that aside from being art objects in their own right, polished jadeite celts were both an important means of exchange and could act as the 'blank' from which the art objects could be derived (Taube 2004a, 18). The relevance of these ideas has long been noted for the LPC lowland Maya as well (e.g. Freidel 1993). The impact of this for understanding value will be discussed in section 8.3.

Another important category of non-monumental containers were mirrors, which were made of jadeite, obsidian, and naturally occurring iron ores (pyrite, haematite).[347] Common to all these materials was their potential to shine and reflect, brought out by polishing and related lapidary techniques. Such objects had important ritual functions and were associated with rulership as well, as can already be seen for the Olmec concave iron-ore mirrors (Carlson 1981). Another function may have been to start fires through focusing sunlight (Nelson et al. 2009, 2). The ontological implications of these objects will be discussed briefly in section 7.3.3 below. Mirrors first appear in the Maya lowlands in the MPC period, as can be inferred from a mirror backing from Cahal Pech dated to 600 BC (Awe 1992, 302-303). More material evidence for mirrors, made both of haematite and pyrite, is known from the LPC period, much of it deriving from caches (Blainey 2007, 59-61). Technically, it seems as if in contrast to the concave Olmec mirrors, most Maya cases were actually mosaics of small pieces, not necessarily from the same materials, on a flat surface (Blainey 2007, 41, 44). The same materials used for mirrors were also used in reflective mosaics from the MPC period onwards (Sharer & Traxler 2006, 180; Healy & Blainey 2011).

Organic materials were also used to make LPC period art objects, and in some cases they were simply used as such without substantial human modifications. Both human and animal bones were worked, including the elaborate carvings on a bundle of some 90 human bones from a royal tomb at Late Classic period Tikal (Miller 1999, 217-220). For the LPC period no bones with complex texts or iconography have been found, but the principle of carved bones did exist, as can be inferred from examples with mat motifs in a burial from Cuello (Hammond 1999, 64). Another important category is that of shell and other marine-derived organic materials. A variety of types of shell ornaments, ranging from intricately worked beads and similar objects to unworked or roughly worked detritus, are known for the LPC period (Hohmann 2002, 104-109). Finally, some non-monumental containers were made from the perishable materials of wood, textiles, and bark-paper, yet few of them have survived but for a few fragments.[348] Nor can much information be gained from

sections 7.4.2 and 8.2, the situation for the LPC lowland Maya is more complicated than this.

[347] Mercury, alongside water, has also been noted in association with the reflective properties of mirrors (Healy & Blainey 2011, 241). The material is very rarely found in LPC contexts, but one well-known find from a cache at Caracol presents a highly enigmatic and compelling case. In this cache a large amount of mercury was found as a pool, lying at the bottom of a small hollow stone that also had a jadeite pendant and beads, as well as shell beads and cinnabar: all likely wrapped up as a bundle (Chase & Chase 1995, 95-96).

[348] Especially for textiles and wood this is highly unfortunate, although the former may have been less prevalent in the LPC period compared to clothing made from bark-paper and other materials (McAnany 2010, 121-123). Ethnohistoric sources suggest wood was a very important and widely used material for art objects, with high status attached to

other sources about such forms. For example, the depictions of textiles in the San Bartolo wall-paintings are sparse, though not completely absent (Taube et al. 2010, figs. 67-68, pp. 106-107), perhaps owing to their emphasis on mythological themes.

7.2.4: Instruments in Late Preclassic lowland Maya art

With regard to instruments in the art of the LPC Maya lowlands, the record is not very extensive and does not include monumental forms. Unsurprisingly, the most important materials to be used for fashioning instruments were chert and obsidian. In general terms, the objects made from these materials that qualify most obviously as art objects are the so-called 'eccentrics'. Best known from the Classic period, the objects in this category are shaped in a wide variety of forms that are not conducive for practical application in, say, agriculture or warfare, and are almost exclusively found in caches (Clark et al. 2012). However, the diversity characteristic of the Classic eccentrics cannot be seen in the limited LPC period record. Instead there existed a limited repertoire of sceptre and 'trident', found only at Colha and a few other sites, forms that seem to derive from the stemmed macroblade or 'dagger' form (Gibson 1989, 134). This latter form was of ritual significance as well, possibly through use in blood-letting rituals, and is more widely found in caches at LPC sites, like Cuello (Robin et al. 1991, 226, 229). The development of these objects at the site of Colha occurred in parallel to the large-scale production of utilitarian tools here (Hester & Shafer 1994, 50).

The evidence for other instrumental forms of LPC lowland Maya art is even more limited. Eccentrics made of obsidian do not appear to have already been made in the LPC period. Most studies focus on distribution patterns and questions of exchange of this material from distinct sources, with perhaps some kinds of obsidian being more commonly used in ritual contexts than other kinds (e.g. Brown et al. 2004, 235). Musical instruments are known, as can be seen for small ceramic whistles or ocarinas, in zoomorphic and anthropomorphic shapes, from K'axob and other sites (Bartlett 2004, 264-265). Ceremonial jadeite celts have also been found, as for example the ones made from blue-green jadeite found in a cache at Cival (Estrada-Belli 2006, 75). Finally, stingray spines are found relatively commonly in caches and burials, as at Cuello (Robin et al. 1991, 229) and at Tikal (Coe 1990, 240). In the iconography of the Classic period, stingray spines often occur in blood-letting rituals,[349] though their toxicity seems likely to have subsided too quickly to be of any significance in these kinds of ritual (Haines et al. 2008).

Finally, of special importance here are the instruments used to fashion LPC lowland Maya art. Recalling the different techniques listed in table 7.1 above, a number of different kinds of craft can be distinguished:

1. Reductive, especially in the knapping of chert and obsidian to obtain usable pieces from cores, but also the techniques used for the bore-holes that can be seen in different materials.
2. Additive, most importantly in the modelling of clay for pottery and figurines, as well as for shaping the monumental stucco masks and panels. Weaving is also included here.
3. Transformative, which can only be seen in a limited form in the pyrotechnics involved in making stucco, painted plaster, and pottery.
4. Surface treatment, employing a range of techniques, including polishing, incising, carving,

working it in Classic period elite contexts (McAnany 2010, 244). More isolated finds from the LPC period, like a stuccoed wooden bowl from the famous burial 85 at Tikal (Coe 1990, 219), point to its likely importance here too.

[349] As with obsidian and chert blood-letting instruments, the stingray spines were used in rituals in which (royal) figures offered their blood to fulfil their debt to deities, thereby ensuring the continuation of the cycle of birth, death, and rebirth, especially of the maize sustaining human communities (Stone & Zender 2011, 75). Interesting in this regard is how stingray spines are one element of a quincunx motif, used in Classic period art in scenes that signify the creation of the world and the transfer of a deceased king from the realm of the living (Haines et al. 2008, 91-92).

painting, and writing.

Some additional points can be made on these different sorts of craft-work and the interrelations between them. The first is that the technology for transforming materials is limited to the use of pyrotechnology for additive craft-work. Until the development of Postclassic Maya metallurgy this kind of craft-work does not involve the transformation of raw materials into new ones like metal alloys. Secondly, the later terminology of craft also points to interesting distinctions between reductive and additive kinds of surface treatment, in that the term *lu-Bat* is used to describe carving while the term *ts'ib* is used for writing and brush-work (Coe & Van Stone 2001, 94-95). Insofar as it can be inferred from both the epigraphic and the ethnographic records, however, *ts'ib* refers more to making patterns or designs across a variety of different media, including weaving, than to a specific technique applied to a specific material (Herring 2005, 75; Tedlock & Tedlock 1985, 124).[350] Finally, apart from additive and reductive procedures there are also those focused on treating surfaces in themselves, such as burnishing and polishing in general. The aesthetic importance of this should not be neglected (e.g. Stuart 2010, 297).

7.2.5: The material forms of Late Preclassic lowland Maya art

Having outlined the different forms of LPC lowland Maya art, the next question concerns the connections between them, in particular with regard to skeuomorphs and recurring kinds of surface-patterns. From the variety of forms discussed and from the absence of reliable information on materials such as wood and textiles, it should be clear that it is not possible to provide a complete picture. Arguing from the Classic Maya record, Houston (2014, 32-48) notes that a variety of cases of skeuomorphism can be recognised, involving 'quotations' from one material form to another. One common strand in this would have been a concern with durability, to move designs from more perishable material forms to those less susceptible to it (Houston 2014, 131-132). This is an important observation, but it is also possible to observe skeuomorphism between forms both made from similarly durable materials. A key example of this, which has been recognised in a more general Mesoamerican context, is the link between celts and stelae. Based on the shape and iconography of a number of Olmec stelae, these have been plausibly related to celts, in particular the upright celts in caches at La Venta (Porter 1996). This creates a category of 'celtiform' stelae, of which quite a few are known in Mesoamerica. In general terms this form is closely related both to notions of cosmological centrality and to maize and its sacred connotations, in particular the ears of corn seen ubiquitously in iconography (Taube 2004a, 37).

All of this is of significance for the lowland Maya as well, since finds from Preclassic Cival include a MPC period cache of upright jadeite celts, while in the same area a celtiform stela was placed in the transition to the LPC period (Estrada-Belli 2006, 75). Though at least possessing some formal resemblance, this example also immediately points to more complex aspects, in this case the connection with maize that will be discussed more extensively in succeeding sections of this chapter and the next one. Also, it should be clear that the stelae are by no means exclusively associated with jadeite celts. In section 7.2.2 the contiguity between stelae and rock in natural formations was mentioned, and since celts are also a naturally-occurring form the relation may be seen as a particular variant of that connection. Another aspect of this might well be the use of burnishing and paint to create more reflective and shining surfaces of stelae, almost resembling in this way polished celts (Stuart 2010, 296).[351] This focus on reflexivity as connecting different forms could also be seen

[350] This can be seen in that while *ts'ib* is used, with different added syllables, for writing and 'colour decoration' or painting (Stone & Zender 2011, 115), at the same time the terms for written texts (*uooh*) and images (*uinba*) are distinct (Herring 2005, 76). The implication is that it is the (additive) act of creating patterns that is conceptually linked with *ts'ib*, not a specific medium such as writing.

[351] There may have been an infix that indicated a polished surface, irrespective of the specific material (Mora-Marin

for the inferred connection between mirrors and the pool of mercury in the Caracol cache discussed in section 7.2.3. At a more abstract level, it has been pointed out that surface-patterns, particularly those with writing but not exclusively so, can actually function as instruments of vision (Hamann 2008a, 58-62), instead of being mere containers of meaning.

What cuts through the different forms of LPC lowland Maya art, then, are not primarily repetitive forms or well-defined iconographic designs, though these are not absent, but rather ways of treating surfaces and the ontological connotations that come with it. This reinforces the focus on creating surface-patterns across different media that were identified in the previous section. This emphasis derives both from considering the LPC material forms of art and from the ethnographic record of recent Quiché Maya communities (Tedlock & Tedlock 1985), perhaps extending to Mesoamerica in general.[352] It is clear that here we have already gone beyond the boundaries of formal analysis proper, but at the same time it is necessary here to outline the issue as it recurs in different guises across the rest of the analysis of LPC lowland Maya art. This will become clear in section 7.3 for craft and materiality, in particular for questions of ontology, in section 7.4 for the understanding of iconographic conventions and their meaning, and in section 8.2 of the next chapter with regard of the spatial contexts of different LPC art forms. In this sense the four different aspects of forms, craft and materiality, iconography, and contexts all partake in each other.

7.3: Craft and materiality of Late Preclassic lowland Maya art

7.3.1: Introduction

It can be argued that the best comparability between Mycenaean and LPC lowland Maya art lies in in the realm of craft and materiality. The LPC period record will be discussed in three sections, the first one dealing with craft-work in general, the second with the specific topic of Maya conceptions of materiality, and the third connects the two strands. In this, it is again useful to keep in mind the basic patterns encountered in section 4.3 of chapter four on the Mycenaean analysis of craft-work and conceptions of materiality:

1. Craft-work and the use of *chaîne opératoire* approaches.
2. The relation of craft-workers to their societal context.
3. The basic conception of materiality as it relates to craft-work.
4. Conceptions of colours as they relate both to the materials that constitute them and to their applications in art.

7.3.2: Craft-work and Late Preclassic lowland Maya art

The exploration of craft-work in LPC lowland Maya art has to begin by noting two main strands of approaches to this issue. The subject involves on the one hand the technical analysis of materials from the archaeological record, and on the other indigenous conceptions of craft-work as they

2001, 180). These interconnections will be further discussed in section 7.3.3.

[352] A family resemblance can be observed, in a strictly generic sense, between the structural relations in design between different forms of cultural expression of the Quiché Maya and early colonial Nahua designs of carvings that have strong parallels in song (Lockhart 1992, 422). Common to both is a 'cellular-modular' form of organisation in which relatively self-contained parts are joined into a whole, which can be seen not only for Nahua song and visual images, but also for the structure of historical accounts, landholding, household organisation, up to the order of the *altepetl* state (Lockhart 1992, fig. 10.1, p. 437). The aspect of social organisation has not been brought up for the Quiché Maya case, nor is it suggested here that the Nahua cases provides a decisive argument that it was connected to the inter-media patterns found there. Instead, it points to the possibility that the replication of surfaces may be related to a broader set of ideas, which were actualised in other domains than art and material culture.

derive from textual and ethnographic sources. The analysis starts with the former approach, as it provides the physical basis within which to embed the interpretations that derive from ethnographic research and texts. Just as for the Mycenaean material, the best way to evaluate the technical aspects of craft-work is through the *chaîne opératoire* approach. To briefly recall the definition used in section 4.3.2, this approach traces the successive steps from raw materials to finished art objects, and for each of these steps also considers, if possible, the social context in which it takes place. As noted in section 7.1.2, in recent years the *chaîne opératoire* method has increasingly been applied to different categories of Maya art. Examples include the analysis of jadeite, pyrite, obsidian and chert (Kovacevich 2006, 2007), lime plaster (Hansen 2001), and wall-paintings (Hurst 2009; Magaloni-Kerpel 2001, 2004). Their most important findings will be briefly summarised here, taking into account also other relevant studies that do not explicitly use the *chaîne opératoire* approach.

In her doctoral dissertation on craft-work in Late Classical period Cancuén, Kovacevich (2006) analysed the data for the production of smaller artefacts made of different materials in residential areas associated with elites and commoners, partially summarised in Kovacevich (2007). Although the material belongs to a different period, there are important implications for the LPC period, for which a similar *chaîne opératoire* approach has so far not been carried out for these particular materials. The Cancuén data will be discussed first and then be contrasted with that available for the LPC period. The key finding was that different materials were treated differently in craft-work. Obsidian and chert occurred widely throughout both commoner and elite activity areas of the site, and this includes the eccentrics (Kovacevich 2006, 307-308, 377-378).[353] The only distinction between the two kinds of contexts may be found in the quantity and quality of the material used. There is a difference, however, for jadeite. While this also occurs in raw form and as simple worked objects in commoner contexts, elaborate and ritually-charged jadeite objects such as ear flares only occur in elite structures and burials (Kovacevich 2006, 189-190).

The suggestion is that there may have been a two-stage production process, one in which the five stages of working jadeite, described by Taube and Ishihara-Brito (2012, 140-145), were split into two phases. As argued for in the study of Kovacevich (2007, 79-82), working jadeite through the final production stages (primarily incising and polishing) to make ritually-charged objects like ear-flares, plaques, and large beads may have involved esoteric knowledge due to the special qualities of the material. These special properties of jadeite will be discussed more in-depth in the next section. Such jadeite and related greenstone objects may have been subject to sumptuary laws, based on an analogy to the Aztec case. But at the same time it should be noted that jadeite objects of lesser quantity and artistic elaboration were also found in commoner households and burials, as well as in caches (Kovacevich 2006, 190). A similar distinction between the different phases of the *chaîne opératoire* of jadeite artefacts has been noted by Rochette (2009) for the surface survey evidence from the Middle Motagua valley, the only source for jadeite so far discovered in Mesoamerica (Taube & Ishihara-Brito 2012, 136). Here the conclusion was that production was widespread and did not involve specialised tools, but also that the more elaborate and valuable jadeite objects were not made at this location (Rochette 2009, 263-264).

This distinction in phases of the production process reinforces the hypothesis that while Maya elites in the Classic period did not control the entire production process of jadeite, the production of certain artefacts was part of a different realm. At the same time, it should be stressed that ritual in

[353] In general few models emphasise direct elite control over chert and obsidian exchange and production for the Classic period. An exception is the study by Aoyama (2001) of the chipped stone record at Copan, which suggests that the proximity of this site to the Ixtepeque obsidian source led to a more direct relation between the control of production and exchange and the formation of the Classic period Copan state. This interpretation is contested, however, by Clarke (2003, 50-54), who reviewed a range of studies from Copan and the larger area surrounding it and concluded that even for this data-rich region central or elite control over obsidian cannot be demonstrated.

itself is not a distinguishing factor in this, as other kinds of jadeite objects and eccentrics were found widely in both elite and commoner contexts at Cancuén. In fact, if both kinds of contexts are seen as points on a continuum, then it is easier to understand how these elite-focused artefacts functioned in their social context. Kovacevich (2006, 524) brings up the concept of authoritative and allocative sources of power as defined by Anthony Giddens to help to understand this. She argues that through the use of certain objects in community ritual, elites could gain and maintain authoritative sources of power based on ritual and special access to esoteric knowledge and use them for allocative purposes such as labour mobilisation and tribute. At the same time, the more ubiquitous distribution of raw materials and less elaborate artefacts suggests that other, more horizontal means of exchange between all kinds of households were present, perhaps including 'peripheral marketplaces' (Kovacevich 2006, 534-537).

As noted, the case of Late Classic Cancuén has been brought up in order to contrast it with the LPC period evidence, for studies with an explicit *chaîne opératoire* framework have so far not been carried out for portable objects of this period. Most of these finds derive from cache and burial contexts, with more circumscribed production data from household contexts.[354] Unfortunately, this means that the potential for cross-craft or multi-crafting analyses, as done for other periods and regions of Mesoamerica (Hirth 2009, table 1, p. 22), is limited. However, craft-work has been studied more extensively in recent projects, especially at Belizean sites such as Cerros, Chan, Colha, Cuello, and K'axob, among others, reflecting a surge in archaeological research in that country since the 1970s (McKillop 2004, 51). With regard to chert, the site of Colha was located closely to an important source of high-quality material, which in the LPC period was worked in more than 35 workshop areas at the site (Hester & Shafer 1994, 50). This production clearly outstripped local demand, and the particulars of the material and the ways of working it are reflected in chert artefacts found not only in Belize itself, but as far away as El Mirador and Tikal in the Petén (Hester & Shafer 1994, 60).

Based on section 7.2.4, it can be stated that chert instruments had both utilitarian and ritual functions, the latter evident for the deposition of macro-blades in caches, for example at Cuello (Robin et al. 1991, 226, 229). This is also true for the few eccentrics from the LPC period, which are mainly recovered from ritual deposits as well (Gibson 1989, table 5, p. 130). In one case it appears that a LPC eccentric was 'curated' as a heirloom in an Early Classic context (Hester & Shafer 1994, 57). Households could acquire materials and artefacts not immediately available in their own hinterland through the exchange networks discussed in section 6.4.2 of the previous chapter. It is clear that even small sites like Chan had access to a wide variety of material, including obsidian from all four major sources in the LPC (Meierhoff et al. 2012, fig. 14.1, p. 278). Some sites have yielded lesser quantities of certain materials than others, as is the case for obsidian and greenstones at K'axob (McAnany 2004, 315). Even so, there is little evidence that suggests elite control of craft-work for chert and obsidian. Instead, it can be observed that materials were widely available, but that some of their uses may have been more restricted owing to the ritual contexts in which they were found.

The same pattern also seems to hold true for the working of shell ornaments, for which good LPC period data is available. The production of shell ornaments does not seem to have been controlled by a specific social group (Hohmann 2002, 219), but nevertheless was also used as an important ritually-charged category of objects that were found in caches and burials. At some sites shell ornaments were associated differentially with certain burials, as for example at K'axob (Isaza

[354] Studies on Preclassic craft-work in domestic contexts is very rare, especially compared to the more copious data from later periods, but some work has been done, as for MPC period Uaxactún (Hendon 1999).

Aizpurúa 2004).[355] With regard to production, just as with the case of chert at Colha the production of shell ornaments may have been part of community-level specialisation, for example at Cahal Pech and Pacbitun (Hohmann 2002, 194). In overall terms the evidence points to a LPC period situation that is broadly congruent with that of Cancuén. Objects made from obsidian, shell, and chert may have been more easily acquired by certain households, but intrinsic differences in access to and working of these materials does not fit the pattern encountered at LPC period sites. This raises the question as to whether the pattern for jadeite production that was observed for Cancuén can be recognised for the LPC period data as well.

The key obstacle for answering that question, however, is that even more so than for objects made from other kinds of materials, jadeite and related greenstone objects are found almost exclusively in caches and burials. Although there is good evidence for LPC period occupation in the Middle Motagua valley jadeite source area, it is often difficult to relate direct remains of jadeite working to specific contexts of this period due to limited data and post-depositional disturbances (Rochette 2009, 99, 114). This is also true for the earlier Olmec use of imported blue, more translucent jadeite from the mountains surrounding this valley, where so far only Late Classic remains have been found (Taube & Ishihara-Brito 2012, 140).[356] The result is that inferences about working jadeite in the LPC period are dependent primarily on the properties of the objects themselves and the use or deposition contexts in which they were found, rather than on direct production-related evidence. The focus here lies on the specifics of jadeite and associated stone objects, as the contexts will be treated in section 8.2 of chapter eight. Even so, it is important to highlight the pattern that such objects are overwhelmingly found in ritually-charged areas like caches and burials, as well as in a few of the known termination deposits.

With regard to the characteristics of jadeite and related stone objects, it is important to stress that there is no overall pattern of these materials in any way being monopolised by elite groups (e.g. Freidel 1993, 158-159). Instead, the most profound change that occurred with working these materials in Late Formative Mesoamerica, including the Maya lowlands, was a concomitant elaboration of forms and of iconography, including writing (Rochette 2009, 64-65; Taube & Ishihara-Brito 2012, 145-146). Of particular interest in this are the objects that carry writing, which as noted earlier involved a variety of materials. Most of the portable objects with writing made from jadeite and related materials are without known provenance or found outside the Maya area,[357] but can be roughly dated from 300 BC onwards (Mora-Marin 2001, 241). Even lacking information on their provenance, a reasonable case can nevertheless be made on iconographic and linguistic grounds that the Maya lowlands participated in a broader sphere in which such objects were crafted (Mora-Marin 2001, 251-252). The implication is that we are dealing with specialists with intimate knowledge of iconographic and written signs, the designs these were employed within, and the broader meaning carried by them. It is also important in this regard to remember that what is being elaborated here is not a mere elite marker, but rather a complex ideology involving maize and the deity associated with it, cosmological centrality, and rulership (Rochette 2009, 61-63).

[355] Based on the presence of shell-working detritus in Preclassic burials at Chan, it has been argued that more important families engaged in working this material and distributed the finished artefacts to the rest of the community, though unfortunately direct evidence from household contexts is lacking (Keller 2012, 266-267).

[356] Even if it is possible to trace the sources of selected materials with greater specificity (e.g. Jaime-Riveron 2010, 130).

[357] Even when the specific site is known it can be difficult to relate the objects that carry writing and complex iconography very precisely to datable contexts, as can be seen for the case of the Pomona flare (Justeson et al. 1988, 98-100). For the jadeite objects from Mesoamerican origin, which include Olmec ones, found in Costa Rica, it has been hard to determine exactly how and when they were transferred. Rather than long-standing trade links, another scenario suggests that they were moved in greater quantities in a shorter period of time, possibly associated with Classic period geopolitical upheavals (Graham 1998, 56).

Turning from portable objects to monumental art, the first topic to consider are the technological styles of lime-burnt plaster studied by Eric Hansen (2000) for the Preclassic and Classic periods. Based on a number of different criteria, including processing, adding clay and colourants, and supports and layering, he argued a distinct technological style can be discerned for the LPC period as opposed to the Classic period (Hansen 2000, 230-232). Furthermore, these differences are not based primarily on the natural development of an increasingly sophisticated lime-burnt plaster technology, but on specific choices that need to be understood as part of their socio-cultural context. For the LPC period there was an emphasis on mobilising great amounts of labour on large-scale stucco masks and panels that were constructed and painted in a single event, in contrast to the Classic use of smaller stucco work that was composed of multiple layers. Considering the differences in iconography between more generic cosmological themes for the LPC period and recognisable and historical rulers in the Classic period, the implications for which will be discussed further below. Hansen (2000, 226-228) argues that the different technological choices can be understood through the dual-processual theory. Whereas the massive LPC period constructions would indicate a group-focused, corporate socio-political structure, the Classic period focus on smaller constructions in more restricted contexts and a concern with individual rulers and genealogy would point to an individually-focused network strategy.

While the stucco masks and panels provide clear contrasts between the LPC and Classic periods, for the wall-paintings finer distinctions can be made. As noted in section 7.2.2, the technology for creating complex wall-paintings was developed between 400 and 100 BC, parallel to the emergence of kingship and associated societal changes. Based on a *chaîne opératoire* analysis, Hurst has argued that the painters identified through a Morellian analysis of painter's 'hands' were involved in the collaborative effort of creating the murals (Hurst 2009, 230-231). This requires a degree of collective specialisation that transcends the household level, although it is unclear what kind of organisational framework this was embedded in.[358] The study by Hurst incorporated both LPC and Classic period wall-paintings, allowing for comparison. She found that while the available resources and technology were roughly the same, the Classic period evidence showed a greater emphasis on naturalism, more regional variation in style, and for the first time murals were also located in elite residences. Taken together with a Classic period emphasis on historical subjects, the development of polychrome pottery, and artistic contacts with Teotihuacan, this points to the impact of a different socio-political framework on the mural artists (Hurst 2009, 229-233). As with the lime-burnt plaster, there is a fairly clear distinction in the LPC and Classic period technological styles of wall-painting, which can also be tentatively related to a more collective or corporate socio-political framework in the LPC period case.

[358] According to Hurst it is likely that craft-workers organised in groups to paint walls were also involved in forming stucco masks and panels, and perhaps stelae too (Hurst 2009, 231). However, direct evidence for this remains lacking.

	availability raw materials	working group(s)
material		
chert	widely/exchanged	community/specialist
obsidian	widely/exchanged	community
shell	widely/exchanged	community/specialist
jadeite and related stones	widely-circumscribed/exchanged	specialist/carver
stucco	specialist production	specialist/modeller
wall-painting	specialist production	specialist/painter

Table 7.2: Overview of production patterns selected LPC material forms.

This broad brush overview of the craft-work of different material forms of LPC art has been inspired by the *chaîne opératoire* approach, though undoubtedly not always being able to live up to the precision implied by it. It has sought to investigate the archaeological record for clues to the ways in which different kinds of materials were shaped into objects, and especially for the societal context in which these activities took place. Table 7.2 summarises the results for the different materials, discerning between the availability of raw materials and the means by which they were acquired, and the working group(s) that crafted them into specific forms. Again, it is important to remember here that important kinds of materials are missing entirely from the archaeological record, or otherwise are so under-represented that further analytic studies are impossible. Some interesting patterns may nevertheless be discerned from what is available. The first one to be noticed is that there does not seem to have been any discernible elite control over chert, obsidian, shell, and jadeite and related greenstones as raw materials. Rather, they seem to have been widely distributed, with even small communities like Chan being able to acquire them through exchange networks. The observation that certain communities seem to have specialised in specific materials highlights the enduring strength of these networks.

At the same time there are some indications that specialists worked these materials, in particular as can be inferred for the chert stemmed macro-blades and eccentrics, and the find contexts of certain shell ornaments. The relation between the specialist and community-wide working of materials is brought into sharper focus with jadeite and related greenstones. Although on the one hand there was a wide distribution of raw materials, but there are also the Olmec heirlooms that were very likely much more circumscribed in terms of access, even as their provenance remains unknown. The difference between the different forms and uses of jadeite and related greenstones can be understood by considering the additional kinds of specialisation required for iconography and writing. Style and subject matter would suggest a degree of overlap in this with stucco modelling and wall-painting, as suggested also by the smaller and less-deeply incised texts on stelae (Mora-Marin 2001, 300).[359] Yet at the same time the raw material used for stucco-work and wall-painting differs from the others, as it involved the transformation of mostly local materials with the help of pyrotechnology. Hence what is important here is not access to raw materials through exchange networks, excepting certain pigment materials that depended on exchange, but rather the mobilisation of labour and resources within the immediate catchment areas of sites.

[359] According to some authors the portable objects with writing and complex iconography may well have played an important role in the spread of symbolic systems (Mora-Marin 1997). Here the lack of information on the provenance of these objects creates great problems, however, as their dating is based primarily on stylistic criteria from monumental art. Hence it is very hard to establish primacy, especially given the early date of 300 BC for writing at San Bartolo referred to earlier.

Having outlined these patterns, the next question is how they can be understood in societal terms. Of special importance in this is the interaction between individual sites and their macro-regional context, which in the LPC period was characterised by two paradoxes. Raw materials are worked throughout the community, yet their availability depends upon access to exchange networks, sometimes long-distance ones. Complex iconography and writing can be understood as part of a larger 'horizon' and history at the macro-regional level, yet also depend upon the local mobilisation of labour to create monumental structures. Considering these paradoxes, it is important to remember also the dichotomies between commoners and elites, and between great and little traditions, discussed in section 6.4 of the previous chapter. Here these issues will be tackled more specifically for craft-work. Earlier in this section some ideas had already been outlined concerning the societal implications of similar kinds of analysis based on Classic period evidence, but before considering the similarities and differences with the LPC period analysis it is useful to reflect on Maya craft in more general terms. In order to do so, it is useful to start with ethnographic and ethnohistoric sources for craft-work in colonial and contemporary Maya communities.

Based on the analysis of lexical information from colonial-era dictionaries of Yucatecan, it has been possible not only to identify crafts but also to interpret them in social terms (Clark & Houston 1998). The two most important findings in this were that different kinds of craft-work in Maya communities of the colonial period were widely shared and constituted a basic aspect of personhood, acquired through social learning,[360] and that there were divisions between different crafts based on gender. These ethnohistoric findings were connected to the broader Maya-area archaeological record by McAnany (2010). She argues that instead of positing a dichotomy between urban-based, full-time specialists and household-based, intermittent craft-workers, it is more useful to consider the centrality of Maya communities and the inter-dependencies between them (McAnany 2010, 210-211). Crucial in this is how the social dynamics of such groupings can influence the way crafts are practiced, as for example can be seen in the long-term persistence of certain pottery types or their decoration (McAnany 2010, 222-223). In this sense, the notion that craft-work is an important aspect of social identity is inseparably tied to memory, which itself depends partly on craft-work but also on other social practices such as feasting.

One useful concept to capture how craft and memory work together is through the notion of 'memory-work'. This considers memory more as an active process than as a fixed store of information, and fits into broader Maya notions of kinship and communal rhythms of life (Gillespie 2010, 404-406). Craft-work is only one aspect of this, but an important one. In sections 7.2.4 and 7.2.5 the connections between designs across different media had been discussed, involving different crafts, based on ethnographic work with the Quiché Maya. However, there is a dimension of memory-work to this argument as well. This can be seen in the way in which traditional narrative and poetic elements called the 'Ancient Word' are 'transplanted' into new texts and oral discourses,[361] with analogies to weaving and planting a *milpa* field (Tedlock & Tedlock 1985, 126). For the Classic period, a connection between patterns in art and working the fields is linked specifically to the work of royal figures (Houston 2014, 72). The relevance of this for the LPC period is twofold. First of all it shows that in recent Maya communities craft-work was integrally connected with questions of social identity and communal memory-work. Secondly, the notion of memory-work allows for a more nuanced understanding of the relation between elites and commoners. This is true

[360] This can also be seen in the close relation of work, including crafts, to changes in names and titles, and the status that was associated with them, as well as a number of different rituals related to craft-work (Clark & Houston 1998, 39-40).
[361] The specific example from which this is taken is the beginning of the Popol Vuh, which features quotations of the Ancient Word (Tedlock & Tedlock 1985, 71-72). It is also possible to refer here to a number of 'archaisms' in Classic Maya art and texts, making use of Preclassic stylistic elements (Houston 2011), although here we are not dealing with quotations as such. Rather, both phenomena can be seen as expressions of a different mode of conceiving of the relation between past and present (cf. Farriss 1987).

especially for the relation between different kinds of crafts, since in some ways it mediated between these different groups (Gillespie 2010, 406-407).

For this second aspect it is important to consider the question of how memory-work can be conceived of at the macro-regional level. For this three related strands of interpretation can be used, even if these have not been integrated into an overarching theory. The first of these is the Nahuatl concept of *Tollan* or 'place of reeds', although the alternative toponym 'place of the gourd' has been proposed (Van Akkeren 2006, 36), known in Classic Maya epigraphy as *puh* (Stone & Zender 2011, 221). This refers to a semi-mythical settlement, variously identified, that stood as the template for civilisation and the 'ancient arts' that constituted it. Because of this it was of key importance to Classic Maya nobility and likely closely controlled by them (Herring 2005, 103-105), something also known from the ethnohistoric record.[362] Another element that is of some importance is the use of heirlooms as the material basis of memory, sometimes involving working them over many centuries (Joyce 2000), and also reflected in the 'archaisms' adopted in the art of later periods discussed in section 7.1.2. Finally, it has been argued that recurrent patterns of memory-work can be related to narratives about the moral community of debt and sacrifice discussed in section 6.4.2, a pattern that, unsurprisingly, is best observed for the Mixtec Postclassic period (Hamann 2002, 358-363, 2008). As noted, these different aspects have not been tied together in an overarching theory. This may be just as well, since it allows us to investigate more precisely how they fit together specifically in the LPC lowland Maya case.

Generally, these general observations on the societal implications of Maya craft-work seem to cohere well with the evidence for the LPC period, as summarised earlier. In particular it allows for a better understanding of how crafts were organised at the level of communities, moving away from models that over-emphasise elite manipulation and control. Instead the wide availability of raw materials and their working in diverse contexts point to the primacy of both communities and the exchange networks that allowed them access to these materials. In this sense craft-work was to a large degree outside, at least in a direct sense, of what has been termed the political economy of the LPC lowland Maya polities, which as noted in section 6.4.2 was instead based on the mobilisation of labour for large-scale public works. But this general picture also points to an aspect of craft that very likely did involve elites: that of complex art and iconography as the arts of civilisation and their relation to a semi-mythical place of origin. Here the focus will lie on the notion of the 'ancient arts' and the concomitant use of heirlooms, the relation to the notion of the moral community will be discussed in the next chapter.

First of all, the monumental component of LPC period art did require mobilisation of labour at a considerable scale, both for producing its raw materials and for constructing the monumental contexts within which it was embedded. Secondly, as noted earlier the portable art objects made from jadeite and related stones point to mastery of a scribal and iconographic tradition, which goes back to the Olmec, including in the form of heirlooms (Mora-Marin 2001, 260-262). A very good example of this is provided by a winged plaque from the Dumbarton Oaks collection, an originally

[362] Important here is the so-called 'language of *Zuyua*' referred to in the Yucatecan book Chilam Balam of Chumayel as a language that served as a mark of leadership (Stross 1983). The concern here is not so much with this language itself, but with the fact that is is associated with *Zuyua*. In the early colonial period in Yucatan references to *Zuyua* were a central concept in the origin myths of some ruling lineages, crafted to suit their purposes (Restall 2001, 370-375). Also, in the Popol Vuh there is a constant linkage, often expressed in a parallelism or *difrasismo* (e.g. Christenson 2007, 198), between *Tulan* and *Zuyua* (Tedlock 1985, 366, 372). This place was conceived of as the place where the original lineages received their marks of rulership (Christenson 2007, 20). It also appears that 'writings' (likely codices) were derived from *Tulan* (Christenson 2007, 244). Finally, the markers of authority from *Tulan* were stored in the 'great houses' of the ruling lineages (Christenson 2007, note 721, p. 248), a situation presumably comparable to that of Yucatan, where the ownership of texts in effect constituted the legitimacy of elite courts (Restall 2001, 341-344).

Olmec object onto which Maya-style text and an anthropomorphic figure were carved in the LPC period (Fields & Tokovine 2012). Important references to this earlier iconography can also be found in monumental art, as can best be seen in the San Bartolo wall-paintings (e.g. Saturno et al. 2007, 25-28). It is noteworthy that both for the portable art objects with complex iconography and writing, and for the wall-paintings formal training and mastery of a cultural repertoire are inferred. There are interesting connections between these media as well,[363] and the scope could be broadened with the inclusion of the stelae and stucco masks and panels.

It seems, then, that the 'ancient arts' and the heirlooms materialising them were an important aspect of the craft-work of LPC lowland Maya art. Unfortunately, the gaps in the archaeological record make it hard to determine the precise societal dynamics of the emergence of this pattern.[364] Despite this caveat, the overall picture points to a broad coherence with the view of LPC lowland Maya culture offered at the conclusion of section 6.4.3 of the previous chapter. This locates memory-work within both kin-ordered communities and larger-scale states. In particular ritual practices also involve memory-work, which bridges both those kinds of objects that did carry complex iconography and writing and those that did not. In this, it is important to emphasise that for the latter category there was also considerable interaction at the macro-regional level, as can be seen for the relative homogeneity of the Chichanel ceramic sphere and the wide availability of materials like obsidian from distant sources even at smaller sites. Hence it would be quite misleading to contrast this distinction between different kinds of objects as one counterpoising the 'inward-looking' communities to the 'cosmopolitan' elites.

Instead the main distinction of those artefacts with writing and elaborate iconography is that they are either inscribed on those kinds of materials that themselves carry high-value in exchange, or painted or modelled on architectural structures that required a considerable mobilisation of labour. As noted earlier, the broader cultural knowledge required for writing and making images was more closely tied to those holding office. However, as discussed for both the stucco-work and wall-paintings there seems to have been a more collective emphasis in the LPC period compared to the more individual-focused Classic period one. This can be seen for LPC period art both for the iconographic focus on generic themes rather than historical ones, and for the greater expenditure of labour on creating massive structures. Even if a few isolated indications for the link between the arts and those wielding power can be seen for the LPC period, they pale alongside the rich evidence from the Late Classic period of Maya elites as scribes and artists.[365] This elaboration during the Late Classic period may well derive from the flourishing and competition of the different courts and the lineages associated with them.[366] The social identities that existed within this context, then, seem

[363] This can be seen especially well for the Jester God image used on headbands, which is seen in both monumental and non-monumental art, as will be further discussed in section 7.4.2 below.

[364] One hypothesis put forward in this regard posits a separation between an elite gift-giving context for the portable objects with writing and a community-wide context for writing on monumental structures (Mora-Marin 1997, 160-162), preferring a primacy of the former. The uncertainty with dates and the provenance of objects make this a very hard to prove scenario. Furthermore, as a study of Mesoamerican writing systems by Marcus (1992, 437-440) makes clear, the relation between horizontal (inter-elite) and vertical (elite to commoner) propaganda could be quite variable. The implication is that any model on the social process of the adoption of writing in the Maya lowlands depends upon both more reliable chronological control and a better understanding of its precise functions.

[365] Mora-Marin (2001, 301) argues that the inscribed bone from the Kichpanha burial was used as a stylus and indicates that scribe-artists already enjoyed elevated social status by AD 150, but the excavators had argued for an interpretation as a blood-letting instrument (Gibson et al. 1986, 12). From the Classic period it is possible to see a link between inscribed bones and writing, as well as to kingship (Herring 2005, 94-98), but this is based on iconography rather than on their purported use as instruments of writing.

[366] This can be understood by the evidence of elite craft-work as not only being physically located in elite structures but also carried out by these elites (Houston & Inomata 2009, 257-278), which also extended to kings as well (Herring 2005, 79). As such, it can be argued that the elaboration and emphasis on such elite figures in general is what sets the Late Classic period apart, rather than craft-work as such. This would extend to notions of Late Classic elite craft-work

more of a specific iteration of Maya conceptions of craft-work, indicating no significant break in the overall trajectory (McAnany 2010, 213-216).

7.3.3: Conceptions of materiality in Late Preclassic lowland Maya art

Turning now to the conceptions of materiality within which Maya crafty-work was embedded, it is necessary first to address some of the general characteristics of this and then turn to the materiality of colours. It is useful to start the discussion by returning to the term *ts'ib*, which in Maya linguistic use has much broader connotations than the aspect of craft-work that was discussed in the previous section, as the following quotation will make clear:

"Ts'ib might refer to manifestations of linear signage clearly distinct from 'writing'. It gestured to an apparent presence of pattern, not to medium: Colonial-era lexica disclose that the term was used to indicate the striped pattern on the body of a snake or insect, an angry pattern of bug bites across a person's back, an abscess in tooth enamel, furrows in ploughed fields, a winding ritual procession. The figure described by a cat's paw as it claws the air, or what we recognise as 'tongues' or 'the dance' of fire: the Maya understood these too as ts'ib."[367] (Herring 2005, 73)

This conception of *ts'ib* as a surface-pattern that can be seen in different phenomena can be linked with the use of the term in section 7.2.4, where it was noted that it was used by the Maya to describe different crafts for creating written and other kinds of patterns. Furthermore, it again focuses attention on the importance of surfaces for understanding the relations between the different material forms of LPC lowland Maya art, as was discussed in section 7.2.5. However, for exploring these interconnections it is necessary to move beyond a focus on calligraphy and consider other aspects as well (cf. Houston et al. 2006, 302). To understand these issues properly, it can instead be useful to briefly turn to more general Mesoamerican and Maya ontological ideas. In a basic sense it can be said that Mesoamerican ontological ideas are structured by a form of monism, in which everything is irrevocably part of the unity of all things and infused by a power known in Nahuatl as *teotl* (Monaghan 2000, 26-28). From his discussion of this term, it is clear that it implies that there is no dualism here between the natural and the supernatural, even if, at least for modern interpreters, the relation between overall unity and particular manifestations remains hard to grasp.[368]

The term equivalent to *teotl* in Maya is *k'uh*, with its adjective *k'uhul*, which means 'god' but can be extended to mean a more generic vital and animating power (Houston & Inomata 2009, 195-196; Sharer & Traxler 2006, 733). This power is associated with a variety of material aspects, especially with blood (the term for which, *ch'ulel*, is related linguistically to *k'uh*), not as identical with the

indicating the impersonification of deities, which seems an individually-focused elaboration of the strong ritual associations of craft known from ethnohistoric sources (McAnany 2010, 213-216; Tozzer 1941, 159-161).

[367] This description may be seen as indulging in poetic license, but even if so, it is one that arguably derives from indigenous Mesoamerican conceptions of metaphor. As a comparative case, the interplay between different kinds of surfaces, even if here not connected to writing as such, can also be seen in the discussion of minerals in the 16th century Florentine Codex (describing the indigenous cultures of central Mexico), especially with regard to colours (Saunders 2004, 142-143). An interesting case in point is that of opal, which is described in Book 11 as follows:

"Its name comes from uitzitzilin [hummingbird] and tetl [stone], because its appearance is like the feathers of the humming bird, the one called tozcatleton. Its appearance is like many fireflies; it radiates, glows; it is as if it burns. Colors come constantly from it; they are constantly coming – chili-red, green, the color of the lovely cotinga, the color of the roseate spoonbill, purple, red, herb-green, etc. However, there is no black in it.....It is glowing like a small firefly, or is burning like a small candle. If it appears just intermittently, it is the firefly. If, on the other hand, if it just continues burning, this is the opal. It is clear, transparent, translucent, very precious, esteemed, wonderful, marvelous. It glows, shines, appears beautiful; it appears clear; it is rare." (Sahagun 1950-1982, XI, 229-230)

[368] One weaker interpretation of Mesoamerican monism deals with the contrast between unity and differences by positing the existence of different realms of being, each with one substance in them (Monaghan 2000, 29-30).

substance itself but in a flowing and watery state (Houston 2014, 81). The connection between water and blood is well-established in Maya thought, where the water in the earth is likened to the blood in one's veins, deriving from the ocean on which the earth floats (Taube 2010a, 209).[369] A key aspect of *k'uh*, then, is as a power of dynamism, energy and flow rather than as substance, and with human beings able to exert agency on this flow (Houston & Inomata 2009, 196). In terms of its social implications, the term also seems to undergo a certain flow. Whereas in the San Bartolo murals *k'uh* can be seen in the watery flow of blood from sacrificial offerings of humans and animals, in the Classic period there seems to be a shift towards royal control of such flows (Houston 2014, 83-87). For the latter period this can control be seen very well in one scene from Yaxchilan (see figure 53), which depicts the flowing of *k'uh* from human rulers, through blood-letting, relating their blood-letting to agricultural sustenance (Stuart 2005a, 275). From the diversity of these sources, it is still possible to draw a more generic conclusion about the meaning of *k'uh* throughout the different eras of the Maya area:

"If there is a conclusion to be drawn from contradictory evidence and competing claims – that k'uh could both centralize and exist everywhere – it is this: by such means the Maya explained the dynamism of the world and its variable ebb and flow. To use a thermal analogy, they lived in an universe with uneven heat. Some sectors were scalding hot, others cold, quiescent, dead, bloodless or, worse, bereft of k'uh. Energy came and went but could be persuaded to stay in certain places or bodies for a longer time. By the Classic period, however, rulers claim to have tightened their hold on this form of vitality." (Houston 2014, 87)

In terms of craft-work, it seems that the notion of an animating force was not relevant for all kinds of materials, being focused more on the subtractive working of materials, especially of different kinds of stone, rather than on the additive and transformative shaping of material forms (Houston 2014, 98). Furthermore, instead of a generic view of an animated built environment there is also a complex interplay between animacy and certain kinds of architecture, as can be observed especially well for the Classic period (Plank 2004).[370] There is no space here to explore all the aspects of this interplay between monism and differentiated particularities. Instead this issue will be explored by looking specifically to surface-patterns and their replication. Two elements of this concern the depiction of (elements) of the human body, as they relate to ideas about personhood, and the use and conception of writing in art, which will be discussed respectively in sections 7.4.2 and 7.4.3. In this section the analysis is concerned primarily with the relation between *k'uh* as an animating force and the depiction and use of colours in LPC lowland Maya art. Looking at this relation also demands taking a broader view of the material ontologies of the pre-Columbian Americas.

In doing so it becomes clear that in a great variety of Amerindian societies there was a set of close associations between light, radiance, materials, and cosmologies, extending into the realm of morality and socio-political power as well, connected through 'analogical symbolic reasoning' (Saunders 2002, 212). A study of the interplay of colour and cosmological ideas in the art of pre-Columbian Panama, taking into account ethnographic sources, has emphasised especially the

[369] Many of the myths relating to the primordial ocean also closely relate blood and water, including the notion of a red and bloody sea, together with battles with mythological sea creatures (Taube 2010a, 209-210). Indeed, one Early Classic image shows a deer-crocodile swimming through a sea of *k'uh* (Houston 2014, fig. 52, p. 86). Even so, the sea can have a variety of colours in Maya art (Taube 2010a, 212).

[370] The notion of houses as beings that have to be 'fed' is widespread in Mesoamerica (Monaghan 2000, 30-31). The Maya term *otoot*, rendered as 'dwelling', has been distinguished from the term *naah* ('structure'), to signify that a certain structure is inhabited by an animate being (Plank 2004, 29-33). Hence the distinction lies not in the animacy of the buildings themselves, but in whether they are closely associated with other animate beings who can 'dwell' in them. The presence of deposits of ritual termination in buildings, indicate that in some cases such associations could have been terminated through human activity (Stanton et al. 2008).

relation between colour and energy (Helms 1993b, 242-247). These more generic views of Amerindian conceptions of materiality do provide an important indication that, in order to relate *k'uh* as force and energy to the material world, the study of the conception and use of colours in art can provide key insights. As in the Mycenaean case, which was discussed in section 4.3.3, there is an increasing recognition of the importance of metaphor for studying the role of colour in the Mesoamerican world (Engel 2012). In the Maya case there is also the possibility of connecting what ethnographic and ethnohistoric sources have to say about the conceptions of colours to the textual record, taking into account its embedding in imagery, of the Classic period. Recent research on this has stressed the role of extensions of the five basic colour terms to a variety of materials and artistic depictions of phenomena (Houston et al. 2009, 16-25; Tokovinine 2012, 283-286).

Very important in this is the relation between colours and materiality, which needs to be conceived of through a set of metaphors that relate the two to each other in different ways, given that more straightforward connections between specific colours and materials are often elusive (Houston et al. 2009, 99-100). For the LPC lowland Maya it is important to stress that, given the lack of a sizeable amount of deciphered texts, the emphasis has to lie on the uses of colours as they can be recognised in the archaeological record. Fortunately, the trajectory of the uses of different colours in Maya art can be traced quite well, with the LPC period showing considerable innovation from the early MPC focus of red, black, and white (Houston et al. 2009, 74-76). The combination of more naturalistic and more symbolic or abstract uses of colour, even if rarely entirely separable, can also be seen in the San Bartolo wall-paintings (Hurst 2009, 174). The preference for materials with certain colours, not only jadeite and greenstones but also a material like cinnabar, should also be considered alongside the fabricated colours. Here first a number of individual colours will be discussed, especially red and blue-green, and then the question of how they can be related to each other.

It is appropriate to start with red, a colour that generally seems to have been highly valued by the Maya (Houston et al. 2009, 42), especially given its association with *k'uh* discussed above. The colour term for red, encompassing in terms of hue also brown and purple, used by the Maya was *chak* (Stone & Zender 2011, 125). A number of extensional meanings have been recognised for this colour, which include the east as direction, blood (specifically in relation to the act of blood-letting), hotness and fire, including for characteristics of deities and extending to greatness (Houston et al. 2009, 30-31; Tokovinine 2012, 287-291). Of particular note is the use of bright red on certain day signs, relating them to blood and often painted as a red cartouche (Stone & Zender 2011, 53). This also indicates a connection with primordial sacrifice (Houston et al. 2009, 30), indeed it can be interpreted as linking sacrificial blood-letting to the emergence of time itself (Houston et al. 2006, 93). The question is to what degree such meanings can be recognised in LPC lowland Maya art. Early work had focused on the use of red and other colours in stucco-work, especially at Structure 5C-2nd at Cerros. One reading of colour-use here recognises the use of the colours of red and black for highlighting, as an oppositional pair, different states of 'volatile liquids' in sacrificial acts that mediate between humans and deities in their cosmic setting (Freidel 1985, 20-22).

Because of the new evidence from the San Bartolo wall-paintings, it is possible to carry the analysis of red much further. Based on this, a distinction can now be made between different uses of red. The first concerns the already discussed use of red as indicating flowing blood, which can be seen in the sacrificial scenes on the west wall, but also emanates in an explosive way from the gourd in the birth scene on the north wall (see figure 54), where it can also be seen as dripping from the mouth of a hunting jaguar (Saturno et al. 2007, fig. 5, pp. 8-9). Of some interest also is the day sign 3 *'Ik* in the west wall mural (see figure 55), being outlined by a red cartouche (Taube et al. 2010, fig. 62, p. 101). This recalls the relation between day signs, blood, and sacrifice noted for the Classical period, and the primordial and mythological setting of this scene, see also section 8.3.4, further reinforces

this connection. Another dimension to the relation between red and blood sacrifice may be in the deposition of red pigment (cinnabar or haematite) in burials, for example the cinnabar found in burial 85 at Tikal (Coe 1990, 219). The relation between these red pigments and sacrificial blood has been the preferred explanation for the Classic Maya burial record (Fitzsimmons 2009, 82).[371]

The use of red in the San Bartolo wall-paintings to indicate blood, can be clearly distinguished from another use: to indicate breath volutes, sometimes accompanied by black accents (Saturno et al. 2007, 7-8), see figure 56. These volutes can be seen at other sites as well (Houston & Taube 2008, 136-137), and are also present at the exterior facade of the Pinturas Sub-1A building housing the San Bartolo murals (Taube et al. 2010, 8). Rather than the different states of a volatile liquid as inferred by Freidel, it seems that there are rather two manifestations of *k'uh* here: one of blood and the other of 'breath' (Houston 2014, 84, 86). Breath is identified with the soul in a diverse set of Mesoamerican cultures (Houston et al. 2006, 142-143), but it is improbable that the soul is primarily referred to by the red volutes. More likely is that this aspect can be seen more specifically in the small, round elements that hover close to the mouths of some of the human figures, as in the case of the three sacrificing youths that have been sufficiently preserved (Taube et al. 2010, figs. 58-60, pp. 97-99).[372] The swirling red volutes, by contrast, are found in a wide diversity of cases, though all emanating from something. The phenomena from which they emerge range from a tree (Taube et al. 2010, fig. 68, p. 107), to a variety of serpents (Saturno et al. 2007, fig. 7, p. 11).

Significantly, in each of the four sacrificial scenes in front of a tree, red volutes, often accentuated with black, rise up from the offerings, one of which consists of a flower (Taube et al. 2010, figs. 57-60, pp. 96-99). In the cases of the sacrificed deer and turkey the rising volutes are paralleled by a downpour of blood, while in the gourd birth-scene on the north wall both the volutes and blood are pushed upwards by the explosion (Saturno et al. 2007, 58). Hence in some cases the association between blood and smoke as variant of a 'generic substance' (Freidel 1985, 20) still retains some plausibility. In overall terms, the San Bartolo wall-paintings do indeed point to a 'primal landscape of animating essence' (Houston 2014, 86), with streams of blood and rising volutes indicating the flow of forces. But even if this all can be understood within the context of the earlier discussion of *k'uh*, it is important to reiterate the point that colour is by no means identical with substance, as red is quite ubiquitously used in the wall-paintings. For example, some of the four sacrificial youths have red marks on their face, which do not likely refer to blood, but can instead better be interpreted as glistening sweat (Taube et al. 2010, 26-27).

Another association between *k'uh* and colour terms can be found in the *k'an* (yellow) and *yax* (blue-green) combination (Houston 2014, 81). The colour terms can be seen in the Yaxchilan blood-letting scene referred to earlier, which relates these terms to blood-letting and agriculture (Stuart 2005a, 275). Rather than referring primarily to colour, however, the *yax*/*k'an* pairing likely refers here more to the maize cycle (unripe green to ripe yellow), and more generally to notions of abundance (Houston et al. 2009, 28-30; Tokovinine 2012, 294),[373] although based on a sacrificial scene it may also suggest a ritual state of purity (Stone & Zender 2011, 157). The combination of

[371] For the Classic period it is explicitly connected to the notion of rebirth, as known from the iconography of the period (Fitzsimmons 2009, 82-83). Haematite and cinnabar have been found in burials and caches in Mesoamerican cultures ranging from the Olmec to Postclassic Aztecs, and for the latter case it is also possible to see cinnabar being deposited on cache objects rather than human remains, arguably symbolically positing a parallel between blood-letting and the sacrificial offering of the objects in the cache (Nagao 1985, 60-61).

[372] The same breath element can also be found in many other Mesoamerican art styles, ranging from Olmec to the Classic and Postclassic Maya (Taube 2005, fig. 9, p. 23).

[373] This is based on the pairing of the two colour terms in a context that suggests completion, thereby together signifying an overarching notion of abundance (Stuart 2005b, 99-100). A fuller set of metaphoric associations based on the theme of abundance can be seen in the combination of *yax* and *k'an* as a kenning or difrasismo in Maya ethnohistoric and ethnographic sources (Hull 2012, 100-103).

these colours does not occur in the San Bartolo wall-paintings, which may be at least partially due to the fact that the blues and greens used here were of a low quality (Houston et al. 2009, 75). The only possibly concurrent use of green and yellow can be seen in rounded features on a stucco mask at Cerros (Freidel 1985, 23), but this is not sufficient to recognise the metaphoric extensions that can be seen for the Classic period. The use of *k'an*/yellow can be seen as important iconographic elements in the San Bartolo murals,[374] but in a way that is less directly relevant to the discussion of the relation between colour, materiality, and energy.

But while *yax*/blue-green cannot be recognised very well yet in LPC lowland Maya monumental art, it is possible to note a connection with jadeite, which is widely found, as the colour term has been closely connected to this material, but not in an identitarian sense (Houston et al. 2009, 40). Analysis of the *yax* sign has revealed two basic logographs denoting it, one associated with celts and shine and another with water, both of which can be potentially related in metaphoric terms (Tokovinine 2012, 291). Shine and moisture are also qualities of the sign for jadeite celts (Stone & Zender 2011, 71). Therefore, even if *yax* and jadeite are not exactly identical, a broad metaphoric overlap in terms of moisture and shine can be discerned.[375] Bearing this in mind, it is possible to turn to Maya conceptions of the materiality of jadeite, which as noted in the previous section was a material especially valued in Maya and Mesoamerican cultures. Analysing the conception of jadeite for the Classic Maya, Taube concluded that, apart from its esteemed beauty, the material can be seen as being related to 'life essences' in three ways (Taube 2005, 47):

1. Primary is an association with maize, which can be traced back to the Middle Formative Olmec (Taube 2004a, 25-29).[376] Another aspect of this is the notion of centrality, as can be seen very well in the deposition patterns of jadeite objects, as will be shown in section 8.2. This centrality of jadeite is paralleled by the central position of *yax* in the arrangement of colours in the quincunx outline of the cosmos (Houston et al. 2009, 13). In the Classic period the linked elements of maize and centrality occupied a central role in the ideology of kingship (Taube 2005, 28-30).
2. Another connection is to water, not only as moisture but also, to highlight just one example, as it can be seen on the wet, shiny skin of sharks (Stone & Zender 2011, 71).
3. Extending from moisture is the relation between jadeite and 'breath', another life-essence, which can be seen in other Mesoamerican cases as well.[377] The clearest expression of this can be seen in the placement of a jadeite bead in the mouth of a deceased person, so as to capture the breath-soul of that individual (Houston et al. 2006, 142). But it extends to a much wider set of metaphoric associations, which also incorporate the special acoustic qualities of polished jadeite (Taube 2005, 32).

[374] Here it was used for flowers and at the entrance of Flower Mountain, likely indicating preciousness (Saturno et al. 2007, 14). Another use of *k'an* in these paintings can be seen in the latticework of the *ajaw* or kingly accession scene on the west wall, which follows a pattern that can also be seen in later Maya art and ethnohistoric sources and is related to the establishment of dynasties (Taube et al. 2010, 60-61).

[375] With regard to shine, a more direct relation with *k'uh* may be discerned, as the sign for this has some overlap with the sign for highly polished stone, if more in an adjectival way (Houston 2014, 92). Once again, it is possible to note the limited and sparse expressions of *k'uh* as a monistic principle in comparison to the very rich array of particularities and associations that derive from its uneven distribution.

[376] Also important in this regard are the quetzal feathers, which are closely linked already in the Olmec case with maize and the notion of wealth, of which jadeite also functioned as an index (Taube 2000, 303-311). This 'complex' can also be recognised for the Classic Maya, with even the same colours being used both for jadeite objects and quetzal feathers in the Bonampak wall-paintings (Magaloni-Kerpel 2006).

[377] As noted by Taube (2005, 30-31), a very clear example can be found in the Florentine Codex, which discusses jadeite as part of a wider set of precious stones. This can be seen in Book 11, where the 'mother of green stone' is described as emanating vapour, as in breathing, from its deposit underneath the earth's surface, and also causing the herbs growing in this area to turn green as a result of its presence (Sahagun 1950-1982, XI, 221-222).

Another way in which colour, material and power or energy were related for jadeite can be seen in the association between celts made of this material and lightning, seen in various Mesoamerican cultures including the Classic Maya (Houston 2014, note 23, p. 153; Taube 2000, 313). However, lightning can be related to a variety of stones in Mesoamerica (Staller & Stross 2013, 173-176), including chert and obsidian in the Maya area (Kovacevich 2006, 274, 345-346). As such, we are dealing here with a general animacy of stone, one aspect of which is a relation between lightning and shine (Stuart 2010, 288-289). Unsurprisingly, therefore, other colours can also be associated with lightning, especially red (Staller & Stross 2013, 186-189). Here we have come full-circle in terms of colour, from *yax*/blue-green back to *chak*/red. This should not be very surprising given the monistic worldview in which a single power, *k'uh*, is concentrated in different ways, expressed by different surface-patterns. Colours are a primary example of how the associations between different phenomena, based on different temporal concentrations of substance and energy, are represented according to Maya thought and praxis. Of course, much more can be said about the use of colours and light in the Maya area, including the intriguing notion of light being absorbed by surfaces (Houston et al. 2009, 20). But the focus of the remaining discussion here will lie rather on the artistic drive to create an aesthetic of durability in Maya art, also seen in colour conception and use:

"Color for the ancient Maya – and, indeed, most other peoples – concerned things, the surface or intrinsic property of an object as well as the play of shifting light and various degrees of saturation and intensity, and the brighter the color the better. The Maya understood separable and categorical color, as witnessed by color-directional symbolism. But the primary focus tended to target overall relations between such hues and the plurisensation of color as part of a chromatic, iridescent, and fragrant paradise. Shiny, reflecting polish represented a key aesthetic value, alongside an almost philosophical musing about the relation between permanent colors on shell and stone and the ephemeral ones of fragile substances like feathers and fabrics." (Houston et al. 2009, 99)

The notion of a 'paradise' as connected to colours is based on the concept of Flower World in Mesoamerica and the south-western US (Houston et al. 2009, 13). This concept encapsulates a diverse set of elements, one of which is the so-called Flower Mountain widely found in Maya art (Taube 2004b, 79-86), including on the San Bartolo north wall (Saturno et al. 2007, 14-21). Another aspect of Flower World is the breath-soul, the essence of which, as noted noted earlier, is closely connected to jadeite objects (Taube 2004b, 72-73). Looking at this set from a material standpoint, it is possible again to point to the importance of durability in patterns of skeuomorphism and the replication of surface-patterns noted in section 7.2.5. Particularly notable in this is the valuation of jadeite and its close association to a variety of essential life-sustaining forces, especially maize, water, and breath. It may be possible in this to recognise an 'aesthetics of durability' that highlights the relative permanence of jadeite objects in relation to these forces (Houston 2014, 126-130).[378] Within a cosmos shaped by a distribution of *k'uh* that is uneven and subject to constant flow, the creation of durable artefactual elements would provide a basic ideological template for human material agency. It is precisely in this regard that these basic Maya conceptions of materiality can be related to the analysis of craft-work that was outlined in the previous section.

[378] In the Postclassic period there seems to have occurred a shift in the valuation of shining surfaces from jadeite to metallic objects (Houston 2014, 127). This can be seen in the discontinuation of the lapidary craft tradition for working jadeite in the Early Postclassic, even if some elements of the symbolism associated with it, especially the placing of a bead in the mouth of a deceased person, still flourished (Taube & Ishihara-Brito 2012, 142, 152-153). Saunders (2002, 218-219) has argued that metallurgy in the pre-Columbian Americas should be seen as an extension of pre-existing ontologies, including with regard to colour. The description of gold in Book 11 of the Florentine Codex fits this pattern, its name deriving both from *teotl* and excrement (Sahagun 1950-1982, XI, 233). Some of the implications of this will be explored in the comparison of Mediterranean and Mesoamerican art in chapter nine.

7.3.4: Craft and materiality of Late Preclassic lowland Maya art

In the previous section it was briefly noted that the relation between *k'uh* and craft-work was fairly complex, applying not, or to a lesser degree, to certain materials and architectural features. The issue becomes even more complicated when considering the role of ritual in crafting, which is pervasive and ranges from the activities of potters and weavers known from ethnographic sources to Classic period elite craft-workers impersonating deities (McAnany 2010, 214-215). But considering the role of *k'uh*, in none of the context it seems to be created or increased through ritual craft-work, instead being a force to handle and control.[379] Turning to the results of the *chaîne opératoire* analyses discussed in section 7.3.2, the difference noted for *k'uh* between reductive and additive processes in crafting artefacts (Houston 2014, 98), cannot be transposed to different kinds of working contexts. Most materials, including jadeite and related greenstones, were widely available and some of them were produced as part of community-wide specialisation. To understand these patterns as part of their material ontology, it is necessary to take a step back from concrete cases of materiality and materials, and consider how they intersect at the level of the organisation of production. The analysis of *chaîne opératoire* patterns in the crafting of LPC lowland Maya art, as summarised in table 7.2, points to a distinction in terms of different kinds of labour as being primary, rather than the specific craft-work associated with different kinds of material.

On the one hand there are various forms of bulk labour, which can vary between the household-based production of chert tools to the mass mobilisation of labour for the construction of monumental-scale public works. In contrast to this there is the more intricate labour involved in the fine crafting of objects and monuments, sometimes involving iconography and writing as well. In some ways these two forms of labour form part of a continuum, and the notion of memory-work is attached to both. But the memory-work that uses texts and complex iconography belongs to a different context, one that involves contacts with other parts of Mesoamerica and can be more closely related to socio-political hierarchies.[380] Furthermore, the materials on which writing and complex iconography were crafted can be related to the 'aesthetics of durability' discussed in the previous section. If this durability is grasped in its proper context, as related to life-sustaining processes rather than to other more perishable materials, then the connection between craft and conceptions of materiality becomes clearer. In crafting a jadeite object a Maya worker would not create or increase *k'uh*, but rather use and shape the intrinsic power of the material, including through texts and images, to give a more permanent expression to an embodied ideology.

7.4: The iconography of Late Preclassic lowland Maya art art

7.4.1: Introduction

In this section the iconography of the art of the LPC Maya lowlands will be discussed. Just as in section 4.4 on Mycenaean iconography there will be two separate sections. The first will consider the conventional rendering of iconographic elements as part of a cultural 'way of seeing', while the

[379] It has been argued that the esoteric knowledge required for intricate craft-work involving text and iconography made such work akin to the creative activities of deities (Inomata 2007, 132). But even if it would be possible to take this hypothesis another step further to suggest deity impersonification in craft-work, this would only involve interacting with such powerful forces, not imply the ability to master and change them by the craft-worker. It is more likely that craft-related ritual followed the template of offerings, reciprocity and 'work' noted for Mesoamerican ritual in general (Monaghan 2000, 30-32). In this regard, the description in Diego de Landa's work of the offering of blood through self-sacrifice and also incense smoke in a ritual related to the making of 'idols' (Tozzer 1941, 160), may provide an example of this for such craft-work.

[380] But not necessarily tied to state polities, as the phenomenon can already be observed for the decorative motifs of pre-Mamom ceramics (Estrada-Belli 2012a, 202-205), and as will be explored for the smaller LPC lowland Maya sites of K'axob and Chan in sections 8.2.5 and 8.2.6.

second will focus on the interplay of these elements in narrative structures. A final section will consider the relation between these two strands of analysis. Based on the Mycenaean case particular attention will be given to the following elements of iconographic analysis:

1. Overall interpretations of the concept of naturalism as well as the rendering of the spatio-temporal environment in art.
2. The depiction of anthropomorphic beings in art and the connection with notions of personhood, as well as the rendering of related elements.
3. The relation between images and words, in particular as they relate to broader issues of narrative and poetic performance.

7.4.2: Iconographic conventions in Late Preclassic lowland Maya art

One of the most vexed issues in Mesoamerican iconographic studies concerns the question of naturalism, which is problematic for many non-Western cultures and the various Amerindian art styles are certainly no exceptions to this (cf. Knight 2013, 28-30). Reception studies have shown that Maya art, and particularly that from the Late Classic period, has often been greatly appreciated by Western critics and audiences for its naturalistic style, in contrast to the more art from Teotihuacan and other cases that seems more schematic and hard to understand (Pasztory 2005, 191-194). The question of naturalism is often closely connected with valuation in Western terms, of which Morley's desire to seek the Maya equivalents of Classical Greek artists Phidias and Praxiteles (Herring 2005, 16) is only an exaggerated example. Clearly, then, the term naturalism needs to be unpacked and put into its proper cultural context in order to do away with such misleading analogies, however seductive they may appear. To do so it can be useful to connect the iconographic conventions of LPC lowland Maya art to the specific ontology within which it was embedded,[381] which was already discussed for materiality in section 7.3.3.

It is possible to see the importance of this when considering the depiction of various features of the environment. Even if the overall effect appears naturalistic rather than schematic, the various plants and animal species in Maya art do not necessarily correspond literally to those that would have been physically present. Instead, in some cases the natural environment seems to have been conceived of according to mythological templates. A good example of this is the conflation of cacao and maize as *'te*, the term for wood that is also connected to a mythical world-tree, while the ceiba, another tree with mythological connotations is called *yaxte'* or 'first tree' (Houston 2014, 13-15). There are also a number of glyphs of natural phenomena, mostly of wild creatures such as the jaguar, the snake and the sky-eagle, that have logographs that show the mythological, and often primordial, templates of these creatures (Houston & Martin 2012). Clearly, even if Maya art intuitively appears pleasingly naturalistic, it also demands a good grasp of the underlying worldview and ontology. The focus here lies on exploring two key elements of this: the rendering of the spatio-temporal environment as it relates to cosmology, and the depiction of (parts of) anthropomorphic beings and the implications of this for conceptions of personhood.

Starting with the spatio-temporal environment in LPC period art, it is best to start with the more technical question of projection. A number of recent Mesoamerican studies have made good use of the work by Margaret Hagen (1986) on systems of projection in two-dimensional art forms. In this work she developed a psychological theory of vision based on the work of James Gibson, in order to investigate the properties of a fairly large set of cases of representative art from past and present

[381] To reiterate the point made in section 4.4.2 for Mycenaean art: the discussion of iconographic conventions here is inseparably tied to Panofsky's third level of intrinsic meaning, involving broader cultural considerations.

cultures.[382] The theory was used to formulate four stable types of representative systems, listed in table 7.3 below, see also figure 57. These systems were based on criteria such as the number and optimal viewing distance for station-points, whether or not the viewer and image plane are parallel or intersect, and whether projection lines converge or not. To this can further be added an emphasis either on two-dimensional or three-dimensional material forms. These different styles can be recognised in the diverse set of cases treated in the cross-cultural study, in which most cases of early civilisations listed seem to fall into the metric projective system category (Hagen 1986, table 9.1, pp. 254-255). The potential reasons behind this pattern in the comparative analysis in chapter nine. Finally, it is also important to remember that styles can sometimes employ multiple systems or variants of them, even if one of them usually prevails.

	planes	**projection lines**	**historical example**
projection mode			
affine	intersecting	parallel	Early Modern Japan
projective	intersecting	converging	post-Renaissance West
metric	parallel	parallel	Pharaonic Egypt
similarity	parallel	converging	n/a

Table 7.3: Overview of projection modes, adapted from (Hagen 1986, fig. 9.1, p. 241).

In temporal terms it is not valid to posit that the projective system with its three-dimensional focus, so highly appreciated in the post-Renaissance West, should be seen as the pinnacle of artistic development. Furthermore, experiments have shown that there is no clear development, and even less an 'end-point' in the artistic capacities of unskilled children and adults (Hagen 1986, 271-280). Rather those skilled at making artistic representations develop their craft with the ideas, techniques, and materials of their specific cultural context. The usefulness of the method developed by Hagen is that it makes it potentially possible for the researcher to relate iconographic conventions of different traditions to the worldviews of those traditions. In this the invariant properties of projection as derived from optics and human vision provide a key bridging role. Of course, the worldviews of early civilisations revolve around more than systems of projection, but at least they provide a basic starting point that can be nuanced by using more detailed information. Although the system developed by Hagen has never been used directly for LPC lowland Maya art, it has been used to interpret the mural art of Teotihuacan (Pasztory 1997, 2005), and to compare two-dimensional Classic and Postclassic lowland Maya art (Gillespie 2007).

Both authors note that the metric projective system predominates in Mesoamerican art,[383] but from this explore how it can be interpreted in more detail in specific cases. Most relevant to the present concern is the study by Gillespie, who uses Hagen's system to understand the connection between pictorial conventions and concepts of time, cosmology, and socio-political structures of the Classic and Postclassic Maya. In doing so, she provides three important points on the relation between the basic elements of Mesoamerican cosmologies and modes of projection (Gillespie 2007, 114-116):

[382] Gibson's theory was based on an 'ecological optics' relating observer and spatial environment, paying special attention to the structuring roles of light and vision (Hagen 1986, 11-13). Here the focus will lie less on this theory and more on its applications to Mesoamerican art. The theoretical perspective of Gibson and Hagen can be related to newer work that seeks to understand the neurological connections between environment and observers (e.g. Onians 2002).

[383] As an example of the earlier observation on other modes being employed in more limited ways within a dominant mode, Pasztory has show how in some of the wall-paintings at Teotihuacan the affine projective mode was used in combination with the metric one to suggest depth (Pasztory 2005, 138). This points to the necessity for using the overall scheme developed by Hagen only as a starting point, to be elaborated by taking into account the specifics of individual styles, such as the use of borders at Teotihuacan (Pasztory 1997, 187-190).

1. An overall emphasis on two-dimensional surfaces, which is related to a basic sense of place that includes a centre and the horizontal and vertical planes that intersect it. The horizontal plane in this case being the surface of the earth defined by the quincunx pattern of four directions and a centre, and the vertical plane by the distinction between the three levels of underworld, earth, and the sky.
2. The distinction between centre and periphery as related to the observation of celestial movements. Basic to this is the daily path of the Sun as it defines an east-west line. The north-south line can be defined by the solar ecliptic, or alternatively as the zenith and nadir points of the daily path of the Sun (Coggins 1980, 731). These two options need not be seen as mutually exclusive (Houston & Inomata 2009, 27), as in both the centre is defined by its relation to these movements of the Sun.
3. The relation between centre and periphery can be represented vertically, with the earth's surface as the main iconographic space, flanked by the underworld below and the sky above. But it can also be represented horizontally, with the quincunx pattern of the four directions and a centre defining the iconographic space.

With regard to the third point, Gillespie (2007, 133-135) has contrasted a focus on verticality for the Classic Maya to one on horizontality for Postclassic central Mexico, which she links to different conceptions of relations between centre and periphery in both regions. These derive from the Classic Maya focus on autonomous city-states, with a system of kingship closely tied to the Long Count calendrics, as compared to the overarching polities that incorporate different ethnic and political groups, from which in some cases tribute is drawn, in Postclassic central Mexico. Quite clearly, these broad conclusions are nuanced, as she herself admits (Gillespie 2007, 134), by some similarities in the socio-political landscapes of both cases.[384] Here it is possible to refer to evidence of Classic Maya hegemonic polities that overruled the autonomy of individual city-states in some ways (Grube 2000, 550), and evidence that even within the Aztec empire the previously autonomous city-states retained something of their independence (Smith 2000). However, an important distinguishing feature of the Classic Maya compared to the Postclassic period is the use of the Long Count, closely connected with the stela as art form (Gillespie 2007, 117), and it is here that the relation between verticality and the centrality of kingship can be observed best.[385]

The next question concerns the relevance of this discussion for LPC lowland Maya art. Gillespie (2007, 116) had noted that the emphasis on verticality seems to date back to the Preclassic, for which the Izapa evidence seems to offer interesting insights into the relation between cosmology and rulership (Guernsey 2006, 119-141). Unfortunately, the only known LPC stelae with Long Count dates are found outside the Maya lowlands, but there is considerable other evidence that is of interest here. First of all it is important to note that, as discussed in section 6.4.2, the basic elements

[384] Another interesting case is that of the Postclassic lowland Maya, which also seems to shift from a vertical emphasis to one that stresses horizontality (Gillespie 2007, 135), even as general Maya conceptions of landscape show considerable continuity over time (Taube 2003b). An interesting exploration of the Chichen Itza wall-paintings as a 'way of seeing', not using Hagen's framework, has emphasised as one of the key changes here the use of a bird's eye view on large landscapes and groups of people (Hutson 2005, 229). This focus on diverse landscapes is related to the far-reaching trading network of the site, but the location and bird's eye perspective are also related to an elite perspective (Hutson 2005, 232). However, some of these developments may be seen in the Classic period, as for the shift away from kings to larger groups at Bonampak (Miller & Brittenham 2013, 171-174), and the quotidian scenes of what seems to be a marketplace at Calakmul (Carrasco Vargas & Cordeiro Baqueiro 2012; Martin 2012). For the Postclassic Yucatan, there is also a need to take into account the insights in cosmology provided by the architectural layout (Pugh 2001) and wall-paintings (Milbrath et al. 2010) at Mayapan.

[385] An aspect connected to this concerns the relation between the names of structures, together with their iconographic programmes and dates, as part of the layout of civic-ceremonial centres and their embedding in cosmological landscapes, as explored for the Classic period by Tremblay (2007).

of the Calendar Round can be found in the LPC lowland Maya area. Secondly, as will be shown in section 8.2 of chapter eight, evidence from the layout of caches at different sites strongly points to a cosmology based on the quincunx pattern of four cardinal directions and a centre. Based on sources from periods other than the LPC, another strong pattern in Maya cosmological thought can be discerned in the notion of the sky as akin to a bowl:

"Rather than an ethereal element gently allowing the flow of celestial elements through the air, the sky in native Maya thought is a giant solid bowl atop the earth at the edge of the sea. Thus, in contemporary Yukatek belief, the rain-bringing Chahks first emerge through a small hole in the wall of the eastern sky. In a contemporary Achi Maya version of the Sipak myth, Sipak escapes certain death by escaping through the horizon 'crack' between earth and sky. Formed of a bowl with another inverted on top, ancient Maya 'lip to lip' cache vessels are graphic models of the sky bowl on top of the circular earth. Such caches frequently contain jade and shells oriented to the cardinal or inter-cardinal points." (Taube 2010a, 213)

In a number of LPC lowland Maya caches the relation between bowls and the outline of the cosmos can be readily observed, often together with small objects with colours suggestive of the cardinal directions, as at K'axob (Harrison-Buck 2004, 73-75). At this site a number of bowls have also been found with a *k'an* cross painted on the inside (e.g. Berry et al. 2004, 244-245), see figure 58, which are relevant to the issues discussed here. The context of these bowls will be discussed further in section 8.2.5, here the concern is more with their iconography. Taken at face value, the *k'an* crosses in these bowls seem to suggest a horizontal outline of the four directions and a centre: a quincunx figure.[386] But a connection has also been made between these vessels and the so-called Humboldt celt from the Olmec area, which, among other things, shows a bowl in profile immediately beneath a horizontal rendering of a quincunx figure with a *k'an* cross in the middle (Headrick 2004, 370-371).[387] Here, then, it is possible to see an extension of the K'axob bowls, combining an overall vertical/profile view of the bowl and the quincunx figure (as well as the rest of the iconography on the celt), with a horizontal/bird's eye view of the quincunx outline itself. Furthermore, a close association between bowls, centrality, and world-trees can be seen in many different artistic renderings from the Preclassic through to the Postclassic period (Astor-Aguilera 2010, 45-49).

The K'axob bowls are discussed here for two reasons, the first of which is to emphasise the relation between LPC lowland Maya iconography and that of other periods of the Maya trajectory, as well as with other regions of Mesoamerica. Even more important, however, is the suggestion that horizontal and vertical viewpoints can be combined. This can also be seen in the main body of evidence for the rendering of space in LPC lowland Maya art: the San Bartolo wall-paintings.[388] As noted by Hurst (2005, 623), there are two important elements of these paintings that are significant in terms of the quincunx ordering of the cosmos, these being the gourd birth-scene and the four trees with sacrificing youths. Before turning to these scenes, however, it is important to note the rendering of skybands (see figure 59), which are also known from external façades. For all the

[386] Of course this covers only the horizontal aspect of the cosmos, not taking into account the layers of the underworld and the sky. These were present in Preclassic lowland Maya art, notably in the layered cache from MPC Cival and the LPC quatrefoil scene from the San Bartolo west wall. Such quatrefoil shapes have been connected with the presence of a cave, as a portal to the underworld, and can be widely seen in the art of this period (Guernsey 2010), and even in recent Guatemalan ethnography (Christenson 2001, fig. 4.17, p. 99). However, the focus here lies on the quincunx pattern as it is both better known and more relevant to other aspects of LPC art.

[387] This reading is partially based on the work of Reilly (1995, 32-33), who noted the use of multiple viewpoints in Olmec art as consistent with broader Mesoamerican ideas in this regard, in particular for the delineation of a centre and the four cardinal directions that mark the edges. This aspect of Reilly's analysis can be used without necessarily agreeing with his ideas on shamanism, a notion briefly discussed in section 6.4.2.

[388] For the identification and outline of specific features of these wall-paintings, the reader is referred to the appendix on the narrative micro-structures in the San Bartolo paintings.

interior San Bartolo murals, the skybands are located below the main pictorial space, suggesting that we are dealing here with a location different from that of ordinary, earth-based existence (Taube et al. 2010, 4). This can be contrasted with the use of skybands and astronomical phenomena in Classic Maya art, which are usually located above depictions of earthly terrain.[389] A good example of this can be seen in the Late Classic wall-paintings of Bonampak, where there seems to be an intimate relation between the concrete and historical events in the main pictorial space and the representation of the constellations above them (Miller & Brittenham 2013, 105-106).

The contrast between the historical events at Bonampak, though of course inseparable from the calendar-based worldview, and the more generic, mythology-influenced setting of the San Bartolo paintings is clear. But the situation is even more complex at the latter site, as in one scene of the west wall a deity descends into the central pictorial space from a skyband located above it (Taube et al. 2010, fig. 62, p. 101), see figure 60.[390] Hence in this section of the San Bartolo murals skybands are present both below and above the space in which the main action takes place. This cannot be easily explained, although it may be less problematic if we are dealing with a setting that is primarily mythological rather than historical. One clue to a more specific determination may be found in the wide occurrence of an U-shaped motif in the skybands of both the north and west walls (Saturno et al. 2007, 66; Taube et al. 2010, figs. 57-68, pp. 96-107). Unfortunately, in the little that is preserved *in situ* of the upper skyband on the west wall it is impossible to recognise any sign, although the edges would suggest that they might well have been present. However, the cloud and rain elements that emanate from this upper skyband at San Bartolo have close parallels to skybands in contemporary art from outside the lowlands, one of which, Izapa Stela 26, combines the cloud and rain elements with an U-shape in the skyband above them (Taube et al. 2010, fig. 31, p. 47).

Significantly, the U-shape can be recognised in contemporary skybands from Izapa, but not in those depicted in Classic and Postclassic Maya art (Lang 2004, 27, 29). For the site of Izapa, one interpretation of the U-shape is that of a womb or in broader terms a place of emergence (Tate 2012, 223-224). Based on this it has been argued that its use within these skybands can be related to the accounts of cosmogony and anthropogony in the Popol Vuh. But the U-shape in fact occurs in a wide range of contexts, including associated with the head and clothing of the figures in the San Bartolo paintings, which may give them a celestial significance (Lang 2004, 70). Hence it would be wise not to limit the interpretation of the U-shape to a womb, and rather consider it as part of a broader set of related metaphors.[391] Nevertheless, parallels between a variety of cases from different areas and periods of Mesoamerica show that the association of U-shapes and wombs is a recurrent and fairly strong one (Tate 2012, 286-287). Hence it can be useful to explore the connection between the Izapa skybands and the Popol Vuh further. In the preamble of the part of the Popol Vuh relating the origins of the Quiché people, there is an especially interesting passage that connects the laying out of the four directions of the cosmos to wombs and giving birth:

[389] This does not imply a broad contrast in the location of skybands in Preclassic and Classic lowland Maya art, however, as there are multiple Preclassic cases of skybands located above the main pictorial space, as can be seen in wall-painting fragments from Tikal Structure 5D-Sub 10 - 1st (Lang 2004, fig. 41).

[390] In her senior thesis on the San Bartolo skybands, Rebecca Lang (2004, 67) interprets this skyband above the main pictorial space as a celestial serpent, which can be seen both in the lower skyband and the rest of the mural as well. Hence there is little question that for this particular scene the space in which it occurs is bounded both below and above by skybands with iconographic significance.

[391] The association between the U-shape and the womb has parallels in other Mesoamerican cultures and can be seen as fairly straightforward for the skybands. More problematic is that this sign also occurs within cartouches attached to the Principal Bird Deity at Izapa, where an alternative interpretation relates them to flowers, and to a broader set of associations related to breath and soul (Guernsey 2006, 107). However, the relation between the U-shape and flowers seems not very strong. The depictions of the floral breath elements in Maya and Olmec art lack them altogether (Taube 2010b, fig. 9, p. 158). The association between U-shapes and wombs and birth is much stronger, as can be inferred from parallels from a variety of Mesoamerican cases (Tate 2012, 286-287).

"Great is its performance and its account of the completion and germination of all the sky and earth – its four corners and four sides. All then was measured and staked out into four divisions, doubling over and stretching the measuring cords of the womb of sky and womb of earth. Thus were established the four corners, the four sides, as it is said by the Framer and the Shaper, the Mother and the Father of life and all creation, the giver of breath and the giver of heart, they who give birth and give heart to the light everlasting, the child of light born of woman and the son of light born of man, they who are compassionate and wise in all things – all that exists in the sky and on the earth, in the lakes and in the sea." (Christenson 2007, 56-57)

The fact that an U-shape is present on the gourd from which the five figures emerge (see figure 55), with another sign explicitly referring to a process of giving birth (Saturno et al. 2007, 9), makes the association between skyband and womb even stronger in this case. Through this it is possible to tentatively point to a generic relation, if not yet a specific one,[392] between the San Bartolo skybands and the womb of sky and/or earth mentioned in the Popol Vuh and other sources from the colonial period. It is likely that we are dealing here with a primordial landscape, one of mythological creation rather than a historical setting. This proposition is reinforced when considering the gourd birth-scene itself in more detail. In the original interpretation by the project team the uniqueness of this scene in Maya iconography is noted, while at the same time the quincunx outline of the five figures that emerge from the gourd is emphasised as being consistent with Mesoamerican cosmology (Saturno et al. 2007, 12-13). Since this study, others have related the scene to evidence from different Maya and Mesoamerican periods and regions to interpret it in more detail.

One study by Ruud van Akkeren (2006) discussed the gourd birth-scene as part of his discussion of Zuyua (rendered by him as Tzuwya), which as noted in section 7.4.2 was interpreted by him as the toponym for 'place of the gourd'. Based on an extensive discussion of colonial-era sources, he interprets the figures emerging from the exploding womb-gourd as the Sons of Sunrise: the first people made of maize, who will witness the first sunrise of the newly created world (Van Akkeren 2006, 48). Basing herself on a wider set of Mesoamerican parallels, Tate (2012, 290-291) also relates the gourd birth-scene to similar accounts of the emergence of humankind. Yet in both studies the quincunx pattern of the figures being birthed is less than fully accounted for. However, it is possible to point to the close relation between the birth of the Sons of Sunrise and the emergence of agriculture (Van Akkeren 2006, 42). Another clue comes from the close association between the life-cycle of maize and humans, especially for seeds and embryos (Tate 2012, 58-61).[393] A number of ethnographic studies also describe Maya farmers planting maize in a quincunx pattern, a parallel for which may be seen in the spatial arrangement of pre-Columbian caches (Tate 2012, 186-187).

Based on these clues, the following hypothesis can be posited: the gourd birth-scene shows the birth of the current version of humankind based on maize, also indicated by the spatial arrangement of the basic quincunx pattern of the *milpa* field. Here it is necessary to recall the parallels between the

[392] Given the occurrence of the U-shape in different forms, and alongside other elements, there may be more interpretive potential to the San Bartolo skybands. This would include the placement of motifs in the skyband as related to the specific scenes in the main pictorial space, as tentatively explored in (Lang 2004).

[393] Recalling the discussion of *k'uh* in section 7.3.3 and noting the explosive force with which blood and red and black volutes are blown from the womb-gourd, it is revealing that a conclusion based on ethnographic research on the relation between maize and humans stresses the connective link of a common energetic force:

"The lives of humans and maize are so intertwined that it is hard to say which is the more fundamental ordering principle. It is becoming increasingly apparent that throughout Mesoamerica, concepts of and observations about the human body formed the basis for metaphors that shaped conceptions of much of the world. Humans sprout like corn, in the wet and cool environments of the womb and earth. And both maize and humans contain a spark of divine energy, or heat, that fluctuates according to the conditions of life." (Tate 2012, 59)

laying out of the cosmos, *milpa* field, and house in Quiché Maya ethnography (Tedlock & Tedlock 1985, 127-128). In section 8.2 the implications for the interpretation of caches laid out according to a quincunx pattern will be addressed. Turning now to the other aspect of the four directional trees, it is important to mention first that here only their interpretation in terms of spatial convention and cosmology will be treated. The rest, including the relation with the gourd birth-scene, will be discussed in section 8.2.4. First of all, it is important to stress the recurrence of the relation between directional trees, sacrifice, and the creation of the cosmos in other periods, as can be seen especially well for the Postclassic codices from the Maya area and central Mexico (Taube et al. 2010, 13-15; Taube 2012, 744-745). Based on the iconographic analysis by the project team, the following associations can be made for each of the four scenes of sacrificing youth, offering, tree and Principal Bird Deity, based on (Saturno 2009, 124), moving from left to right:

1. West, a watery realm associated with the underworld, with an offering of fish.[394]
2. North, associated with the land, and with an offering of a deer.
3. South, associated with the sky and an avian aspect, with an offering of a turkey.
4. East, associated with a flower-based paradise, and with an offering of flowers as sustenance for the gods and ancestors.

In addition to these identifications,[395] the four sacrificing youths in front of each of the four trees have been associated with the so-called 'Year Bearers' (Taube et al. 2010, 19-22), the role of which in the Calendar Round was briefly discussed in section 6.4.2. These figures relate the San Bartolo paintings to more general Maya conceptions of order, as expressed at a basic level in the outline of a *milpa* field or a house. For the more complex scene of the four directional trees, it instead signals the spatial order established by the polity and office of kingship centred at San Bartolo, expressed in cosmological terms (Saturno 2009, 124; Taube et al. 2010, 84). Finally, another tree depicted in the west wall murals might hypothetically represent the central axis mundi, appearing without Principal Bird Deity or sacrificing youth, but instead with an avian maize deity and birds (Taube et al. 2010, 84). Having outlined these different scenes from San Bartolo, it now is time to return to the K'axob vessels that formed the starting point of the discussion. Bearing in mind the small sample, it is nevertheless possible to recognise a fairly coherent pattern in qualitative terms. Basic to this is the observation that the horizontal rendering of the *k'an* cross on the bottom of the K'axob bowls can, based on the comparison with the Humboldt celt and other cases, be extended to a vertical/profile view of the quincunx outline of the cosmos.

This can be seen very clearly in the San Bartolo wall-paintings. Even if we are dealing with a mythological and primordial landscape here, based on the analysis of the skybands and the content of the main pictorial space, it is still one that conforms to the basic outlines of the Maya cosmos. While the gourd birth-scene shows this in a horizontal/bird's-eye view, the four directional trees depict it in a profile view. As in the interpretation of the K'axob vessels, this shows that the two viewpoints are far from mutually exclusive. This pattern should not be interpreted as a stage in an evolutionary scheme of lowland Maya art, moving from Preclassic mythology to Classic kingship to Postclassic human landscapes. Given that these reconstruction are based on only a few cases, and also considering the close connection between the San Bartolo murals and the Postclassic codices, this would be a highly tenuous model. Instead it is possible to see in LPC lowland Maya art templates, which were articulated in different ways in later periods, based on different demands placed on artists, but sharing the same cosmological views. Thus it is possible to recognise here

[394] The scenes with offerings on tripods have hearthstones on them from which smoke volutes arise, a reference to offering that is also closely related to the raising of the world-trees (Saturno et al. 2007, 23-25).
[395] In its basic elements this outline is strikingly similar to that of the Dresden Codex, except that in this case the sequence ends with the deer rather than with the fish, as in the San Bartolo scene (Taube et al. 2010, 28).

what may be termed a 'way of seeing', which could be represented flexibly in a number of depictions using techniques for rendering space captured by Hagen's metric mode of projection. It could also be extended from the order represented by the layout of the house and the *milpa* field of the farmer, to the ordering of the territories of powerful kingdoms.

If maize cultivation played an important role in the discussion so far, it arguably occupies an even more important one in the other element treated in this section: the rendering of anthropomorphic beings in LPC lowland Maya art and its implications for understanding personhood. It was already noted in the discussion of the gourd birth-scene the set of close associations between the creation of human beings and maize, but in broader terms this relation extended to the entire life-cycle of both kinds of organisms, including to death (Fitzsimmons 2009, 22-24). The prevalence of metaphors involving maize and humans can be grasped as part of a broader notion of a 'botanical substrate' for the current human race and those that preceded it (Houston 2014, 11). It extends to other kinds of vegetation as well, as can be seen in the ancestral figures sprouting from different orchard trees in the Late Classic sarcophagus of king Pakal from Palenque (McAnany 1995, 75-77; Fitzsimmons 2009, 127).[396] As such, the notion of Maya personhood is bound up within the overall monistic worldview, and individual persons can be viewed as aspects of it.

The discussion here will focus on providing a more generic outline of personhood in LPC lowland Maya art, without going into the extensions of it in various social roles. The reason for this is that the evidence for such social roles in LPC period is simply too limited, in contrast to that from the Classic and Postclassic periods. For the Classic period in particular, it is possible to recognise social roles in terms of courtly life, for example at Bonampak (Miller & Brittenham 2013), the position of women in the Maya state (Reese-Taylor et al. 2009), and occupational roles in the Calakmul 'market' murals (Carrasco Vargas & Cordeiro Baqueiro 2012; Martin 2012). Such social roles cannot be recognised in the LPC evidence as it exists now, but once again the contingent character of that sample should be emphasised. Before the discovery of the Calakmul paintings, quotidian scenes were unknown in Classic Maya monumental art as well. Hence it would be unwise to state that social roles were absent by the original intention of the creators in LPC lowland Maya art, as one single discovery could easily overturn such a necessarily tentative statement.

By focusing instead on the more generic question of personhood as it relates to the representation of anthropomorphic beings in art, the most can be made of the evidence available. A number of different terms are relevant for the interpretation of Maya personhood. Most problematic is the *way*, which seems to have acted as a co-essence to humans and of which a considerable variety existed (Grube & Nahm 1994). Yet even for the Classic period the precise meaning and role of the *wahy* beings remains difficult to determine with great precision, although a close association with disease and sorcery has been put forward by different scholars (Fitzsimmons 2009, 44-47; Helmke & Nielsen 2009; Houston & Inomata 2009, 208-210). Given the lack of clear depictions of *wahy* in LPC lowland Maya art,[397] this topic here will not be elaborated upon further. Another term is *winik*, referring primarily to a human or person and widely found in the textual record of the Classic period (Houston et al. 2006, 58-59). Another connotation of *winik* was the 20-day month, based on the relation between the human body and the vigesimal count, and there is some evidence that this was already the case in the LPC period (Coggins 2007, 225).

[396] In a different way, metaphoric extensions relating to human beings can be observed for the artefactual realm as well. This can be inferred from the practice of adding specific materials to different Classic Maya court functions, as in 'head wood', with human beings in this way functioning as 'tools of statecraft' (Houston 2014, 28). The same terminology that uses material terms to describe persons occupying positions at court can be seen in a recently discovered wall-painting from the Classic period site of Xultun

[397] One reading of the scene on the LPC stela from Cahal Pech, of a human figure in the mouth of a jaguar, might plausibly be interpreted as indicating an animal co-essence of a human being (Awe et al. 2009, 185).

However, the most important term for the discussion of Maya personhood in relation to art is that of *baah*. Ubiquitous in Classic period texts, its translation is to 'body' but also with a close association with 'head', both in a literal and a metaphoric sense (Houston et al. 2006, 59-61). A variety of uses were made of *baah*, but for the present purposes the most significant one lies in its use for denoting images (Houston et al. 2006, 67). The connection between surfaces, especially faces, heads, and masks, but also skin, and divine power can be observed throughout Mesoamerica (Monaghan 2000, 29). For the Classic Maya this relation can be seen in the notion that an artefactual representation can share a vital energy with what is represented, not through an occult transfer of essences but as part of a shared monistic ontology (Houston et al. 2006, 74-76). As can be seen especially well for stone, the permanence of such images makes them more durable than the flesh of the person represented, even if this permanence was often negated through intentional acts of mutilation and defacement of images (Houston 2014, 99-100). In this way, the relation between *baah* and images points to the extension of personhood in Maya art.[398]

This basic outline of terminology only sketches the bare bones of how personhood is related to the depiction of anthropomorphic beings in Maya art. For the Classic period much more information is available that allows insights into practices that involved artistic images. This includes rituals that involved the impersonification of deities, known not only from depictions in art but also from finds of masks used in such rituals (Houston & Inomata 2009, 203-205). Another example of praxis is the vision or -*ichnal* emanating from a powerful figure, or the artistic image thereof, that structured the perception of certain architectural spaces (Houston et al. 2006, 173-175). Unfortunately, the artistic record of the LPC lowland Maya lacks both direct textual evidence for the terminology of personhood discussed here, and also provides no unambiguous clues to practices such as deity impersonification. In order to remedy this problem, first a broad outline for various depictions of anthropomorphic beings in LPC period art will be provided, followed by a return to the generic picture outlined before. As such, the investigation is very much dependent on the direct historical method, in this case connecting the material to the Classic record (the interpretation of which is partially dependent on later sources), but in a way that is structured by the LPC period evidence.

The discussion of the evidence starts, however, not with positive evidence but rather with an absence: the lack of figurine-making in the LPC period. As discussed in section 7.2.3, in the MPC period, figurines had been present in the archaeological record of the lowland Maya area, and the shift away from them was attributed rather generally to socio-political changes. The key question here is whether such changes can be related to changed conceptions of personhood as well. Here one obstacle is presented by the fact that, as far as this author has been able to ascertain, the record of Preclassic lowland Maya figurines has not yet received an exhaustive analysis of key characteristics such as physical properties, gender, attributes, and find contexts. Some basic features can be noted, including that they can be associated with household ritual (Hendon 1999, 111; Ringle 1999, 190, 193), and that there is some overlap with whistles or *ocinaras*, a type of flute (Bartlett 2004, 264-265; Hendon 1999, table 2, p. 104). More uncertain are theories that they were portraits of ancestors, as will be discussed in section 8.2.6 for the site of Chan, or even of rulers (Hammond 1989, 113), the latter hypothesis clashing with the household contexts (Ringle 1999, 193).

One systematic survey of figurines from Formative period Oaxaca offers more insights for the shift away from figurines in relation to socio-political changes and personhood. Using a combination of

[398] Based on a similar focus on heads, surfaces, and extensible personhood, *baah* has been related, if with some caution, to the Nahuatl term *tonalli*, which denotes an important aspect of the soul in central Mexico (Houston et al. 2006, 79-81). Reservations have been expressed, however, as these similarities really imply an equation of physical images with souls, even if the *tonalli*, like the *ch'ulel* of the Tzotzil Maya, could become detached from the human body (Fitzsimmons 2009, 39-42). As with the *way*, more research still seems to be required to resolve the issue satisfactorily.

Zapotec ethnohistory and comparative ethnography, Marcus (1998b, 25-29) locates the early use of figurines in a nexus of women, divination and ancestors, in a society based on corporate kin groups.[399] With the development of socio-political stratification and the state, these 'little tradition' figurines went out of use and were eventually replaced by mould-made 'great tradition' figurines of nobles and kings (Marcus 1998b, 301-306).[400] Even if the analysis of the Oaxaca material should not be readily transplanted to the early figurines of the Maya lowlands, the shift in socio-political structures follows a similar trajectory. While there are other aspects of figurines, such as embodiment and ornamentation (Joyce 2003; Lesure 1999), the realignment of household and ritual within a context of stratification and state formation seems to provide a good explanation for the temporary cessation of figurine-making. As will be shown in section 8.2.6, in LPC period Chan figurines from the MPC period were still curated, hence the break was not complete in ritual.

Given that both the figurines and the monumental-scale stucco masks are not understood in very precise terms with regard to what they represent, it is hard to accept the theory that the shift away from the figurines would be to the monumental masks (Hammond 1989, 113). While the stucco-work, as noted in section 7.2.2, is increasingly well-understood in terms of its material properties and identification of iconographic features, this is less the case for more abstract notions such as personhood. Whereas the Classic stelae have received much attention in this regard (Christie 2005; Newsome 1998), the uniqueness of the Preclassic monumental masks relative to other periods makes it harder to interpret this aspect of them. Nevertheless, some broad features can be noted. One is that the masks become more complex in iconographic terms as the LPC period progresses, including the expanded colour palette noted in section 7.2.2, with an initial zoomorphic focus being supplemented by anthropomorphic elements (Reese-Taylor & Walker 2002, 95). This allowed for more narrative complexity, as will be discussed in the next section, but in a basic sense the significance of the masks remains obscure.

One potential avenue may be sought in taking the term 'mask' beyond its common-sense use, to consider broader questions of masquerading and facial attributes in LPC lowland Maya art. Leaving aside the notion that the masks refer to actual masks worn in rituals,[401] the development of Maya art throughout the Preclassic offers interesting clues on these issues. One key element in this is the so-

[399] Marcus' use of comparative ethnography derives from her nuanced position on social evolution (Marcus 2006), which she has used together with Flannery to outline a detailed trajectory of state formation in Oaxaca that does not depend on typology (Marcus & Flannery 1996). This perspective enables her to compare the social use and meaning of figurines from different areas of the world with 'village societies' (Marcus 1998b, 17-23). A recent comparative study by Lesure (2011, 213-217) of early figurines on a global scale has stressed the distinct art-historical properties of such figurines. Focusing more on the distinctiveness of regions or 'macro-units', the female focus of these artefactual representations is still related to ideological concerns too, even if their societal contexts are not discussed in-depth. Combining the social focus of Marcus and the art-historical rigour of Lesure would be highly useful, especially for considering changing gender roles in the emergence and development of early civilisations (*Understanding*, 194).

[400] According to Marcus (1998b, 306), the 'little tradition' would still have been carried on in more archaeologically invisible ways in household contexts. The Classic Maya case provides a different perspective on the relation between elites and commoners. Although many figurines are of kings and nobles, there are also many others, including those that seem to have fulfilled a role in ritual humour in the sense of Bakhtin's carnival (Taube & Taube 2009, 255), acting as a counter-weight to socio-political hierarchy through ritual humour. One study of the ceramic paste types used to make them, suggests that some of the Classic period figurines were exchanged in festival fairs (Halperin et al. 2009). More detailed sources on Postclassic markets from central Mexico suggest that Bakhtin's notion of carnival can be successfully used in a Mesoamerican setting (Hutson 2000). This would be one way to provide an alternative to the notion of top-down dominance by elites, and allow for a different view of the relation between households and states.

[401] Based on an initial suggestion by Proskouriakoff, it has been proposed be that the large zoomorphic masks were 'composite signs' that derived from masks worn in ritual and dramatic performances, as they are known from the Postclassic through ethnographic records (Bachand & Bachand 2005, 45-46). Unfortunately, given the available evidence it is far from clear how this hypothesis could be further substantiated. Another possibility is that in some cases the masks could function as platforms for ritual performance viewed from below, as has been proposed for the site of El Achiotal (Acuña 2013, 345-346).

called 'Jester God' (named so because of the 3-pointed cap on this image),[402] an image attached to a headdress closely associated with rulers. This iconographic element derived from maize-related imagery in Olmec art, as can also be seen in close parallels spread out from the Olmec Gulf coast heartland such as an early axe found at El Sitio, Guatemala (Fields 1991, fig. 2, p. 168). It can still be seen in the art of Chichen Itza, even if the iconography and its societal implications have changed over time (Freidel 1990, 78). For the LPC lowland Maya, the Jester God can be found both in monumental and non-monumental art. It can be recognised on stucco-work dating to the later part of the LPC at Uaxactún and, more uncertainly, at Cerros (Freidel 1990, 71), while it may also be recognised at El Mirador (Hansen 1992, 50).

The Jester God image can also be seen on the headband of the right protagonist on Nakbé Stela 1 (Hansen 1992, 140-149, fig. 113, p. 343), see figure 61, which will be further discussed in section 8.2.2. It is important to note here, however, that its dating to the later part of the MPC period is far from uncontroversial (Houston & Inomata 2009, 82). Much more securely dated, as noted earlier in this section, to 100 BC, are the San Bartolo wall-paintings. Here the Jester God image can be seen on the headdress of one of the sacrificing youths (Taube et al. 2010, fig. 9, p. 15). It is also present on the headdress given to a seated figure of authority on the west wall (Taube et al. 2010, fig. 68, p. 107), see figure 62, which can possibly be interpreted as a royal figure. Close parallels can be found between this depiction of the Jester God element and that of the fuchsite mask from Burial 85 at Tikal (see figure 52), and to an even greater degree the quartzite or serpentinite Dumbarton Oaks plaque without provenance (Taube et al. 2010, 68), see figure 63. Based on the very close iconographic parallels between the depictions of the Jester God and the seated figure of authority in the San Bartolo painting and the Dumbarton Oaks plaque, it is possible to relate the latter object more securely to the LPC lowland Maya (Fields & Tokovinine 2012, 158). Ultimately, however, this will depend on further work on deciphering the text on the plaque, which, like all LPC lowland Maya texts, is as yet poorly understood.

Recent discoveries keep adding to the corpus of Jester God images, for example in the murals from Cival that are dated to 200 BC, where it is used in the headband of a maize deity (Estrada-Belli 2011, fig. 5.24, p. 108), see figure 64. The find of wall-paintings in a peculiar style at El Achiotal have also helped to clarify a more enigmatic use of the Jester God. This concerns the use of this motif on masks put on bundles, as can be inferred for the mask of Burial 85 at Tikal and is shown on the two bundles that are carried in procession on the north wall mural from San Bartolo (Saturno et al. 2007, 65).[403] A similar kind of bundle can be recognised in a vertical, stacked position in the El Achiotal wall-paintings (Acuña 2013, fig. 6.7, p. 260), see figure 65. This notion of bundling is also connected to architecture here, and refers not just to the remains of ancestors but the precious materials and royal regalia as well (Acuña 2013, 351). As such, it is now possible to understand the extension of the Jester God image to the bundles as extending the same meaning of the royal insignia to these important ritual objects, which are also closely connected with kingship.

All these examples of the Jester God,[404] with the possible exception of Nakbé Stela 1, date from the later part of the LPC period. The temporal distance with depictions of the Jester God in Olmec art, had given rise to the notion that there was a significant disjunction in the use of the symbol between

[402] There are two versions of the Jester God motif, one showing a face with trefoil on a headband, as in the Dumbarton Oaks plaque (Fields & Tokovinine 2012, fig. 86, p. 156), while the other depicts only the trefoil on the headband, as can be seen for the El Achiotal wall-painting (Acuña 2013, fig. 6.7, p. 260).

[403] The idea that the Burial 85 mask was part of a bundle is reinforced not only through iconographic parallels, but also by the find context that indicates the remains were bundled (Coe 1990, 218).

[404] To this it is also possible to add the case of a small jadeite greenstone pendant from Cerros (Freidel 1990, 71). One view of this kind of object, which was found together with three others in a cache that also contained *spondylus* shells, is that they can be interpreted as 'stones of prophecy' (Freidel & Schele 1988, 559).

its Olmec and LPC lowland Maya uses. In particular, a shift in symbolic terms from a focus on maize to bright, polished surfaces and royalty was noted (Freidel 1990, 73). The discovery of the San Bartolo wall-paintings, on the contrary, showed that there was considerably more continuity in the symbolism and style of maize-related imagery with the Olmec than previously known (Taube & Saturno 2008).[405] Another recent discovery at the site of K'o has further undermined the notion of a significant disjunction. Here a vessel with a Jester God image on it was found in a burial, which may well have been a royal one, dated to 350-300 BC (Tomasic & Bozarth 2011). Even if this post-dates the decline of the major Olmec site of La Venta, there is also presence of Olmec-style blue-green jadeite in a cache dated to the 8th century BC at the nearby site of Cival, to be discussed in section 8.2.3. Both finds corroborate the possibility of more continuity between the Olmec and LPC lowland Maya culture, including for the Jester God image.

The finds from K'o and Cival have a significant impact on the understanding of shifts in ideology over time. One scenario had posited what is in essence a two-step development from the MPC to the Early Classic period (Bachand & Bachand 2005, 63-64). The first of these would consist of a shift from an emphasis on masking and ritual performance in open areas in the early part of the LPC, to an articulation of 'crowns' in iconography and more secluded spaces for ritual in the later part of this period. The shift away from masks to head ornamentation is connected respectively with concealing and highlighting individuality (Bachand & Bachand 2005, 56). The other transition was that of the Early Classic, with the emergence of elaborate burials of rulers on the summits of pyramids, as well as an end to 'austerity' in material culture, as can be seen in the new polychrome pottery (Bachand & Bachand 2005, 62). In overall terms this trajectory of a shift to more secluded ritual spaces and an emphasis on individuality is clear (McAnany 2010, 153-154), even if there are important continuities as well.[406] But the find of the Jester God image from K'o, as dated to 350-300 BC, throws into question the idea of a shift from masquerading to highlighting individuality during the early to later parts of the LPC period.

Based also on the recognition of greater iconographic continuity in maize imagery with the Olmec, as can be seen very clearly for San Bartolo, a different kind of pattern can be inferred for the Jester God motif. In particular, its occurrence can be noted on a wide range of media, both monumental and non-monumental, and in depicted roles as part of headbands and bundles. Although caution should be exercised in attributing the Jester God image exclusively to the office of kingship, as it also occurs with the maize god, its use on royal insignia and bundles is broadly congruent with this connection, referring respectively to the 'crown' and 'burden' of the ruler. There are implications of this for the understanding of LPC lowland Maya kingship, but these will be discussed in section 8.3.2. Here the focus will lie on conceptualisations of personhood, starting with the shift away from figurine-making at the transition from the MPC to LPC period. Rather than indicating a change in size, from figurines to large stucco masks, this involved a qualitative shift in image and ritual, even if, as noted earlier, it was not a complete break. The development of the office of kingship would reorient ritual activity, and the concurrent disappearance of figurines and emergence of Jester God images can be understood as part of this shift.

It was argued earlier in this section that the term *baah* in the Classic period could be interpreted as evidence for the extension of personhood to artistic media. Given the limited decipherment of the LPC lowland Maya textual record, it is not possible to recognise a similar use of *baah* in the texts of this period. But even using only iconographic evidence, it is possible to see extension in the

[405] One of the clearest examples of this concerns the mask of the maize god in the Flower Mountain and procession scene, which has strong Olmecoid features (Taube & Saturno 2008, fig. 4, p. 297).

[406] In particular it is necessary to mention here the continuity in the use of plazas for mass rituals involving a sizeable portion of the population of Classic polities (Inomata 2006; Lucero 2007). In this regard, it is also important to remember the case of the Late Classic Maya figurines in relation to ritual.

replication of the Jester God motif in media such as wall-paintings, stucco masks, portable art objects, and bundles.[407] This can be compared, in general terms, with the Classic period replication of ruler images and insignia across different forms of art as indicating the extension of a ruler by artistic means (Houston et al. 2006, 99-101). Even so, there were clear differences between LPC and Classic Maya kingship, as noted for the burials in section 6.4.2, and in the former period the office was emphasised over the person occupying it. Nevertheless, some form of extension is plausible. Another case, related to the Jester God image, concerns the mask of the maize god depicted on the San Bartolo north wall, which can be closely linked with certain Olmec images of this deity, described as 'the living face of corn' (Saturno et al. 2007, 25).[408] Here it is possible to return both to the notion of a 'botanical substrate' of humans at the beginning of the present discussion, as well as that of an aesthetics of durability discussed in section 7.3.4. LPC lowland Maya personhood as extended in the artistic record would depend on both of these notions, especially for imagery related to the office of kingship, which constitutes the main evidence for this aspect of lowland Maya art in the LPC period.

7.4.3: Images, words and narratives in Late Preclassic lowland Maya art

Unfortunately, the record of lowland Maya writing in the LPC period is much less understood compared to the voluminous one of the Classic period. But this does not mean that nothing can be said about the relation between images and words in art, nor that it is impossible to deal with questions about narrative and performance. It does imply, however, that what can be said will, by the necessity of the more limited evidence, be much more generic than the detailed accounts that can be given for later periods. In order to focus the discussion will move from the outside inwards, starting with ideas about pre-Columbian semiotic systems in general.[409] The notion that the various Amerindian writing systems should be interpreted in their own terms and not according to the European standard of the alphabet was already developed by Vico and Boturini in the 18th century, as discussed in section 2.2.3. Today, the study of these writing systems has developed up to such a point that the relation between words and images can be compared between many different Amerindian cultures. An insightful study by Simon Martin (2006) specifically explores the range of different modes of representation across different pre-Columbian cultures, ranging from iconographic (pictorial) to a glottographic (textual) modes. Another mode, the semasiographic one that is characteristic of the Postclassic central Mexican highlands, is wedged in between these two.

Of course, it is very much possible that such modes coexist with each other and are even deployed together in the same setting (Martin 2006, 64), as can be seen in Maya art which combined an iconographic and a glottographic mode in a way that makes it very hard to separate them. The relation between these two modes has received much analysis, especially since the decipherment of the Maya script, as can be seen in the early notion of 'conjoined' texts and images (Berlo 1983, 13). Some have argued against conflating iconography and epigraphy in the interpretation of Maya art, owing to their different modes of organisation. Arthur Miller (1989, 186), for example, has contrasted the multivariate meanings of images to the linear organisation of textual messages.

[407] The limited evidence for the intentional preservation, through burial, or mutilation of stucco masks in this regard should be considered as well (Hansen 1992, 29), even if in this case there is no relation between what was depicted, being mostly deities, and historical individuals.

[408] The personification of plants, as well as of artefacts, in either anthropomorphic or zoomorphic form can already be seen in Olmec art, including for celts and stelae depicting the maize god (Taube 2004a, 37).

[409] Knight (2013) provides a programmatic overview of methodological points on iconographic analysis in studying the art of the pre-Columbian Americas. Unlike in the work of Martin and Pasztory, however, he does not apply these methods for outlining a general framework for Amerindian art. Pasztory (1998) treats the art from Mesoamerica and the Andean area based on distinct naturalistic and abstract styles, which carry socio-political implications, but does not connect different kinds of writing to this.

However, it has been observed that while few syllabographs are incorporated in Maya images, except for names, many logographs are embedded in pictorial contexts. Furthermore, some pictorial elements are rendered in such a way that it is possible to view them as what has been termed as 'extended logographs' (Stone & Zender 2011, 12).

One of the key reasons for the difficulty in understanding the relation between words and images in Maya art may lie in its intrinsic differences, the invocations of Praxiteles notwithstanding, with the art of the Western tradition. Contrasts have been drawn between Maya art and that of Mesopotamia (Reents-Budet 1989, 192) and Egypt (Stone & Zender 2011, 17). Whereas in the two Near Eastern cases texts were 'autonomous' or 'disarticulated' from visual imagery, in the Maya case a constant 'overlap' and 'blending' between the two can be seen.[410] The implication of this is that the relation between texts and images in Maya art is best understood not in terms of basic sign usage, but rather in the interrelations between different kinds of signs within overall (narrative) settings, which can also include oral performance. The concept of a 'textscape' as developed by Simon Martin (2006, 57-61) is a good way to relate all these elements to what he terms 'interpretive communities'. As discussed earlier in section 7.3.2, in the LPC lowland Maya area the creation of both visual imagery and texts can both be ascribed to the same circumscribed group of workers.[411]

Turning to the LPC lowland Maya textual record specifically, it was already noted in sections 6.3 and 7.1.2 that it is limited in the number and length of texts, which furthermore are not understood very well. As a result, these texts have played no significant role in the interpretation of the meaning of specific images (Houston & Taube 2008, 132). However, even the limited record available can point in a more generic way to understanding the relation between texts and images, thereby providing a better insight into the art of this period as a whole. A good example that this is possible can be seen in the use of property qualifiers, well-known in Classic Maya art (Stone & Zender 2011, 13-15), which can be seen in the San Bartolo murals (Houston 2014, 16). In more general terms, three main uses of writing, apart from tattoos and graffiti, were made in the Classic period: as glyph blocks, as dedicatory texts, and as captions (Grube 2012, 850). Leaving aside the question of the dedicatory texts, which is problematic,[412] the other two forms of text blocks and captions can now be recognised in LPC lowland Maya art, mainly because of the discovery of texts in the San Bartolo wall-paintings (Saturno et al. 2007, 41-48).

Of particular interest in the paintings from this site is the use of captions, for example the one that is associated with one of the sacrificing youths, see figure 66, and which originally may have accompanied all four of these figures (Taube et al. 2010, 12-13). Such captions are common in Classic Maya art, as can be seen in their ubiquitous use in the wall-paintings from Bonampak (Houston 2012b, 158-159; Miller & Brittenham 2013, 72-77). The use of captions in visual imagery is varied, specifying different phenomena, creating an overall effect in which naturalism blends almost seamlessly with the conceptual (Stone & Zender 2011, 28). Clearly, this would also involve ontological issues, and here it is possible to again return to the discussion of surface-patterns started in section 7.2.5. In particular, the relation between texts and images in Maya art can be grasped as

[410] Such 'blending' can even to some degree be recognised in the intermixing of alphabetic writing and images on Quiché scarves, often pulled out by Western collectors in a peculiar form of culture shock (Tedlock & Tedlock 1985, 124).

[411] It may be noted that while in the Near East and eastern Mediterranean in the Bronze Age scribes and artists were different occupations, even if not hermetically sealed off as discussed in section 4.4.3, this was generally not the case in Mesoamerica. Instead, there seem to have been distinctions between the different kinds of books that could be made and used by different kinds of specialists (Herring 2005, 73).

[412] Most of the dedicatory texts from the Classic period derive from the elaborately painted polychrome vases, which have not been found for the LPC lowland Maya. However, it has been argued that the texts on many of the portable objects of this period were dedicatory (Mora-Marin 2001, 242). As the main concern here is with monumental art, there is no need to treat this question here further.

an extension of the discussion of *baah* and personhood in the previous section. There is a close parallel between personification in writing and in visual imagery:

"Jewelry, thrones and clothing are frequently personified with the attachment of a conventional zoomorphic face. Ritual paraphernalia, such as eccentric flints, obsidian blades and stingray spines, are also given faces. Nearly all plants had personified versions, whether an ear of corn, a leaf, a flower or a tree. The monstrous, chimerical personification of trees – involving a jaguar ear, missing lower jaw and streams of blood – was frequently stuck into the base of trees in art, and regularly appeared in the script as the head variant of the logograph TE' 'tree' or 'wood'. Underlying the extensive personifications in Maya art and writing is the view that all things in the universe are living and vitally interconnected." (Stone & Zender 2011, 22)

More specifically there is also a category of glyphs that are depicted in ways that make them closely resemble corporal entities, either more generically, for example through a head, or in a full-body mode (Houston 2014, 106). Such glyphs carry both linguistic and pictorial meaning within a single, bounded element. One example of this are fully-figured birds that signify both *muut* (the term for 'sound') and pictorial birds, and which are deployed in textual settings, as can be seen in the San Bartolo murals (Houston 2014, 108), see figure 67. The presence of such corporal, animate glyphs only occurs in very distinct settings, and still follows the basic syntax of writing (Houston et al. 2006, 76). Rather than obfuscating the boundary between image and text, the embodied glyphs seem rather to point to the dynamic, living qualities of words themselves. Here a further connection can be made to oral performance, and the power and unpredictability inherent in it, which is especially relevant for the ritual contexts in which many of these kinds of glyphs occur (Houston 2014, 118). Maya writing, then, was also animate, and sometimes there was a concern to highlight this in an explicit way. This can also help to explain why the blending of naturalism and the conceptual is less remarkable than it seems, as the conceptual itself forms an intrinsic part of a natural world defined by monism.

Once again it should be stressed that this does not mean that the glottographic and iconographic modes were fused together in the Maya case, as the syntax of writing and imagery was not the same. Rather, the interpretation of words and pictures together would take place at the level of Martin's 'interpretive community', where the relations between different modes could be grasped. Very important in this is the notion of synaesthesia, or 'cross-modal experience', as between colours and taste but also between script and speech (Houston et al. 2006, 136-138). Of particular concern for the understanding of Mesoamerican writing is the relation between reading and seeing in this macro-region, the latter also involving knowledge in general and sometimes specifically divination (Hamann 2008a, 58-61). Writing as such would function as an 'instrument of seeing',[413] as noted in section 7.2.5 for surface-patterns. Based on the extension from eyes to surfaces in general, this notion of seeing by means of patterned surfaces has been related to monism as well (Hamann 2008a, 66). The instability of surfaces is noted here, especially in relation to divinatory vision, but not the more durable character of surfaces with texts and images on them. This durability could potentially play a key role in the nexus of different modes of perception: not only visual and auditory, but also in a very broad sense involving smell, taste, and touch to some degree (Houston et al 2006, 141-152, 175-176), as part of overall perception in interpretive communities.

[413] This derives from the use of the term *ilb'al* for the Popol Vuh as a book, a term that literally refers to an 'instrument of seeing', and which in an ethnographic context can be related to divination (Christenson 2007, 25). The relation between 'seeing' and 'reading' has also been noted for the Classic Maya textual record, if only in a very generic way, and with many texts located in such a position that actual reading would be impractical (Stuart 1995, 85).

Having outlined the main characteristics of the relation between words and images in Maya art in general, one additional question concerns the implications of this for the interpretation of narratives. Unfortunately, here the limits of the available data are more imposing. Whereas the basic presence of texts in the San Bartolo wall-paintings indicated a coherence in broad terms to overall interpretations of Maya art as a semiotic system, the amount of information required to grasp narrative structure is much greater. Certainly what is available is insufficient to reconstruct in any form the concept of Maya literature for the LPC period, even as it is now actively being explored in terms of poetic techniques for the Classic Maya, as was discussed in section 6.3.[414] Yet the data is, in a very basic way, sufficient to address questions about narrative syntax, at least in a pictorial sense, using the same structuralist models deployed in section 4.4.3. This approach has already been tried in other cases of pre-Columbian art, in particular for the narratives on Moche vessels from Peru (Martin 2006, 68-75; Quilter 1997).[415] Here this model will also be used, not to reconstruct the complete narrative structure of LPC lowland Maya art, for the evidence does not permit this, but rather to elucidate some significant patterns.

One characteristic feature of LPC lowland Maya art, at least for the record discovered and published up till now, is the predominance of mythological themes. It is necessary recall here the analysis of Greek narrative in section 4.4.3. One distinction noted there was that between *Lebensbilder* (from human settings) and *Sagenbilder* (drawn from mythology), with the narrative scope of the latter less clear, but nevertheless interpretable through structural analysis (Stansbury-O'Donnell 1999, 31-33). It was noted in the previous section that the stucco masks are not understood very securely beyond the identification of basic traits and identity. Without understanding their iconographic function, for example as emblematic representation or as index for masquerading in ritual performance, it is very hard to grasp the role of these masks in narrative contexts. This does not mean that there have been no attempts to infer meaning of broader iconographic programmes, as can be seen for El Mirador (Hansen 1992, 48-52) and Cerros (Reese 1996, 118-120). In both cases these interpretations involve further interpretations of the cosmological significance of these masks, which structure the outline of the iconographic programme and purported narrative.

As such, the interpretations of narratives in these studies are based on specific views of what is represented by the masks, not on a basic structuralist reading of narrative elements in relation to each other. This is not to say that the narrative-based interpretations of the El Mirador and Cerros stucco-work may not be accurate. Rather, it is the case that for the purposes of grasping narrative structure at a basic level they are less suitable, as these interpretations are based primarily on their relation to general cultural ideas. As with many other aspects of LPC lowland Maya art, the analysis here will rely very much on the San Bartolo wall-paintings. For in this case there are enough iconographic elements that can be related to each other in a coherent pictorial space. Once again, for the identifications of these elements, the reader is referred to the outline in the appendix on the narrative micro-structures of the San Bartolo wall-paintings. Here the basic structural features of the narratives in these wall-paintings will be treated, which can be seen as complementary to the

[414] Tedlock's (2010, 25-30) survey of the presently available evidence makes clear the very limited potential for recognising literature in early Maya texts. The use of parallelisms as a poetic technique has been proposed for the outlay of the LPC stucco masks at Cerros (Reese 1996, 183-184), as well as outside the lowland Maya area for the Cascajal block from San Lorenzo dated to 1000-800 BC (Anderson 2012, 168-171). In both cases these reconstructions are much less secure than the interpretation of poetic techniques in the Classic period, which are still being developed.

[415] A particular notable case is the use of a structuralist model to provide a sophisticated analysis of the so-called 'revolt of the objects' scene as part of wider themes in Moche vase-painting (Quilter 1997, 123-128). The conception of materiality in this scene and related ones can be situated within overarching Andean ontological ideas (Allen 1998), and its theme has also been related to the Popol Vuh (Houston 2014, n. 11, p. 151; Quilter 1990, 60). Despite the differences of ancient Mediterranean and Andean ontologies, it still proved useful to use structuralist models for the Moche. Hence as an analytic technique this model can prove useful in the LPC lowland Maya case as well, even if, to emphasise it once again, it should be used only to elucidate structures in narratives, not impose a structuralist view of humanity.

discussion of their broader cultural meaning in section 8.2.4. As the San Bartolo murals are the best case for grasping narrative structure in LPC lowland Maya art, they may also provide some insights into other forms of art for which this is less clear.

In terms of overall structure, the division of the San Bartolo wall-paintings into coherent thematic sections, characterised by different artistic 'hands', has been likened to the pages of a screenfold codex (Taube et al. 2010, 11). As such a linearly organisation of the murals might be expected, but it has also been argued that it is possible to recognise concentric forms of pictorial organisation within this overall setting (Saturno 2009, 119). Before considering such broader issues, the focus will here first lie on the micro-structures of individual scenes,[416] of which thirteen can be recognised for the west and north walls, as outlined in the appendix table. Starting with pictorial nuclei, most of them show relatively little complexity. They consist either of anthropomorphic figures facing each other or facing trees, or dynamic events such as the gourd birth-scene and the infant and dying maize gods. All are in effect monoscenic, involving only one event that takes place at one particular place. The only exception to this may be the Flower Mountain and procession scene, which does show movement from two directions that converge on the nucleus. This is also the only scene in which a significant number of catalysts can be observed, in the form of six humanoid figures, one of which may be the wife of the maize god shown in the nucleus (Saturno et al. 2007, 34-37).

Moving on to the third element, that of the informants, it is possible to see the use of texts for this in different ways.[417] One of them is the identification and description of iconographic elements, as with the four sacrificing youths discussed earlier, but which also can be seen for the two figures carrying bundles in the Flower Mountain and procession scene (Saturno et al. 2007, 38). Another important use of text can be seen in the date 3 *'Ik* already discussed in section 6.4.2. This basic use of a temporal reference would be carried much further in the Classic period, as can be seen in the fairly ubiquitous use of Long Count dates in that art. Not all texts in the San Bartolo paintings necessarily functioned as informants, however, as can be seen for the text in the centre of the west wall (Taube et al. 2010, fig. 62, p. 101), which may have been more self-contained in an iconographic sense. Many pictorial informants are used to provide locational contexts, as can be seen in the Flower Mountain and great serpent with footprints on the north wall. In the west wall murals it is possible to note scaffolds, a quatrefoil, water areas, a floral area, a list not nearly exhaustive but indicative of a great variety in landscapes. Other signs provide qualitative information, such as the *k'an* and *ak'bal* signs in Flower Mountain (Saturno et al. 2007, 14-15). The skybands also provide an overall locational framing, as noted in the previous section. Finally, although there are a few indications, there is little that is conclusive with regard to the use of indices in specific scenes.[418]

The next question to consider is whether, and if so how, the different scenes can be related to each other. As noted earlier, the overall structure may be seen as consisting both of screenfold pages and as having cyclical aspects based on a common theme. Recalling the models of narrative extension used in section 4.4.3, both the syntagmatic and paradigmatic forms, based on sequential and

[416] As a brief refresher of the terms used first in section 4.4.3, there are four terms used to investigate these micro-structures: a) the nucleus, the essential and central focus of the narrative, b) the catalysts, providing specific clues to explicate the nucleus, c) informants, placing the narrative in a spatio-temporal context and adding key information, and finally d) indices that refer to relevant elements not shown directly in pictorial space.

[417] Three birds with song scrolls emanating from their mouths act as catalysts in one of the west wall scenes (Taube et al. 2010, fig. 62, p. 101). Even if they closely parallel the fully-figured birds used in a text from the same site, discussed earlier for the notion of animated glyphs, they should not be seen as glyphs in this context. Rather, it seems that closely related signs, as well as the meanings associated with them, can be used both in textual and pictorial syntax.

[418] One possible case is the small serpent emerging out of a hole in the lower left corner of the Flower Mountain on the north wall, which may refer to a broader conception of transition between realms (Saturno et al. 2007, 48).

metaphoric connections respectively, seem to have been present in the San Bartolo wall-paintings. A form of syntagmatic narrative organisation may be recognised in the four scenes of a sacrificing youth in front of a tree, with the Principal Bird Deity perched atop it. As these belong to the same temporal moment, the erection of the four directional world-trees, but shown in different frames, this constitutes an unified syntagmatic narrative (cf. Stansbury-O'Donnell 1999, 137-139). There is also the symmetrical arrangement around the quatrefoil containing the maize god, the details of which will be discussed in section 8.2.4, which has been related to a common theme (Saturno 2009, 124-125). It may therefore be seen as a paradigmatic narrative cycle, based on the metaphoric relations between the maize cycle, the maize god and rulership. Whether such paradigmatic linkages can be extended to the overall mural programme of the Pinturas Sub-1A building has to remain an open question, based on its incomplete reconstruction.[419]

To return now to the general issue of the relation between words and images in the narratives of LPC lowland Maya art, two key observations can be made. The first is that the combination of the glottographic and iconographic modes, 'conjoined' as it were, has to be understood as part of a process of synaesthesia that is culturally specific. Within the broader 'textscape' of interpretive Maya communities, images could function as 'instruments of seeing', a notion that can be extended to other kinds of surface-patterns as well. The presence of animated glyphs shows how what in Western eyes is the conceptual world of language, was intertwined with image-based naturalism in a monistic worldview. The second observation concerns the specifics of narrative settings. Here it is possible to see a crossover not only from the pictorial to texts, as in the animated glyphs, but also the other way around with the use of captions to identify figures and provide temporal markers. Yet at the same time there appears to be no violation of the syntax specific to textual and pictorial representations, as narrative micro-structures and extensions can be recognised for the latter. As with the case of the Moche referred to earlier, the structuralist reading of images can coexist with very different ontologies. Finally, even if most of the San Bartolo texts remain undeciphered for now, the aspects of the relation between words and images that can be recognised here do point to some coherence with the much better understood textual and artistic record of the Classic period.

7.4.4: The iconography of Late Preclassic lowland Maya art

Summarising the analysis of the iconography of LPC lowland Maya art, it can be useful not only to briefly recall the three aspects covered in the preceding sections, but also their interconnections. Starting with the artistic rendering of the spatio-temporal environment, it was shown how cross-cultural models of pictorial projection could be adapted to the worldview specific to the Maya and Mesoamerican cultures. In particular it is possible to note the importance of the quincunx pattern of a centre and the four cardinal directions, as can be seen in both vertical/profile and horizontal/bird's eye depictions in LPC lowland Maya art. As a basic template the quincunx pattern is closely embedded within an ontology focused on maize cultivation, as can be seen both in accounts of cosmogony and anthropogony, as well as in conceptualisations of Maya houses and *milpa* fields. It could be extended more broadly to demarcate the boundaries of states as well, based on the relation between the centre and the peripheral areas. Turning from this to the second aspect of iconography and personhood, it was shown that here maize-based agriculture was of key importance as well, especially in the notion of a 'botanical substrate' of humankind. The extension of personhood to

[419] It is important also to note here features that can be seen as connecting different parts of the mural programme, as with the two gourds on the north wall, or the fifth tree with maize god situated between the four scenes of directional trees with sacrificial scenes and the scenes involving the maize god. But these connections can only be made at the level of the further cultural interpretation of these paintings, and as such has to wait for section 8.2.4. One aspect that can be noted here, however, is the presence of certain elaborate motifs in the underlying skybands (Saturno et al. 2007, 66; Taube et al. 2010, fig. 57, p. 96, fig. 68, p. 107). Located at the edges of parts of the programme, these might signal shifts in the overall narrative and/or the transfer to different locations.

artistic images cannot be observed as closely in the LPC period as it can for the Classic period, where relevant terms such as *baah* frequently occur in the textual record, but in a more basic sense it can be recognised in the replication of certain motifs.

The most important of these was the Jester God image, which can be seen across a wide spectrum of different artistic media, but there are others as well, including the more enigmatic U-shape. The Jester God motif has close connotations with masquerading and highlighting identity, as part of iconographic contexts closely related to kingship and the maize deity. Having summarised the analysis of the iconographic rendering of the spatio-temporal environment and anthropomorphic beings, including its relation to personhood, the question of their connections arises. Basic to both was the conception of the role of maize, figuring prominently in conceptualisations of the quincunx outline of the cosmos and of the human body as part of natural cycles. In this way macrocosm and microcosm are closely related to each other, which also can be seen as a temporal way in the term *winik*, relating a human being and 20-day month through the vigesimal count based on the sum of fingers and toes. An elaboration of this connection can be seen in the relation between the quincunx pattern and the centre-periphery structure of the state, and the use of the Jester God motif to express kingship in a position of centrality. But if such patterns are becoming clearer, it should be admitted that others remain unresolved for the LPC period, such as the broader set of metaphors related to the U-shape and the calendrical aspects relating individuals to the cosmos.[420]

Finally, the relation between pictorial and textual elements was investigated, especially for narrative contexts. The notion of 'conjoined' images and words was dealt with through a discussion of the properties of different representational modes, in this case the iconographic and glottographic ones. It was shown that there was overlap in an ontological sense, with the use of personification and animation in glyphs, even if pictorial and textual syntax remained distinct and internally consistent. The use of images and words together can best be grasped within the context of a 'textscape' and its interpretive community. Here a culturally-specific 'way of seeing' would be actualised, especially in the ritual contexts conducive to synaesthesia of the senses.[421] Yet at the same time it is possible to recognise the working together of texts and pictures through the analysis of narrative micro-structures. In this sense basic representational modes can be adapted to highly distinct 'textscapes', without losing their intrinsic properties. With regard to the interconnections with the two aspects covered earlier, first of all the use of temporal markers in narrative contexts relating text to spatio-temporal settings can be noted, even if this was only done in a rudimentary way in the LPC period.[422] Secondly, it is possible to discern an underlying ontological basis for both the extension of personhood onto different artefactual surfaces, and the animacy and personification of certain textual signs. However, beyond the observation that both reflect a similar worldview, this has no obvious implications for connecting these textual signs to notions of personhood.

[420] For the U-shape in particular the potential is clear from the San Bartolo wall-paintings, where it recurs both in the skyband and related to the head and costume of different individuals, as well as to other objects. From ethnographic sources the relation between days and faces also seems highly significant (Tedlock 1992, 2).

[421] Of course the implication of such synaesthesia is that we are dealing here not only with a way of seeing, but also ways of hearing, smelling, and touching.

[422] With the use of Long Count dates in the Classic period important new avenues were opened up for iconography and narratives in this sense. The contrast with Mycenaean art and its counterparts and successors in the Mediterranean is very significant with regard to the rendering of the spatio-temporal environment, as will be discussed in chapter nine.