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A Sacred Trinity:
God, Mountain and Bird.
Cultic Practices of the Bronze Age Chengdu Plain

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INTRODUCTION

For nearly eighty years the earth of central Sichuan has been revealing its ancient secrets. Beginning with an accidental discovery of 300 to 400 jade and stone objects, on the Yan family farm in Yueliangwan in 1929,¹ countless more jade, bronze and gold artefacts are now available for study. From early agriculture,² to the present day, Sichuan has been a hotbed of civilization. It is not within the scope of this paper to discuss Sichuan's earliest inhabitants, but their contribution to the development of the Bronze Age culture here examined cannot be overlooked. The continuous habitation of the Chengdu Plain³ gave rise to a late neolithic culture⁴ out of which rose the Bronze Age civilization which produced the objects I discuss. This culture was complex and prosperous, a stratified society with religious, artisan, trade, ruling and slave classes. The major cities were surrounded by dense forests, amid which rice, fruits and vegetables, and possibly tea⁵ were cultivated.⁶

Much has been written regarding the fabulous finds from the village of Sanxingdui, in central Sichuan in the late 1980s. From museum exhibition catalogues,⁷ to studies on masks⁸ and eyes.⁹ Nearly every month in the Sichuan Cultural Relics journal,¹⁰ scholars expound on the themes and legends which the contents of the two sacrificial pits provoke. To these are added continued excavation and analysis of the archaeological sites beneath modern Chengdu – Shierqiao, and Fanchi Street, and now west of the city, Jinshacun. This paper hopes to add to the corpus of

¹ Graham 1934, Feng Hanji & Tong Engzheng 1979.

² It is possible that cultivation technology may have been influenced by Shijiahe Culture (c 2500-2000 BCE) a development of the earlier Daxi Culture (c 4400-3300 BCE) of southern Hubei, where excavations reveal similar shapes in pottery and building construction. See Zhang Chi & Okamura Hidenori 1999, and Xu 2001a.

³ We do not know the ancient name for the geography which is today known as the Chengdu Plain – that region of relatively flat land surrounding the city of Chengdu. Throughout the paper the modern names for such locations will be used for obvious convenience.

⁴ Baodun Culture is the name given to the people of the neolithic walled settlements, centred round Chengdu, who produced distinctive pottery vessels (Xu 2001a, p.22; Chen Shen 2002, p.8). Sanxingdui itself exhibits a clear development of pottery technology. For a closer examination of the archaeology of neolithic Sichuan see Cheng 1967, and for further reading on the topic of indigenous development (relationship to Daxi Culture) see Sage 1992.

⁵ The argument for the origins of tea in Sichuan are made by Ku Yen-wu (*Jiqi lu* Chapter 7) as referenced by Li Huilin 1983, pp.49-50. It is not clear when this occurred, but that said tea was then introduced into central China after the Qin conquest of the Shu kingdom in the 3rd century BCE.

⁶ Li Huilin 1983, p.41.

⁷ Bagley 2001; Beijing 2002; Chen Shen 2002; Saint-Germain-du-Puy 2003.

⁸ Liu Yang 2002.

⁹ Wu Hung 1997.

¹⁰ *Sichuan Wenwu*.

scholarship focused on the culture of these sites. Here, I endeavour to give life and further explanation of the religion of Sanxingdui based on previously published material regarding architectural, ritual and secular artefacts excavated from the various sites which are included within the Sanxingdui cultural sphere. Evidence suggests that the above mentioned archaeological sites belonged to the same culture. But in various sources they may be referred to individually, eg Shierqiao Culture,¹¹ or the later phase of the Sichuan Bronze Age – Qingyanggong Culture.¹² Throughout this paper, the key sites will all fall under Sanxingdui Culture for convenience. I am concerned with defining the rituals and implements of Sanxingdui religion as they were depicted by the culture itself.

The people who inhabited the Chengdu Plain from around 2000 BCE to the demise of their culture in the 9th century BCE adored¹³ mountains and birds and revered the sun. They believed in an omniscient deity,¹⁴ and in bird-man hybrid beings. They made offerings to the deities, of or in, the mountains. Artisans recreated some of these activities in bronze and as decoration on jade. They cast in bronze representations of altars, sacred birds, mountains and trees. Among these elements of the natural world, they placed themselves, priests, laymen and women; members of a religious segment of the community. They tattooed themselves and embellished their garments with sacred images.

There are several motifs running through objects from Sanxingdui Culture. These are the mountain, the bird, either standing on his branch or in flight, circular or spiral shapes, and finally a shape which resembles an eye. These are the principle motifs which I believe represent the importance of the natural and supernatural worlds in the daily lives of the people of the Chengdu Plain. They seem to have had a respect and understanding of their role within their greater environment. Mountains, birds and the sun are commonly revered in many cultures over the course of human history, but what is unusual in ancient Sichuan is that there do not seem to be any overt representations of gods. We cannot be sure from the artefacts we have, that the people

¹¹ Shierqiao Culture includes the sites Xinyicun, Fangchijie, Fuqinxiaoqu, Junpingjie, Zhihuijie, and Minshanfandian (Chen Shen 2002, p.9).

¹² Includes the tomb at Majiashan, Xindu County. Chen Shen 2002, p.10.

¹³ To adore is defined as 'to worship as divine', 'to love greatly or honor highly; idolize' by Webster's New World Dictionary.

¹⁴ Deity is defined by Webster's New World Dictionary as 'the state of being a god; divine nature; godhood'.

of Sanxingdui Culture believed in any gods, or a god, or what sort of deities they may have made offerings or sacrifices to. We have rather, a group of objects which depict the above mentioned motifs repeatedly, and from this we can understand that they were aware of a super and a natural world and that these ideas played a central role in the life of artisans and those responsible for the resources and spiritual life of the community, and thus the community at large. I believe that '...a mere stylistic analysis would not be sufficient since we are dealing here with icons that were more than artistic creations. They were objects made specifically for worship.'¹⁵ Therefore, it is imperative to examine the artefacts as more than just things or isolated motifs. Scholars must endeavor to see the objects as they were meant to be seen, by the practitioners themselves. In the following discussion, I hope that the motifs will be analyzed in such a way—based on how they are depicted by their own culture — so as to breathe life into them. This is done in order to better understand the civilization of Sanxingdui, independently, and thereby create a foundation for further study. Only after the objects and activities are explored autonomously can they then be compared to neighboring communities and the avenues of influence and exchange be discovered.

¹⁵ Ghose 2002, p.17.

CHAPTER 1 – METHODOLOGY & DEFINITIONS

While no contemporary written sources exist,¹⁶ the beliefs and practices of the Sanxingdui Culture come to us in jade,¹⁷ gold, bronze, and stone works. What do the surviving objects and architecture tell us about their religious beliefs? What can *we* learn from *them*? Like a puzzle, we put together, piece by piece, these objects in order to better understand this ancient and unique culture, and thereby place them in a greater context of world history. By examining the objects we discover a series of practices and can then make inferences about the beliefs that inspired them. On a psychological level, we can begin to understand the people's spiritual occupations. Politically, the artefacts tell us that Sanxingdui Culture was at the centre of several overlapping cultural circles, and that through interactions with these other spheres, technology and luxury items were exchanged. Often it is the case that with such material trade, the transference of ideas also occurs. I must say at the outset, that this is the current methodology of much scholarly work involving ancient Sichuan;¹⁸ ancient Sichuan being one leg of a tripartite system of study (Figure 1).

Nearly every scholarly paper published examines Sanxingdui Culture in terms of their relationships with the Shang.¹⁹ Great effort is made to define and reference regional cultures using Central Plains (*zhongyuan*) legends and myths, first as they are projected from Han Dynasty texts²⁰ back onto the Shang,²¹ and second, from the Shang to Sanxingdui. The third leg

¹⁶ There are two graphs on oracle bones excavated from the Fangchi Street site (Zhou Ertai 2003, p.24) but they do not match any Shang graphs, and it is tantalizing to think they might belong to the Ba-Shu script (undeciphered), which appears on bronze weapons from *circa* 5th century BCE (Sage 1992, Chapter 3).

¹⁷ By the term 'jade', I include objects made of nephrite, serpentine, and indeed a number of other minerals and stones which were used to make similar objects. '...Fewer than 6 percent, according to the [excavation] report, are actually nephrite.' (So 2001, p.154).

¹⁸ Rather than listing the published works here, I include them in individual footnotes as the work relates to a specific element of this paper.

¹⁹ Here, Shang means the culture associated with the Shang Dynasty as it is defined by the material culture excavated from royal tombs, architecture and inscriptions from oracle bones. The majority of oracle bones come from excavations at Xiaotun, in modern Anyang county, Henan Province.

²⁰ Texts include the *Shiji*, *Shanhaijing*, *Huainanzi*, *Chuci*, *Shuwang benji*, *Zhouli*, *Liji*, *Shangshu*, *Zhushujinian*, all of which come to us in forms written later than the fifth century BCE. While many of the texts are based on earlier documents and rites, and many sections of the texts have proved to be accurate (*eg* the *Shiji* Yinxi phase royal chronology, and portions of the *Zhushujinian* which discuss astronomical events), they cannot in their entirety be held as credible sources of Bronze Age history or cultic practices. Additionally, these texts were codified after the unification of the major Huaxia Warring States, those polities which represent the 'Chinese' homeland, of which Shu and Ba were on the western periphery and are not extensively mentioned as being great players during this time.

of this comparative study, is to use regional texts to describe Sanxingdui Culture. Correlative study is the common pursuit of many Sinologists and is valuable and necessary to our understanding of the Shang.²² Using regional texts written after the Chinese unification also has a place in Sanxingdui studies, but not in the current paper. It is the opinion of this author that at present we must first try to understand the artefacts (as they are ever expanding due to ongoing excavations at Jinsha) of Sanxingdui Culture within their native context, and then work to see them from the perspective of their neighbouring cultures. That is, we must try to understand them in the context from which they come to us, and not solely rely on texts written some thousand years after the demise of the culture and especially not texts written a thousand years after the demise of a wholly separate culture. It may yet be proved that Sanxingdui Culture is indeed the Shu mentioned in oracle bone (Figure 5) inscriptions,²³ and that the large protruding eyes of the monumental bronze masks do in fact represent the founder kings of Shu as described in the *Huayang guozhi*,²⁴ but as yet, the proof is insufficient. The following is an interpretation of the extant (and published) artefacts and architectural remains as they are seen in their native context. A motif may be compared with a like image in order to describe its 'universality', or to suggest the precedent of such a motif's meaning, but this is not intended to insinuate that the Sanxingdui images are a result of the influence of the cultures where similar images appear.

It is necessary to introduce some definitions and the methods behind the presentation of the motifs and objects which I believe represent the religious practices in Bronze Age Sichuan. First and foremost, it is necessary to distinguish the inhabitants of the Chengdu Plain from their counterparts in the rest of 'China'.²⁵ The 'Chinese' homeland was centred round the late Shang capital of Yinxi, excavated at Xiaotun, Anyang County, Henan Province, and extended

²¹ Sarah Allan has been working for many years on myths and legends in early China using both extant classic texts and the oracle bones. On a number of occasions she admits that a particular element of a myth or legend does not appear in the oracle bone graphs or inscriptions, but that the general rites and rituals discussed in the classic texts, when compared with the rituals laid out in the bone inscriptions prove to be accurate, and from this foundation builds a case for the pre-textual existence of such legends and myths. See Allan 1984, 1990, 1991.

²² Examples of this include the work of Sarah Allan, David Pankenier, and Li Xueqin.

²³ Sage 1992; Matsumaru & Takashima 1993; Wu Hung 1997, p.64; Liu Yang 2002, p.8.

²⁴ Peng Bangben 2002, p.80.

²⁵ China as we know it in terms of a cultural inheritance came into being in the 2nd century BCE when the state of Qin united the various warring states, and then standardized the political workings, writing, weights and measures, road systems and irrigation projects.

'primarily along the middle and lower stretches of the Yellow River'.²⁶ This is not to say that there weren't very far reaching relationships involving trade and therefore cultural exchange. Shang bronzes have been found as far south as Xin'gan, Jiangxi Province,²⁷ and the combination of Shang technology with southern decorative styles resulted in the bronze vessels excavated from the two sacrificial pits at Sanxingdui.²⁸ But it would be an injustice to Sanxingdui Culture to always discuss it in terms of its relationship to the Shang and Zhou Cultures. It seems clear given the contents of not only the pits, but several other factors²⁹ in Chengdu, Jinsha and in Sanxingdui cities that there were long established relationships not only with the Central Plains, but with cultures as distant in time and geography as the Liangzhu Culture of the lower Yangzi region. Exchange of luxury items does not necessarily indicate a simultaneous introduction of religious beliefs and certainly not political sovereignty; rather it signifies a common aesthetic appreciation, and cannot be extended without much more exact evidence. This way of viewing ancient Sichuan is in keeping with 'trend[s] in the field, [of viewing] China as a network of enduring regional traditions ('cultures') linked to specific ethnic groups that from prehistory preserved their innate essences, despite ongoing interaction....'³⁰ For now, Sanxingdui Culture will be understood to mean the culture associated with several archaeological sites, with modern Chengdu at its centre. These sites include Sanxingdui in Guanghan County, Fanchi Street and Shierqiao within Chengdu, Jinsha on the western edge of Chengdu, Yangzishan, and Zhuwajie; all of which were inhabited (in varying degrees) from about 2000 BCE and experienced a general period of prosperity during the 13th to 10th centuries. This was followed by a decline until

²⁶ Shaughnessy 1989. Although this article was written just after the two ritual pits were discovered at Sanxingdui, the arguments regarding the political influence of the Shang are still reasonable.

²⁷ Xin'gan: *Wenwu* 1991.10; Bagley 1993; Chen Fangmei 1999. The pits at Sanxingdui: Chen Xiandan 1999; Bagley 2001; Liu Yang 2002. Additionally, adobe bricks were used to form portions of the walls of Sanxingdui (see Xu 2001a), Wucheng, and are used in burials from Yanbulaq cemetery, Xinjiang Province (Li Shuicheng 1999). Additionally, orientation of the pits, altar at Yangzishan, and 'temple' building at Jinsha, and the tomb at Xin'gan all have non north-south orientations.

²⁸ According to Jay Xu, the many bronze *zun* and *lei* excavated from Sanxingdui pits 1 and 2, are of the types chiefly used in Zhongyuan ritual, but 'most have a distinctive style which identifies them as products of the middle Yangzi region' (Xu 2001b, p.141). Additionally, the hoard at Zhuwajie dates to Western Zhou, and contained a number of *lei* and an assortment of weapons. Two *zhi* bear Western Zhou Chinese inscriptions, but as Lothar von Falkenhausen (2001) explains, there are a number of theories as to the manufacture and dating of the *lei*. That said, whichever theory may be correct, none of them suggest that the vessels were made by Sanxingdui Culture during its period of prosperity (1200 – 850 BCE).

²⁹ These factors include bronze vessels, styles of jade and bronze weapons, architectural structures and divination bones all found in the various sites, including Fangchi Street and Shierqiao in Chengdu, Jinsha, Zhuwajie, and objects from the Sanxingdui pits.

³⁰ Nylan 2001, p.309. Interestingly, Wang Yi and Yan Jingsong propose to conduct DNA tests on remains from several sites in Sichuan. See Wang Yi 2004.

the mid 9th century when there seems to have been a collapse of the culture.³¹ The prime cities are located amidst the rivers and fertile soil of the Chengdu Plain, bounded on the west by the Min River and the Tuo River to the east.

In his paper on the meaning and explanation of Shang bronze motifs, Robert Bagley³² makes the point that a discussion of Shang bronze decoration should not exclusively interpret the decorations as having been necessarily intended by the artisans, to depict symbols of Shang religion. As example he uses the *taotie* motif of Erligang bronzes, and hypothesizes that if Anyang (and the associated bronzes and motifs) never existed, then a discussion of Shang bronzes would include Panlongcheng and Zhengzhou-Erligang decorations. His point is that it is not logical to exclude these earlier decorations, and thereby assume that Shang bronzes necessarily depict later Shang (and therefore Anyang) religious ideas. He notes that 'even if we could establish that the face-like motifs on Liangzhu jades are ancestors of the Shang *taotie* motif, we would not be entitled to conclude that Liangzhu religion and Shang religion had ideas or beliefs in common'.³³

I mention this because it seems a traditional habit among scholars of the various sites scattered throughout 'China' to continuously use Anyang as the source, or at least the standard of Bronze Age civil, social, and religious makeup. Indeed I too began my line of thought on Sanxingdui religion as a direct comparison with that of Anyang. This is accomplished primarily through use of oracle bone inscriptions, which are not histories or poems, but divinations inscribed on turtle plastron or ox scapula, and were used by the kings and their diviners for the purposes of confirming the auspicious and inauspicious activities surrounding the complexities of the practice of ancestor worship. Over the past 100 years of scholarship, the graphs on the bones have been debated and interpreted, and present an incredibly multifarious group of questions. Only a small portion of the graphs have been definitively transcribed into modern Chinese, and

³¹ Sanxingdui, Shierqiao and Fanchi Street all have been dated to as early as 2000 BCE, but the height of all these sites seems to have been between 1300 and 850 BCE (Yu Duan 1999). 'On the evidence, the end of the culture of Shierqiao corresponds in the Sichuan basin with a historical event in the course of which some large cities were destroyed.' (Sun Hua 2003, p.172)

³² Bagley 1990.

³³ Bagley 1990, p.53.

of the rest, the majority are undecipherable, leaving the remainders in a limbo of constantly changing interpretation.

It now seems to me that it is a more useful and indeed, a more accurate path, to take the activities and therefore the artworks created in the Chengdu Plain, by artisans of that region at their own face value. Instead of looking at the Chengdu Plain as a provincial, and quirky, outpost, I prefer to look at it as an individually developed culture with its own right to exist outside the sphere of Central Plains influence. Additionally, as Bagley states in his note that 'the adoption of pagan motifs by Christian art' was an integral phase in the development of Christian art,³⁴ so too could the motifs or ideas have been adopted by Sanxingdui Culture, and have, in the transfer, lost their original meaning. Therefore, items from Sanxingdui Culture which depict motifs similar to those found in Anyang do not necessarily reflect transference of the same ideas or inherent meanings of the decorations.

One specific example of a similar motif occurring in two distant cultures can be seen in the bird-man and mask features incised on a Liangzhu Culture *cong*.³⁵ Figure 2 shows a line drawing from such an object.³⁶ This particular motif is much discussed in regards to its relationship to the *taotie* motif which shows up so extensively on Shang bronze wares.³⁷ But here we look carefully at the clawed feet of the figure holding the mask. The line drawing shows that the 'feet' are not human feet, but something more like bird's claws or talons. Now, we see from Sanxingdui two examples of such creatures. First, a bronze finial (Figure 4) showing a bird-like creature with a human face strikingly similar to the bronze heads (Figures 7 and 14) and a bronze 'hybrid figure standing on birds'³⁸ (Figure 3a). Jay Xu described the later object as 'a figure wearing a tight skirt stand[ing] with its clawed feet on the heads of two birds.'³⁹ From the line drawing (Figure 3b) it is clear that the feet of the skirted figure are not human. They unmistakably resemble the

³⁴ Ibid.

³⁵ Sun Zhixin 1993.

³⁶ David Keightley (1995, p.129) cites Hayashi Minao (1989, pp.25-44, 60-63) as relating 'animal masks' of Liangzhu jades with sun and moon gods based on the assumption that 'the gods were adorned with feather headdresses that symbolized the radiation of fiery or watery *qi*' but he then lists a number of prominent scholars who currently argue the origins of such motifs.

³⁷ See Allan 1990; Li Xueqin 1990; Wang Tao 1990 for discussions on the origins and meaning of the *taotie* motif.

³⁸ This is the title given the object in Bagley 2001, p.128. It is a fragment of a larger object, the rest of which is not extant.

³⁹ Xu 2001b, p.128.

clawed feet of the Liangzhu *cong*. These motifs are at least one thousand years and a thousand kilometres from each other. Can the Sanxingdui figures be said to be descendents of the Liangzhu figure? On one hand yes, because there is more than just this motif to link the two cultures.⁴⁰ On the other hand, how reasonable is it that the original meaning could have survived over such time and distance? It is unlikely that the motif appears on objects associated with ritual is a mere coincidence. But do they represent the same deity, the same symbol? Probably not. Could the 'art' have endured so long and so arduously to then appear on a bronze figure so far in the future? Certainly. The motif continued, but it is most likely that its original meaning was lost long before it appeared in central Sichuan during their Bronze Age.

A number of scholars refer to Sanxingdui Culture as the ancient Shu kingdom.⁴¹ Oracle bone inscriptions contain several graphs (Figure 5) which have various interpretations,⁴² including the character which denotes the kingdom of Shu (蜀). Some of the arguments for referring to Sanxingdui as the Shu kingdom are intriguing,⁴³ but mainly because 'currently available evidence does not justify connecting Sanxingdui and Shu in this way'⁴⁴ I will not refer to Sanxingdui Culture as ancient Shu. Although, as new archaeological discoveries are happening every day in Sichuan, it seems that some conclusion to this debate may not be far off. This particular problem characterizes a more general predicament when trying to use Zhongyuan Culture to flesh out that of Sanxingdui. We know quite a lot about Anyang royal society from the

⁴⁰ 'Some of the *bi* and *cong* [from Liangzhu Culture sites] were in fragments when found and bore traces of burning, suggesting that some kind of ceremony involving breaking the jades and burning was performed at the burial' (Sun Zhixin 1993, p.18). Many of the jade and bronze objects from the Sanxingdui ritual pits were also purposely broken and burned prior to burial. 'The evidence of burning, the breaking up of animal remains and the passageway specially made at pit No1, indicate that there was an organized ritual accompanying the burying of objects.' (Chen Xiandan 1999, p.171) Additionally, in Shang burials, some grave goods may have been intentionally damaged during the burial ritual, *eg* pottery shards which were scattered on the secondary ledge and on top of the coffin. 'It is clear that many jade and bronze weapons were also broken or bent as part of the funeral rite.' (Tang Jigen 1999, p.176)

⁴¹ Liu Yang 2002; Wu Hung 1997; Peng Bangben 2002; Sage 1992; Yu Duan 1999; Chen Xiandan 1999 all refer to Sanxingdui Culture as either 'early Shu' or discuss the archaeological findings in terms of, the as yet unproven, royal chronology which appears in the *Shuwang benji*.

⁴² See Ito & Takashima 1996; Keightley 1978, 1995, 1997a, 1997b, 2001; Matsumaru & Takashima 1993; Serruys 1974; Shaughnessy 1997 for oracle bone graph studies.

⁴³ See Peng Bangben 2002 for a number of arguments, some of which are based on lost Shu texts, and a discussion of *zongmu* or 'perpendicular eyes' which connect the protruding eyes of the Sanxingdui bronze masks to Cancong, the mythical founder of the Shu kingdom. Also see Liu Yang 2002, p.8 for similar remarks. See Chen Shen 2002, p.10 for a discussion of the inscriptions on two *zhi* from Zhuwajie which 'imply that Shu people from Sichuan were allied with Zhou troops in battle.'

⁴⁴ Xu 2001a, p.21.

many tombs and oracle bone inscriptions. But these are limited in what they say about the daily life, or even what they say about who was worshipped.⁴⁵ Additionally, the precise location of the Shu mentioned in the oracle bones is still widely debated. Therefore, even the oracle bones cannot yet be used as reliable sources for the history, much less, the religion of Sichuan.

This leaves us with what? As stated in the introduction, we have a conglomeration of architecture, bronze, stone, jade and gold objects with unique decorations. It is precisely the unparalleled design of these artefacts which creates a picture of the indigenous religious practices. Upon this framework can then be built a clearer picture of how this culture interacted with its neighbours, and became an integral player in the development of Chinese civilization.

⁴⁵ See Chang 2000 for debates about the meaning of Di, or Shang Di, and whether or not some of the earliest ancestors were indeed worshipped as gods and not ancestors.

CHAPTER 2 – RELIGION – MAN IN RITUAL

Much of the resources of the people of Sanxingdui Culture were expended on architecture. Sanxingdui city had walls which were 40 metres wide at the base, tapering to 20 meters at the top. These monumental walls and their possible purposes are discussed by Yu Duan. Analysis of some major differences between Sanxingdui and the city which lies beneath modern Chengdu shows that the two urban locations had quite different purposes, one centred round ritual, the other, economics.⁴⁶ Interestingly, there has not been discovered a city wall surrounding the 10 square kilometre area comprising the site of Shierqiao,⁴⁷ nor around the site at Jinsha.⁴⁸ There is however a key structure located just north of Chengdu at Yangzishan. Here a massive man-made three-tiered platform was built. This structure, covering a 'total area of over 10,000 square metres' is oriented 55° as are the pits from Sanxingdui.⁴⁹

Newly excavated architecture at Jinsha reflects an equally serious attention to powerful building design. A structure 300 square metres large, paved with sun-baked bricks was discovered within an arc of a circle 150 metres long. The complete significance of this building is not yet known, but its orientation is the same as that of the pits at Sanxingdui and the platform at Yangzishan.⁵⁰ Yet another city, located just 30 kilometres north of Jinsha is Zhuwajie, which also experienced a period of prosperity in the 11th and 10th centuries BCE. Together, these structures indicate an advanced level of manufacture, resources and man-power dedicated to building and maintenance and use by a large number of people. Monumentality in architecture and construction of permanent symbols of political and religious power provide a vehicle by which the ruling elite may control and mobilize the masses.

I take as my fundamental guide for the definition of religion, Tong Enzheng and his source, Monsignor Le Roy who defined religion as 'the ensemble of beliefs, obligations and practices by which man recognizes the supernatural world, performs his duties towards it, and asks for help

⁴⁶ Yu Duan 1999.

⁴⁷ Yu Duan 1999, p.97.

⁴⁸ Sun Hua 2003, p.172.

⁴⁹ Yu Duan 1999, p.97.

⁵⁰ Sun Hua 2003, p.171.

from it'.⁵¹ 'Here the term 'beliefs' refers to humans' view of the cosmos and their sense of their own value; by 'obligations' are meant the disciplines and doctrines determined by these beliefs, whereas 'practices' refers to rituals and ceremonies representing them.'⁵² The religion of Sanxingdui Culture should be explored using these terms, where we can see from the objects themselves references to the culture's sense of the world – natural and supernatural – and how they fit into it, as well as the specific ritual activities executed with respect to these entities. We cannot be certain if they were monotheistic or polytheistic, or even if they defined the mountains and birds as deities at all. We can't really even speak of their practices as shamanistic, as 'practitioners ... with the ability to communicate with spirits through divination, sacrifice, exorcism, or spells'.⁵³ Nor can we say with any certainty that the Sanxingdui people were trying to control nature when they practiced their religion. However, we might be able to say that there were priests, and other officials — wardens — associated with religious practice.

Priests 'emerge from stratified societies, and they are associated with recognized religious organizations and with temples or churches. In many cases they retain special hairstyles and dress. Unlike sorcerers and witches, priests cannot be self-identified. Their knowledge is derived from systematic training and their status must be formally recognized. Priests are experts on the interpretation of theological texts, on the performance of rituals, and on guiding the religious life of other people. While they are, like magicians, sorcerers, and witches, the intermediaries between human and supernatural beings, they do not generally possess supernatural powers. Their ranks and functions are strictly defined, reflecting the class stratification and labour specification of the secular world.'⁵⁴

⁵¹ Le Roy 1922, p.33.

⁵² Tong Enzheng 2002, p.29.

⁵³ Tong Enzheng 2002, p.31. Turtle plastrons with burned holes resembling those used in Anyang divination have been found at Fanchi Street (Zhou Ertai 2003), and in Jinsha (Zhu Zhangyi *et al* 2002). There appear two graphs on the Fanchi Street bones, but they do not correspond to any Shang graphs. Although it is reasonable to assume the bones were used in divination, it cannot be known whether or not they were used in the same way as those of Anyang-Yinxu.

⁵⁴ Tong Enzheng 2002, p.33.

The standing figure⁵⁵ (Figures 6a and 6b) and numerous bronze heads⁵⁶ (Figures 7 and 14) excavated from the ritual pits at Sanxingdui may represent such a person, and other Very Important Persons associated with religious practices. Given the ritual nature of the pits, it is reasonable that all the objects buried there belonged to the same spiritual sphere., The standing figure is obviously the Most Important Person, therefore it stands to reason that he represents a 'high priest' or leader of religious practice. The secular and spiritual leader may have been the same person, thereby increasing the power of the ruling elite over nearly every aspect of communal life.

There seems a differentiation here between these wardens and the diviners of the Shang kings. Where the diviners acted in the role of shaman — communicating with the spirits and interpreting the cracks made on turtle plastrons⁵⁷ — the Sanxingdui wardens were perhaps members of the religious community who during special ceremonies took on the persona of a spirit. It is interesting to note that according to Jay Xu, 'at the time of excavation the lips, nostrils and ear hollows could be seen to have been smeared with vermilion; judging from the points it was applied to, this might not be colouring but something ritually offered for the head to taste, smell, and hear (or something that gave it the power to breathe, hear, and speak)'.⁵⁸ We can interpret either of these suggestions to mean essentially the same thing, that these heads were not ordinary characters, but members of the community entrusted, by right or selection, with the handling of spiritual matters, either with ceremonial objects or with ceremonial activities. We might also take these heads smeared with vermilion to be gods, or spirits of the many mountains and birds Sanxingdui ritual objects depict. Except that in the very scenes of these rituals, persons wearing masks of the same style are seen offering articles, not receiving them. See Figures 8a

⁵⁵ See Xu 2001b; Liu Yang 2002.

⁵⁶ The heads can be classified into groups based on their headdress and subtle differentiations in facial features. I take as evidence that these heads represent ritual participants from the scene depicted on the jade blade (Figure 11).

⁵⁷ Apparently in Period I (time of WuDi) divinations, however, the prognostications were made by the king himself. But in later periods, and certainly by Period V (the end of the Shang Dynasty) it appears that the diviners alone were responsible for the interpretations (See Ito and Takashima 1996). Mark Edward Lewis (1990) echoes these ideas in his discussion of the role of violence in early China, reasonably extending some of his textual evidence for the Zhou, back to the Shang, he states that '...the link between taking life and authority was emphasized by the fact that the king and the feudal lords acted as their own sacrificers; they personally performed the sacrifices in their own states' (Lewis 1990, p.21). So the role of the diviner is somewhat lessened in the early periods, but develops into a greater, more powerful role as the rites and rituals became standardized. He (she?) may have retained a place between the spirits and the people in terms of his superior or special knowledge and understanding of the supernatural world.

⁵⁸ Xu 2001b, p.96.

and 8b (the bronze altar); Figure 9 (woman with *zun*); Figure 11 (jade blade with incised decoration); Figures 12a and 12b (small bronze figure with forked blade) for examples. From this, the heads can only represent humans who bore a special responsibility in the ritual ethos of the community. David Freedberg relates an anthropological story which may shed some light on this situation. The Nupe people of Nigeria had a ceremony involving the wearing of a 'mask' made of white fabric which was suspended from a wheel-shaped bamboo frame several feet above the head, and covering the whole of the body of the participant. The point for us here is to know that once the participant entered the 'mask' he ceased to be just any member of the community, he became the spirit.⁵⁹ As the bronze heads themselves lack eye-holes it is unlikely that they were worn, but perhaps they represent wood or fabric masks that were worn in ceremony, thereby transforming the participant into a spirit. The Sanxingdui heads were not implements, but fixed representations of different ranks of religious persona. They may represent perishable masks worn by participants, storage for the spirits therein, thus creating the need to keep them 'alive' by covering the orifices in vermillion.

'Peoples of all regions of the world and of all periods show a persistent tendency to identify sources of, or attribute causes to, phenomena, and to consider among those causes demons, spirits and gods.'⁶⁰ So, why aren't there any overt representations of spirits or deities in Sanxingdui Culture? It was a society evidently much absorbed with recreating man in his ritual context, but apparently did not feel the same desire to depict their deities. There are two very divergent representations of man presented in Sanxingdui Culture. The first being bronze works of religious Persons, including life-sized heads, some with masks of gold, traces of black-painted irises, they can be divided into categories (or ranks), with realistic hairstyles; works of monumental masks (the largest is 66 centimetres high by 138 centimetres wide);⁶¹ a single work of a standing figure on a pedestal; miniature representations of persons with ritual implements; and persons engaged in ritual activity. The second being stone figures of slaves⁶² (Figures 13a and 13b), depicted with variously shaped eyes, but all kneeling naked, with braided hair, and

⁵⁹ Freedberg 1989, p.31.

⁶⁰ Rawson 1998, p.110.

⁶¹ Xu 2001b, p.108. Jessica Rawson regards the standing figure and monumental masks of Sanxingdui as 'real presentations of feared and awesome beings of their makers' universe' (1998, p.122).

⁶² Several of these figures are discussed by Wu Hung (1997) and are said to come from Yueliangwan (a modern farm north of Sanxingdui, but within the ancient city walls). Also see Graham 1934 and Tong Enzheng & Feng Hanji 1979, on finds from Fanchi Street site in Chengdu.

their hands bound behind their backs. What can be said about the beliefs of a society who render only these two incongruous subjects of humanity? Both the bronze heads (as mentioned above) and the stone slave figures were found with remnants of vermilion spread on their mouths.⁶³ Jay Xu notes that the stone figures show remains of having been painted with pigments: red on the ears, pupils and surround in black, blue irises.⁶⁴ What does this mean? It somehow seems illogical to treat ritual participants and slaves with the same regard for the 'life' of the image, unless, both are representations of participants involved in a ritual. From this, we might believe that the stone kneeling figures embody sacrificial victims and the purpose of recreating and then keeping them 'alive' in stone was to facilitate man's nature become divine through sacrifice. Why would they not depict their gods but depict victims? Does the depiction of slaves, where no other realistic human depiction is found, indicate a distaste for 'capturing the soul' of one of their own? Interestingly, no mention is made of bronze axes which are commonly associated with human sacrifice such as those found at Anyang and Xin'gan.⁶⁵ How the bronze 'wardens' and the stone 'slaves' might be related still needs much research. Jay Xu expressed his expectations that as excavations continue at Jinsha, many more of these figures will be revealed.⁶⁶ Perhaps a more definitive answer still lies buried with them.

WOMAN IN RITUAL

What was the role of women in Sanxingdui ritual? We have but one example of a women participating in a ritual. But do we really? Figure 9 shows a kneeling woman presenting a covered *zun*, figure 7 shows one of the bronze heads, one of those I term 'warden'. Both objects were excavated from Pit 2. As I have not read anywhere that these heads may represent women, at first glance I too assumed that they must have been men. They certainly have a serious and angular look, which is often contradictory to our idea of how a woman, especially one associated with ritual might be depicted. We think of the voluptuous clay sculptures of Hongshan Culture for example, soft and round and full of procreative juices. But, when these two heads are put side

⁶³ Zhu Zhangyi *etal* 2002; Wu Hung 1997.

⁶⁴ Jay Xu 2003, p.178. The bronze heads had painted black eyes, but here the eyes are blue. This most likely represents two different ethnic groups. But it does not necessarily mean that the two groups were not living together within the same community, although it does point to a dominant and a subordinate group.

⁶⁵ Bagley 1993, p.33.

⁶⁶ Xu 2003, p.178.

by side, it is possible that some of the bronze heads may represent women. After all, we do have one very concrete example of a woman, wearing such a mask with heavy eyebrows, large eyes and an angular mouth unquestionably taking part in ceremony. A number of the bronze masks have braided pigtails, as do the many stone slave objects, but some of them do not, just as this woman does not. As yet we do not have enough evidence to say definitively what the difference in hair styles were between men and women. Given the similarity between the 'wardens' hairstyle and that of the 'slave' figures, wearing long hair braided at the back may have been a common fashion, and not restricted to one class, gender, or even ethnicity.

While there don't appear to be any overt examples of fecundity symbols in Sanxingdui Culture, they may have, by the mid-Bronze age, lost their obvious function, and been replaced by symbols which we today cannot readily recognize. Even our lone woman lacks the prominent signs of fertility which are often associated with worship of the sun—large breasts and hips. She, like many of the male figures is dressed in a short skirt. Hers however is not as ornately decorated as many of the male participants. This may only indicate a differentiation between their specific duties involved in the ceremony. For a comparison of the differences in costume, look at the two sets of individuals represented on the bronze 'altar' (Figures 8a and 8b), in which one group is much more simply dressed (much like the woman). It is entirely possible that women played a much more substantial role in Sanxingdui cultic practices than we know.

CHAPTER 3 – MOTIFS - MOUNTAIN DIETIES

I have described a number of the figures associated with ritual. Now we must look at them in their service. I refer again to the major scenes of ritual, all of which prominently depict mountains. Compare the line drawings from the 'altar' (Figures 8a and 8b) and the blade (Figure 11), with the pattern on top of the *zun* (Figure 9). Among these representations, mountains figure most prominently.

Practically a narration, the scenes on the jade blade give the best idea of such a ritual. The blade is divided into two opposite panels, each with five registers. The registers portray, from top to bottom: 1) a row of standing participants with flat hats and curly shoes; 2) two mountains with a rectangular shaped object with 'fiery' protrusions between them, and flanked on either side by indistinguishable objects; 3) a row of geometric shapes; 4) three kneeling participants wearing tall peak-shaped hats; 5) two more mountains, but with a notched, forked blade to one side. This panel is repeated in reverse on the lower end and tang of the blade. The object between the two mountains on register 2) is likely to be either a long, flat dish filled with a burning sacrifice, or possibly, a jade knife like the one in Figure 17. The geometric shapes appear on several other objects, including tattoos, textile embroidery (see the skirt on figure 3a (3b line drawing) and decoration of a bronze snake.⁶⁷ Taken as an entire scene we can see that standing wardens and kneeling participants make an offering or sacrifice to the mountain itself, or to what the mountain may symbolize. Each of the eight mountains depicted is further decorated with what has been described as a 'flat altar inside a tent-like structure with sun and trailing clouds above'.⁶⁸ Jenny So calls the two shapes on either side of the mountains 'a hand or claw'⁶⁹ and identifies the curved object in between the two mountains on register 5) as possibly an 'elephant tusk'.⁷⁰

It is possible to compare the kneeling figures of the blade (register 4)) with the small bronze kneeling figure (Figures 12a and 12b) who is holding in his hands a forked blade. In his

⁶⁷ While these geometric patterns appear throughout Sanxingdui Culture decorations, they are not unique, and appear in numerous other cultural spheres.

⁶⁸ So 2001, p.162. Jenny So here refers to the interpretation by Chen De'an 1990, 'Qian shi Sanxingdui erhao jisikeng chutu de 'bianzhang' tu'an', *Nanfang minzu kaogu* 1990.3, pp.85-90.

⁶⁹ So 2001, p.162.

⁷⁰ Ibid.

assessment of the figure, Jay Xu states that 'it is the only evidence ever found bearing on the manipulation of jade and stone forked blades'.⁷¹ 'However, it must immediately be added that the evidence may well apply only to the way this mysterious shape was used at Sanxingdui.'⁷² Jay Xu argues, convincingly, that forked blades are widely distributed throughout China (Figure 15) and that regional uses may have been enacted. I concur with this logic. Therefore, the Sanxingdui Culture forked blade must remain a mystery until more concrete evidence can better explain their meaning. For the time being, we might be satisfied with evidence that they were involved in ritual associated with mountain deities.⁷³

JADE

'In several ways, the physical and the material not only reveal but also contribute to what we can call 'thought' ... ways in which artefacts reveal the assumptions and intentions of their makers and users. ... The artefacts do not simply store; they are integral to the process of forming the beliefs and of bringing them into being.'⁷⁴ This occurs at the very base of an immediate and tactile connection between the medium and the artisan. What may be observed in nature or felt in terms of relating to the existence and purpose of an individual within his society and the larger cosmos can be given physical (and therefore inherent) representation. The individual chooses to make manifest the ideas which may have been originally inspired by the medium. The form and decoration of the object then take on their own life and perpetuate the fundamental connection. Jade is a prime example in that wherever it is found it is keenly linked to the spiritual personality of the community.⁷⁵ As has just been discussed, jade⁷⁶ was a key element of the Sanxingdui Culture artisan. Of the artefacts excavated, the majority belong to the jade category.⁷⁷

⁷¹ Xu 2001b, p.151.

⁷² Ibid.

⁷³ See Appendix A for scholarly discourse on the purposes of jade objects.

⁷⁴ Rawson 1998, p.107.

⁷⁵ Take for example the many similarities between the uses of jade in neolithic China with those of Mesoamerica. The highly technical aspects of finding and carving jade appear to be prohibitive to an early society which might seem to have many better things to do than spend months (in some cases) carving a single object. However, the innate beauty of the stone itself may be *a priori* to its ritual significance, making it worth the time and effort.

⁷⁶ See Note 15.

⁷⁷ From the two pits at Sanxingdui, more than two-hundred jade and stone objects were excavated. From Jinsha as well, the majority of recovered artefacts are of jade and stone. See So 2001; Beijing 2002; and Zhu Zhangyi *etal* 2002, p.5 who reports that of the 2000 objects excavated from Jinsha, 900 are of jade and 300 of stone.

What do all these jade objects⁷⁸ tell us of the ritual life of Sanxingdui Culture? As we have seen on the narrative registers of one blade from Sanxingdui, they can show what sort of rituals were conducted and by whom. They tell us of the intimate relationship between the material and the object. Unfortunately they cannot tell us more specifically how they were used or what the shapes symbolized to the people of Jinsha and the other communities. Certainly they meant a great deal to the many artisans and persons associated with their 'mining' and artistry, in addition to the many persons who used them in sacrifice or adoration of their deity. It is reported that some burials from Jinsha contained jade objects,⁷⁹ but the report did not specify what shapes and in what numbers. Representative of the jade objects from both sites are jade blades (Figure 16), *ge* (Figure 18), and notched *bi* (Figure 19). Most unusual however are the decorations on these objects. Figure 20a is a forked blade from Sanxingdui which is a standard forked blade, but at the top, a bird has been cut out. Additionally, the blade is incised with another, elaborately carved blade. What is the significance of decorating an object with a representation of itself? Another blade from Jinsha, while damaged, is presumed to have had a similar cut-out at the tip. From Jinsha an excellent *cong* (Figure 21) with a *taotie* decoration very similar to Liangzhu style *cong*. While it is still not possible to know their meaning, we can understand that they contained both ritual and material significance.

So, what to do with our forked blade from Sanxingdui? Is it enough to say that it was clearly being presented to someone or something. We cannot be sure, but from the way the object is depicted by the culture itself, this blade was used in a ritual either to, or at, a mountain, and that this mountain (or the deity therein) was revered and viewed with awe. For comparison I direct your attention to Figure 32 which, while not contemporary with Sanxingdui culture may offer a clue as to the meaning of the mountains so popular in Sanxingdui art. This African mask depicts a solar disc between a band of what might be regarded as mountains. However, we are told the triangles represent the rising of a new moon. It is certainly logical that along with the sun, certain other cosmological bodies and events were also observed and are represented in Sanxingdui

⁷⁸ In the following discussion I use the Zhongyuan terms for many of the jade objects found at Sanxingdui Culture sites. Although their use may not have been the same, it is highly unlikely that the shapes themselves were developed independently, therefore generally, it can be useful to call them by their 'Chinese' name.

⁷⁹ Zhu Zhangyi *etal* 2002, p.5.

religious art. The people of Sanxingdui Culture may have believed that mysterious beings inhabited the mountains, or rites and rituals may have been performed on their peaks.

BIRDS

Of all life, birds inhabit a most unique position, for they exist simultaneously within and without the world of man. They rest so tangibly on a nearby tree, yet fly into any building and then can't escape, and more importantly they fly away where no man can reach or see them. Some of them fly away when the weather turns cold, but return when it is warm again, when the trees are in bud. Some of them can be trained – a testimony to the bird's intelligence, and to man's power over nature. A number of the birds represented at Sanxingdui are depicted in a 'natural' setting, while some perch on the tip of a blade. Birds do not decorate objects rather they are in themselves, objects of adoration. Perhaps these are the symbols of fertility that often accompany worship of the sun. A characteristic feature of Sanxingdui Culture is its birds. First observed as handles on pottery dippers (Figures 22a and 22b), they come to hold a central position in the culture of the Chengdu Plain. As we have seen, they are unified with humans to represent supernatural beings. They stand guard on altars and alight on the branches of trees. They circle the sun.

I refer again to the bronze altar (Figure 8a) for on each corner of the uppermost section, stands a majestic bird, who appears to be guarding, or supervising the activities below. They are depicted realistically with large wings and thick clawed feet (which also appear on the bird-man bronze figures). For comparison we look at the birds standing on branches of a bronze tree. The 'great' tree is nearly four meters tall, and is composed of nine branches, and upon each branch, stands a bird in a blossom (Figures 23a and 23b). At the base of the tree is a mythical animal which in many ways resembles the beast at the base of the bronze 'altar' (Figure 8a). At Sanxingdui, three of these trees were discovered, but restorers were able to reconstruct only one.⁸⁰ It is assumed that the other trees, although smaller, were much the same as this one.⁸¹ These three trees may represent an *axis mundi* — the avenue by which the natural and the supernatural worlds might

⁸⁰ Xu 2001b, p.116.

⁸¹ Ibid.

communicate.⁸² Less likely, though extremely tantalizing is that this tree represents a mythical tree inhabited by the sun-birds of Chinese mythology.⁸³ Figure 34 shows several petroglyphs from Saimaly Tash, Kyrgyzstan which depict solar deities together with deer. These links between sun worship, fertility and the animal world may also be represented by the Great Tree of Sanxingdui.

Although it is clear that birds were revered, it is not evident that they were worshiped. They, like the standing figures on the 'altar' appear to be wardens of the ritual, not necessarily recipients of it. And, some of them, like the human 'wardens' and 'slaves' received treatment of vermillion. This is most evident in the largest bronze representation of a bird.⁸⁴ Figure 24 shows this image. 'The eye sockets and the opening in the beak were painted with vermillion, still visible on the left side of the head.'⁸⁵ From this we can only assume that this particular representation was meant to be 'alive' in the same way other figures were. Interestingly, no mention is made of vermillion being smeared on the orifices of a very realistically portrayed rooster.⁸⁶ Liu Yang suggests 'that the bird served as the emblem or symbol of a kinship group in Sanxingdui.'⁸⁷ This argument is largely based on the proliferation of birds in art at Sanxingdui, including the development of the bird-handled pottery which belongs to Period II and Period III of cultural development.⁸⁸ Liu Yang's article was written prior to many of the discoveries at Jinsha, therefore this theory may not quite pan out. The gold 'crown' which is decorated in a similar fashion to the gold staff of Sanxingdui is likely to belong among the royal adornments. The presence of the same motif on likely secular objects indicates that the political situation (ruling family) may not have changed in relation to the burial of the two ritual pits. The significance of the birds may be related to a wider tribal iconography rather than restricted to a specific kin, although this may be clarified with more finds at Jinsha. What does seem clear is that there was a developmental stage from which birds became a prominent motif in Sanxingdui Culture, and even after the demise of the religious centre at Sanxingdui, the power of their image continued in

⁸² Tong Enzheng 2002, p.34.

⁸³ See Appendix B for a discussion of such theories.

⁸⁴ The head is 40.3cm high. Xu 2001b, p.125.

⁸⁵ Xu 2001b, p.125.

⁸⁶ Xu 2001b, p.124.

⁸⁷ Liu Yang 2002, p.12.

⁸⁸ Liu Yang 2002, p.11.

secular form at Jinsha. Bird motifs are a prominent feature of the Shierqiao city as well, and mark the Yu cemetery at Baoji in Shaanxi province, as relatives of the Chengdu Plain.⁸⁹

ROYAL REGALIA

Sometime after the objects were buried in the pits at Sanxingdui, the city of Jinsha was coming into its period of prosperity.⁹⁰ This archaeological site has only begun to be explored⁹¹ and so the objects thus far excavated may only be a hint of what is really beneath the soil. From Period II at Jinsha (middle 11th century – 10th century BCE)⁹² we have a disc of gold foil, with a remarkable cut out design (Figure 25). Taken together with the bronze collared disc with incised design (Figures 27a and 27b) we have two very clear representations of birds in flight, depicted inside a disc. At first glance, these might reinforce the mythology of birds in the sun, or of birds being the sun, or of the sun being represented by a bird. Sanxingdui Culture unmistakably held birds to be mythical and powerful beings.⁹³ As evidence we have the bird-man hybrid of Figure 3a and a smaller bronze finial depicting a similar union (Figure 4). Whether or not these two figures represent the same creature or different ones, whether or not they are meant to be spirits of a real person or legend cannot be known. What is probable is that they represent a view of a supernatural world, and the relationship between that world and this one. Indeed, it seems that Sanxingdui Culture believed that sometimes, man himself could be supernatural. Unique among the material culture these hybrids are an invention of man's mind. They depict a synthesis of the natural world with that of man's religious beliefs. They are the closest thing to deities we find in Sanxingdui Culture.

If we take the intimate symbolism of birds and the sun as axiomatic, then the gold disc of Figure 25 can be nothing other than a very clear representation of three birds in flight within (or around) the sun, meaning the sun and the birds are one. It is also understood that gold was, and still is, a precious resource and that only the most important and meaningful motifs would appear on it.

⁸⁹ Sun Hua 2003, p.172.

⁹⁰ Sun Hua 2003, p.167.

⁹¹ The Institute of Archaeology in cooperation with the Association for the Heritage of Chengdu conducted three excavations of the site between 1995 and 2001. Sun Hua 2003, p.167.

⁹² Sun Hua 2003, p.168.

⁹³ Sun Hua 2003, p.171.

The object is very small, only 12.5 centimetres in diameter.⁹⁴ It could not have been part of the ritual implements affixed to temple banners. It is also unlikely that it was attached to a wooden tablet or box as there do not appear to be any holes for such a purpose. Being so thin, perhaps it was part of the accoutrements of the king, or the high priest (these two may have been the same person). A precious item to be kept safely packed away, used only in the coronation ceremony of a new ruler, or high priest. The simple and abstract shape of the birds directly contrasts to every other representation of birds seen from any of the Sanxingdui Culture sites. The style may have counterparts in the hybrid bird-man bronze figure (Figures 3a and 3b). Here too, the neck of the bird is elongated and the wing feathers curl back in a loop-ti-loop.

Figures 27a and 27b show a bronze collared disc⁹⁵ with three birds in flight incised in the area between the collar and the outer rim. The outer rim is emphasized by two incised concentric circles. It is smaller than the gold disc, being only 10.36 centimetres in diameter. At the 'base' of the disc is a rectangular short handle.⁹⁶ It is suggested that this handle is a tenon to be inserted or combined with a wood support.⁹⁷ It is logical then to call this object a standard, which would have been attached to a wooden pole, and then held or displayed by a priest in ceremonial fashion. This bronze disc, together with the gold disc and other gold objects⁹⁸ belonged to the secular realm and were part of the adornments of the ruler.⁹⁹ The proliferation of sacred images among religious and secular objects strongly suggests that the ruling person was indeed both the spiritual as well as political leader of the community, and that this position was associated with worship of the sun.

⁹⁴ Beijing 2002.

⁹⁵ The bronze collared disc is a characteristic of Sanxingdui Culture, as there are no other examples of such a jade object being reproduced in bronze. Xu 2001a, p.33.

⁹⁶ Ibid p61.

⁹⁷ Ibid p61.

⁹⁸ These gold items include from Sanxingdui, a gold 'sheath' length 142cm which contained traces of burnt wood when it was excavated (Xu 2001b, p.71). The motif of an arrow passing a bird and piercing a fish, appears again on a gold diadem from Jinsha (Beijing 2002, p.23). The Sanxingdui staff also depicts several heads wearing earrings and pronged headdresses, while the Jinsha piece shows an abstract circle containing two smaller circles (like eyes?) with two lines above and below. Sanxingdui also yielded a gold foil tiger, and a mask, and a gold ingot (Xu 2001b, p.71). From Jinsha gold foil toads, and a plaque decorated with what looks like narwhale (Beijing 2002, pp.27, 32).

⁹⁹ Much of this bird-fish symbolism is used to prove the historicity of the texts, which include tales of Shu kingdom founder kings with unusual eyes. See Peng Bangben 2002.

These solar images simultaneously belong to both the secular and the sacred. The birds are rendered with fluid, flowing lines showing their hooked beaks (see again Figure 3a and Figure 4), and back-curving wings, and at the end of elongated legs, claws. The square hooked beak is a prominent feature of nearly every bird represented in Sanxingdui Culture. The style of this collared disc reflects a number of jade collared discs found at Sanxingdui, which have their origins, like the hybrid bird-man in Liangzhu Culture.¹⁰⁰ There is evidence of bird and flaming discs as far back as Hemudu Culture (5th and 4th millennia BCE),¹⁰¹ where on a wood plaque, are depicted just such a scene (Figure 26). Birds were a prominent motif in Hemudu Culture art.¹⁰² But, as with the Liangzhu bird-man motif, can the Jinsha discs be said to be descendents of such a motif?

Another set of small objects, appearing both in gold and in bronze¹⁰³ are several 'cone' shaped items. Figure 28 shows one in gold.¹⁰⁴ This object is 11.62 centimetres in diameter, and stands 4.81 centimetres tall. There is a small perforation at the peak (1.12 centimetres wide) through which a ribbon might have been run.¹⁰⁵ It is suggested that they might have been used as a sort of chime.¹⁰⁶ But for comparison, I present a photograph (Figure 29) of a reconstruction of the clothing and objects found in a burial from Egtved, Denmark, dated 1370 BCE.¹⁰⁷ The gold 'cone' shaped object affixed to the girl's belt is understood to represent the sun. Could these distant objects have had a similar purpose? Since the exact location of the gold and bronze objects from Jinsha is not published, I assume they were not excavated from burials. However, it is reasonable to believe that they may belong, with the previously mentioned items, among the royal regalia.

¹⁰⁰ See Note 41 for discussion of the Liangzhu connections with the Chengdu Plain. The concept that there may be a relationship between motifs and implement style between Sichuan and the eastern end of the Yangzi is also echoed in Beijing 2002, p.61.

¹⁰¹ Chang 1986, p.208.

¹⁰² Chang 1986, p.212.

¹⁰³ Beijing 2002, pp.67, p71.

¹⁰⁴ Beijing 2002, p.35.

¹⁰⁵ Ibid.

¹⁰⁶ Ibid.

¹⁰⁷ Image came from http://www.oakview.demon.co.uk/bronze_age/egtved.html

'SOLAR' MOTIFS

These small objects must have been for an entirely different use than the large bronze discs from Sanxingdui Pit 2 (Figure 30) which measure 84 centimetres in diameter.¹⁰⁸ At first glance, this object appears to be a wheel, or a bronze decoration for a wooden wheel. Its size is appropriate, and it has holes along the outer rim for attaching it to something. Fragments of six such objects were excavated.¹⁰⁹ Indeed, it has been suggested that it was just such a device, probably for the wheels of a ritual chariot¹¹⁰ to carry an important icon or Important Person in a ceremonial procession. Jay Xu suggests an architectural setting, or perhaps a shield.¹¹¹ Given the proliferation of mountains among Sanxingdui Culture ritual, is it possible that this bronze object is not necessarily an object in itself, but a frame of sorts? The five open areas caused by the 'spokes' might be meant to represent five sacred peaks surrounding a central 'eye'. The bulbous centre does in many ways resemble the protruding centre on many of the disembodied 'eye' plaques (Figure 35). I suggest that they were affixed to perishable temple banners. But as large, simple motifs fixed to silk or wooden tablets, they could easily have been used in a ceremonial procession, or been a fixed part of the temple complex. They were certainly meant for everyone to see. The same motif is seen elsewhere on Sanxingdui bronze works, such as nostrils on the mythical beast of the altar (Figure 3b). But given the variety of the motif, it cannot be assumed that it represents the sun. What is the significance of an image of the supreme solar deity as the nostril on a mythic beast? However, given the precedent for depicting the sun as a wheel (Figure 31) the Sanxingdui spoked objects may indeed represent solar discs.

Another motif is the 'sun burst' or whorl pattern which is even more prevalent at both Sanxingdui and Jinsha. This can most clearly be seen as the inner portion of the gold disc with cut-out birds (Figures 25) but also appears on the headdress of a small copper figure from Jinsha (Figures 10a and 10b). But in Sanxingdui it appears as a spiral motif having five, six, or sometimes seven 'tendrils'. It might be easy to say that this is just an aesthetically pleasing

¹⁰⁸ Xu 2001b, p.135.

¹⁰⁹ Xu 2001b, p.135.

¹¹⁰ Barbieri-Low 2000. But in conversation (by phone, 2 July 2004), Dr. Barbieri-Low said that he has since changed his position on the probability that these objects were affixed to chariot wheels, stating as his reasoning they were too thin to be used in such a practical way.

¹¹¹ Xu 2001b, p.135. Qiu Dengcheng 2001 also addresses these possibilities, but concludes that they have something to do with solar worship.

feature, but it must have deeper meaning when men have it tattooed on their backs and used as textile decoration for the same participants (Figure 3b). It is also seen on Shang vessels, and indeed on vessels excavated from Zhuwajie, and Xin'gan. The place of manufacture for such vessels is still under debate, and I have not read anywhere that the whorl motif on Shang bronzes necessarily represents the sun. Why then does it represent the sun at Sanxingdui when there is no further evidence to suggest this? Certainly the motif has taken on a wholly independent meaning in the Chengdu Plain. One which we cannot know, and must assume had something to do with their religious practice. It may have something to do with celestial motions, the visible planets and stars which may have played a large part in the architectural orientation, and other cultic activities.¹¹²

If we compare the Sanxingdui 'wheel' objects (Figure 30), the whorl tattoos (Figure 8b), the sun as represented by the royal gold disc (Figure 28), the bird-sun disc (Figure 25) and bronze standard (Figure 27a) with the many other representations of the sun it is reasonable to believe that sun worship did play a central role in the religious ethos of Sanxingdui Culture.

THE GREAT EYE

From both Sanxingdui and Jinsha there are a number of bronze and jade objects which resemble eyes. These appear as single objects. Were the plaques to be affixed to a shield, a breast plate, a symbol of status, a talisman? Their burial in the Sanxingdui pits and their widespread appearance at Jinsha suggests that they played a significant role in the religious life of the people. It is suggested that the motif descends from eyes on Liangzhu jades.¹¹³ While this is possible, given the Liangzhu penchant for hybrid bird-men, and the spread of jade objects which have their origins in Liangzhu Culture, I believe that the Sanxingdui eye does not represent in simplified form, the mysterious beings represented on Liangzhu jades. In Sanxingdui Culture, the eye is extremely important and often exaggerated. On both birds and men, they are routinely coloured in pigment, giving life to the persona to which they belong. In his assessment of several diamond plaques (Figure 35) Jay Xu puzzles over the abstract shape, when comparing these with other

¹¹² See Appendix C on archaeoastronomy.

¹¹³ Gao DaLun 2002.

shapes which more closely resemble the eyes of certain birds (Figure 36).¹¹⁴ It does now seem generally accepted that all these forms represent eyes.¹¹⁵ The diamond-eyes have perforations for attachment, and are large (objects such as Figure 35 having an average length of 57 centimetres), meaning they must have been for public display. As they are also found in proliferation in both bronze and jade at Jinsha,¹¹⁶ and appear as tattoo and textile adornment on a number of bronze figures from Sanxingdui, their power 'has been exploited ... in art ... probably for religious or magical reasons.'¹¹⁷ The variety in which they appear is represented by figures 37 (line drawing of several objects from Sanxingdui), 38 (a bronze appliqué from Jinsha), and 39 which is an abstract tremolite plaque. The plethora of shapes and media in which the eyes are reproduced is indicative of their function as religiously significant objects for public consumption.

David Freedberg's work on the life of art, gives several examples of the power of the beholder, the story of Pygmalion being perhaps one of the most well known. Freedberg also relates numerous tales of paintings or sculpture whose eyes are said to follow the spectator around a room. The images are alive either through the innate power of the image, or through the belief of the spectator.¹¹⁸ When compared to the sculptures of birds and men, and the geometric tattoos found on the bronze bird-man sculpture (Figures 3a and 3b), it is clear that these eyes represent an absolute power.

Therefore I believe that these eyes represent an omniscient being, a supreme deity capable of seeing all, and possibly affecting all. It does not appear in the available reproductions of Sanxingdui Culture ritual practice that the sacrifices were made to an 'eye' or to the deity it may have symbolized. Perhaps the proliferation of eyes, which appeared as tattoo, textile adornment, and as appliqué were effigies of a supernatural being unseen but observable; a god needing no natural form, only the innately alive and all-seeing eye. There is also the possibility that these eyes may represent the sun – a solar deity. For comparison, we might look at eyes as they appear in Egyptian Culture. In the mid to late second millennium BCE, faience eyes were used as

¹¹⁴ Xu 2001b, p.136. His argument also includes mention of diamond shaped appliqués which were constructed in halves or quarters.

¹¹⁵ Alain Thote includes these diamond shapes in his discussion of a less abstract tremolite eye (Thote 2003, p.180). Wu Hung also refers to the various shapes as being eyes (1997, p.63).

¹¹⁶ Zhu Zhangyi *et al* 2002.

¹¹⁷ Thote 2003, p.181.

¹¹⁸ Freedberg 1989, p.285.

talismans, amulets worn against evil.¹¹⁹ Interestingly, arguments are made that the hieroglyph



wdjt 'is the sound uninjured eye of Horus and plays a prominent role in Egyptian myths.'¹²⁰ From a culture who so plainly depicted and wrote about their gods we also have a pectoral (Figure 33), which combines a sun disc with a scarab to make one of the names of the king, which includes the name of the sun-god Re. What is significant here is that in Egyptian mythology, Horus represented kingship and was the sky-god. His eyes were thought to be the sun and the moon.¹²¹ In a culture without writing, symbols are infinitely more portentous.

Unlike the eyes of the 'wardens' and 'slaves' and even birds, these disembodied eyes are not smeared with vermilion. If we understand that the smearing of vermilion on the image breathes life into it, and the eyes are meant to represent an omniscient being, then wouldn't they also be 'alive'? Not necessarily. Wu Hung distinguishes the eyes of the bronze masks and 'wardens' as not having 'pupils [and therefore] not affecting the onlooker with a definite gaze',¹²² from those of the monumental masks, whose protrusions exaggerate the pupil. 'It seems that the gaze is given a material, sculpted form, extending towards the onlooker and overpowering him with its sheer physicality.'¹²³ Once our eyes are arrested by an image...we can no longer resist the engagement of emotion and feeling.'¹²⁴

I concede here that I have been unable to determine whether or not these eyes were also smeared with vermilion. However, if they were meant to be affixed and worn on a person, this practice might not be desirable as wearing a 'living' representation of a deity might somehow invoke possession by the deity, which might not always be a positive thing. If the eyes, like the eyes of Horus are meant to represent the sun or moon then perhaps in the thinking of the people of Sanxingdui, the sun and moon were not living deities, but powerful elements of nature, thereby not requiring any 'living' representation.

¹¹⁹ Pritchard 1988, pp.78-79, 273.

¹²⁰ Te Velde 1985-86, p.66.

¹²¹ Cass 1997, Ward 2004.

¹²² Wu Hung 1997, p.63.

¹²³ Ibid.

¹²⁴ Freedberg 1989, p.358.

Kimberley Te Winkle, "A Sacred Trinity: God, Mountain, and Bird. Cultic Practices of the Chengdu Plain" *Sino-Platonic Papers*, 149 (May, 2005)

Alternatively, if these eyes did indeed represent a supreme being, the creation of the eye in itself may have made the need to *paint* them alive superfluous.

CONCLUSION

History comes down to us in a myriad of ways — oral, written, in objects — both sacred and secular, from the notorious to the most mundane. What these modes of communication have in common is that they come from someone, an individual who is a member and indeed a product of his community. They were made by a person who lived a life in a time we no longer know, in a place geographically and environmentally different from today's world, in a political arena perhaps not so far removed from the modern one, but peopled by individuals with their own minds and pursuits. The objects themselves cannot be separated from the world which produced them, from the people who produced and consumed them. Whether or not an artist left his mark is irrelevant, the object he left is ultimately more valuable if only to lead us (historians, art historians, and archaeologists alike) on a journey full of mystery and often unanswerable questions.

It is precisely that mystery that attracts us to the objects and the stories they might tell, to the people whose hands they once rested in, to the temples they enriched, to the cities they served. It is precisely that mystery which we wish to enter, to discover and to express to our colleagues and the greater community. Just as they did three thousand years ago, so we too, wish to bring alive a culture and breathe life into the objects so long buried.

I suspect that a large portion of the community participated in some way, in the religious activities, if only as observers. Certainly a large portion of the community was involved in the manufacture of ritual implements. 'Legitimacy, no matter how its definition is phrased, is the means by which ideology is blended with power. Legitimacy is most clearly grasped in terms of its principal functions: to explain and justify the existence of concentrated social power wielded by a portion of the community and to offer similar support to specific social orders, that is, specific ways of apportioning and directing the flow of social powers.'¹²⁵ This is the framework within which I believe the culture of Sanxingdui existed: a ruling elite, governed by a priest-king, able to control the labour of the masses, through common religious practices.

¹²⁵ Tong Enzheng (2002, p.41) quotes Morton Fried (Fried, Morton H. 1967, *The Evolution of Political Society: An Essay in Political Anthropology*, Random House, New York, p.26).

Those practices included adoration of mountain deities, worship of the sun and identification of the sun with the ruling elite, belief in an omniscient being and in supernatural bird-man hybrid beings. Sacrifices, of precious stone and men were offered either to beg favour or to glorify the divine nature of the cosmos. The people of Sanxingdui Culture observed the events of the natural world and expressed those interpretations in bronze and in jade. They built their cities and holy architecture to a specific orientation, creating unity among several large and prosperous cities. They exhibited clear distinctions between the ruling elite and the rest of the community. It is possible at least two different ethnicities lived together, with the dark-eyed dominant men enslaving (sacrificing?) the blue-eyed group. The position of women was not restricted to domestic activity; rather they participated in religious ceremony along side men.

The motifs here discussed were not benign decorations adorning the city plaza, nor were they reserved for a select few, rather they were parts of a complex and powerful unifying religion. If we take the numerous bronze heads and standing figure to represent the wardens of the religion, and the jade and stone objects as implements, then we may look upon the stone kneeling figures as sacrificial victims which must have served to placate the deities be they mountain spirits, the sun, or an omniscient being. As excavations continue at Jinsha a clearer picture will form of the political upheaval and give us a larger window through which we may look upon Sanxingdui Culture.

It is not my own question or pursuit of some remote 'truth' that has drawn me to the plains and mountains of western China some three thousand years ago, rather it is the objects which beg me 'explain, let me live again by being touched and observed, find my home'. This may all sound rather dramatic, melodramatic even, and certainly not 'academic' or intellectually valuable, but what is the purpose of seeing an object if not to ponder its place in its own time, and what meaning it had for those who made it, fought for its resource, dedicated their lives to what it symbolized? I wish to bring to my studies some element of the human, not the desiccated corpse, or an analytical dissection of the possible ethnicity of the inhabitant of a burial, rather the living, breathing, seeing, worshiping, and dying humanity which called for the creation and use of the object.

Appendix A

JADE STUDIES

Although in the Zhongyuan the forked blade has received much scholarly attention as being associated with sun worship. Blades like the one pictured (Figure 11), and blades of a similar shape (Figures 12a, 12b, 16), are often referred to as *zhang*, or *yazhang* (where there are notches at the tang).¹²⁶ Among the first modern scholars to address this issue was Berthold Laufer¹²⁷ whose pioneering book on jade is still used today as a source for jade study. Laufer's writings are largely based on the work of Wu Dacheng, and De Groot, both of whom use Chinese classical texts (and their commentators) to explain ancient Chinese rituals and religions. Laufer agrees with De Groot who said that the *yazhang* was an emblem of solar worship, stating 'the Zhou emperor worshipped the sun by holding in his hands the hammer-shaped jade symbol of sovereignty. This means...the jade hammer was regarded as the actual image of the solar deity.'¹²⁸ For two-thousand years scholars have been examining classic texts such as the *Zhouli* which describe such implements and how they were used. One such commentator, Cheng Kangcheng stated that there were three types of *zhang* and that they were used according to their size, to worship the mountains and rivers, according to *their* size.¹²⁹ The *Zhouli* states that the *yazhang*: 'a tablet *zhang* with a tooth...serves to mobilize the troops, and to administrate the military posts.'¹³⁰ Another Han period commentator, Cheng Sinung described the *yazhang* as being in the shape of a tooth, which symbolizes warfare.'¹³¹

While these descriptions are tantalizing; and certainly worthy of further study, relying on the correlation between archaeology and the classic texts, and their commentators can result in an oversimplification of reality. Wu Dacheng and Berthold Laufer were both working at a time when Chinese archaeology was beginning to corroborate many of the classic texts and it was a natural step to try and put the two together. Currently however, it seems a dangerous and frankly,

¹²⁶ Tong Enzheng 1979.

¹²⁷ Laufer 1912.

¹²⁸ Laufer 1912, p.103.

¹²⁹ Laufer 1912, p.101.

¹³⁰ Laufer 1912, p.101.

¹³¹ Ibid.

biased way, to explain the implements of ritual for which we have no contemporary written evidence. It is true that throughout Chinese history much has been systematically preserved by succeeding dynasties and so still exists today in a form not much different from its origins. Take for example the jade *bi*: on any given day walking the streets of any town or city in China one might see small jade *bi* tied with red strings about the necks of men and women alike. But it would be negligent for scholars to see this and know that they are worn mainly as emblems of good luck, and then to project some thousands of years into the past, the same meaning. Therefore, it is better to approach these ancient symbols without preconceptions and to try and explain them in the context from which they came. Xia Nai's work greatly added to modern scholarship by removing many of the artefacts from their textual basis and understanding them from their archaeological context. He put the artefact first, and the text second. Of course, he was working after the discovery of Yinxu and had access to a great many more implements, scientifically excavated, therefore had seen firsthand the way in which the objects were buried. Ritual implements had become artefacts. And explaining an artefact taken from its burial context, from the very position it had been laid by hands three-thousand years ago, can sometimes take much of the wind from the classic textual sails. 'According to the *Sanli* and the Han Confucian commentaries, *cong* were used in sacrifices to the earth, placed on the belly when laying out the deceased, and presented by the various feudal lords to their ruler's wife at imperial audience. These uses were no more than the fabrications of Confucianists, as no such procedures were followed in the pre-Qin era. ... From their placement in tombs and rate of occurrence, it does not seem that the neolithic and Shang Dynasty *cong* were ritual objects used by the emperors in sacrificing to heaven and earth.'¹³² Why do I mention these conflicts? It is necessary to any discussion which tries to explain the meaning and use of a ritual implement to explore every possible avenue of rationalization. While in 1912, when Laufer's work was published his arguments and logic were of the highest standard, some of his comments no longer seem valid. In the case of the Sanxingdui forked blades, and other jade objects, it is a better method to follow Xia Nai's reasoning, to remove the comments of Han period and later scholars, to remove the later texts altogether and to try and see the implements in their natural setting. From this, to see the objects as they were when they still had the scent of the temple or the softness of silk on them.

¹³² Xia Nai 1986, p.221. This appears to reflect the truth since in Liangzhu culture, *cong* were placed around the body of the deceased, while jade *bi* were placed on top of the body. See Sun Zhixin 1993, Salviati 1999.

From the Sanxingdui Culture sites, there is a plethora of jade shapes, some of which are discussed in this paper (Figures 11, 16, 17, 18, 19, 20, and 21) and which indicate a penchant for the quality of not only the stone itself, but the shape of the objects. At this early stage of Sanxingdui studies there are more questions than answers as to the meanings and uses of these implements. It is my hope that in the coming years the objects will be investigated within an objective and broad scope thereby understanding them in their original context and then connecting them to the proliferation of similar objects throughout Chinese art history.

Appendix B

THE GREAT TREE

The Great Tree of Sanxingdui is perhaps one of the most enigmatic objects discovered in the Chengdu Plain. More than the jade objects or the brilliant human representations, understanding what this tree meant to its creators could shed enormous light on the religious practices of the people of Sanxingdui. Does the Great Tree represent an adoption of Shang symbolism, or is it a shaman's vehicle for communication with a supreme deity? Does it delineate the belief in ten suns circling the earth which corresponds to the Shang ten-day week? The possibilities seem almost endless.

Here it is most tempting to use Shang and Huaxia mythology to relate the symbolism of the Sanxingdui Great Tree. K.C. Chang¹³³ has discussed Shang rituals involving the descent of the supreme deity (Di), or the ascent of a shaman(ess) to communicate with the supreme deity. Chang refers to the *Huainanzu* which states the *qian* tree was the place where many Di spirits may ascend and descend. Chang also refers to the *Shanhaijing* which refers to a *fusang* tree which may be understood to be the Fu mulberry tree of the legends. Sarah Allan discusses the significance of the Mulberry tree and its relations to Shang mythology.¹³⁴ Both scholars relate the myth of the Shang lineage hometown being related to the location of the *fusang*. Moreover they both discuss the legend of a tree on which nine birds rested. According to the *Shanhaijing*, 'There is a country of the Black Teeth ... down below [this country] is a Tang valley, in which is the Fu Mulberry tree, and in which the ten suns bathe.... In the water is a large tree; nine of the suns rest on the lower branch and one sun rests on an upper branch.'¹³⁵ Oracle bone inscriptions contain a number a variations for what Allan interprets as the mulberry tree.¹³⁶

Sarah Allan examines the text of the *Huainanzi* and its discussion of the myth of Archer Yi. Here I paraphrase the myth:

¹³³ Chang 1994.

¹³⁴ Allan 1991.

¹³⁵ *Shanhaijing* (Hawaii tung ching 9) as referenced by Chang 1994, p.24.

¹³⁶ Allan 1991, p.27.

In the time of Yao, there were ten suns each of which lived as a bird on the branches of a Mulberry Tree. At the foot of the tree was a spring. Each day, Xihe, the mother of the sun, would take one down and bathe it in the pond, and then set it to fly through the sky. In the evening the bird/sun returned to the tree. One day, the ten suns appeared together in the sky. This was a catastrophe for mankind, for ten suns would surely cause the rivers and lakes to dry, the crops to die and be the end of man. Emperor Yao summoned his best archer, Yi. Now, Yi pleaded with the suns to return to the normal order, but they refused so he had no choice but to shoot them down, and so he did, all but one.¹³⁷

The Sanxingdui Great Tree as reassembled by archaeologists has nine curving branches, upon each stands a bird in a blossom. What rested on the uppermost portion is still a mystery, but could it have been a tenth bird? Allan continues her discourse on the relationship of the myth of Archer Yi and the mulberry tree being the home of the ten suns, and concludes by stating that the 'Mulberry Tree tradition...is a late Zhou and Han tradition of Southern China and has no particular association with the Shang. However, the same motifs – with the exception of ten as the number of the suns – are intimately associated with the Shang in ...the origin of the Shang people and their dynasty....'¹³⁸ This origin theory belongs to the tradition of water and fire, flood and drought cycles which are associated with the decline and rise of succeeding dynasties in Chinese history.

According to the oracle bone inscriptions, the Shang year was divided into ten day weeks, three weeks making a month, and so on.¹³⁹ Each day was called after a 'heavenly stem',¹⁴⁰ and were paired with one of twelve 'earthly branches'.¹⁴¹ The Shang (and later dynasties) used this cycle

¹³⁷ The origins and 'history' of this legend and other associated aspects such as the location of the Mulberry Tree, the directional significance, the lineage of the suns father in relationship to the lineage of the Shang are all much better discussed by Sarah Allan in her book *The Shape of the Turtle*. The reader should refer not only to this but to other sources of Chinese mythology, such as Birrell 1993.

¹³⁸ Allan 1991, p.38.

¹³⁹ Allan 1991.

¹⁴⁰ 'There is no consensus amongst scholars as to the original significance of these characters.' Cullen 1996, p.9.

¹⁴¹ Cullen 1996, p.9.

of days in conjunction with the genealogy of royal ancestors for their divinations.¹⁴² For each divination, the day-date is given, followed by the subject and the result of interpretation of the cracks made by the diviner. The auspiciousness of certain days was crucial to the outcome of anything from a positive birth to warfare to hunting outings.¹⁴³ Here is where the separation comes between the Southern Traditional legend of the Mulberry Tree upon which rest the ten suns, and the ten suns of the Shang calendar.

A last note on the significance of the Sang Lin (mulberry grove) of the Shang. K.C. Chang notes that 'in ancient texts one sees also that there were music and dances at the mulberry groves, which were used sometimes as the location where men and women rendezvoused and worshipped the fertility god (*gaomei*).¹⁴⁴ If the Great Tree of Sanxingdui may one day be proved to represent the *fusang* of Shang, then the relationship between Shang culture and that of the Chengdu Plain would indeed have been an intimate one. Additionally, if this tree is connected with Shang worship of the sun, or suns, then it may also be one of the most interesting representations of fertility rites to have been made between the Hongshan culture and the bricks of Xindu¹⁴⁵ burials of the Han Dynasty. However, and there does almost always seem to be a however, where Sanxingdui culture is concerned, at the moment, the Great Tree can only be understood to represent a fertile tree with many birds and blossoms among its branches. It remains to be seen whether or not this tree was meant to symbolize an *axis mundi* of travel between two worlds, or a symbol of the great abundance which the sun provides.

¹⁴² See Ito & Takashima 1996; Keightley 1978, 1995, 1997a, 1997b, 2001; Matsumaru & Takashima 1993; Serruys 1974; Shaughnessy 1997, for oracle bone graph studies.

¹⁴³ Ibid.

¹⁴⁴ Chang 1994, p.25.

¹⁴⁵ Rawson 2001, p.293.

Appendix C

ARCHAEOASTRONOMY

In addition to the many themes and motifs represented in Sanxingdui Culture, there is also the orientation of the Sanxingdui ritual pits, the altars located nearby, Jinsha 'temple' complex, and other architectural structures at Shierqiao and Fangchi Street. 'The orientation of the platform [at Yangzishan] is 55° north, the same as that of the sacrificial pits at the Sanxingdui site.'¹⁴⁶ Additionally, the tomb at Xin'gan, Jiangxi Province is oriented at 271°.¹⁴⁷ An examination of these sites must not be limited by comparison with Central Plains archaeology, or restricted by using only Chinese classic texts as sources. There is a need for independent study regarding the astronomy of the Chengdu Plain.

Archaeoastronomers researching sites in Mesoamerica have discovered a number of sites oriented in various directions, corresponding to locations of Venus, the rising of the sun at an equinox, locations of eclipses and planetary alignments. Measurements and dates correspond to surviving texts from the sites and the Mayan culture. Independent of the texts, archaeologists are investigating graphs and petroglyphs. From their work, they are able to determine that 'ancient daykeepers chose to align a significant natural with an appropriate religious date.'¹⁴⁸ This practice can also be seen in the Central Plains, in terms of Shang and Zhou events, as evidenced in the importance of calendrical dates to auspicious events. The work of David Pankenier and others is critical to our understanding of how astronomical events were viewed and recorded.

'...Time and space were coordinated with the landscape by means of building and settlement orientation. The physical manifestation of cult activities kept agricultural cycles in tune with solar calendar regulating social and economic life.'¹⁴⁹ Many of these calculations and alignments are taken from the astronomical observations based on the rising sun in relation to prominent natural settings such as mountains. If such activity was happening in Mesoamerica, then it was

¹⁴⁶ Yu Duan 1999, p.97.

¹⁴⁷ Chen Fangmei 1999, p.125.

¹⁴⁸ Galindo Trejo 2000, p.34.

¹⁴⁹ Ibid p.38.

certainly possible in ancient Sichuan. As we have seen, mountains played an integral role in the rituals of Sanxingdui culture which makes the correlation between geography and astronomy all the more crucial. It is the opinion of this author that such was the case in the Chengdu Plain, and that some part of the mystery of the cultic practices may be solved through archaeoastronomical investigations.

Figure 1

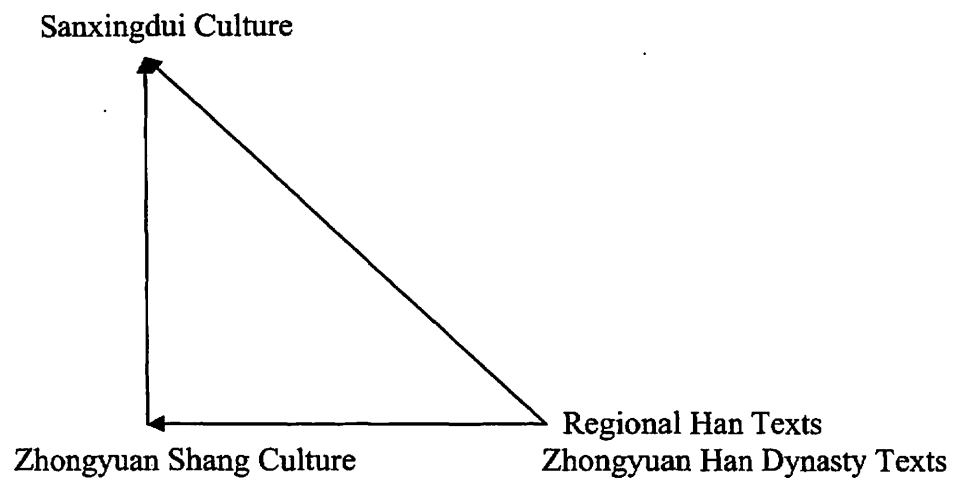
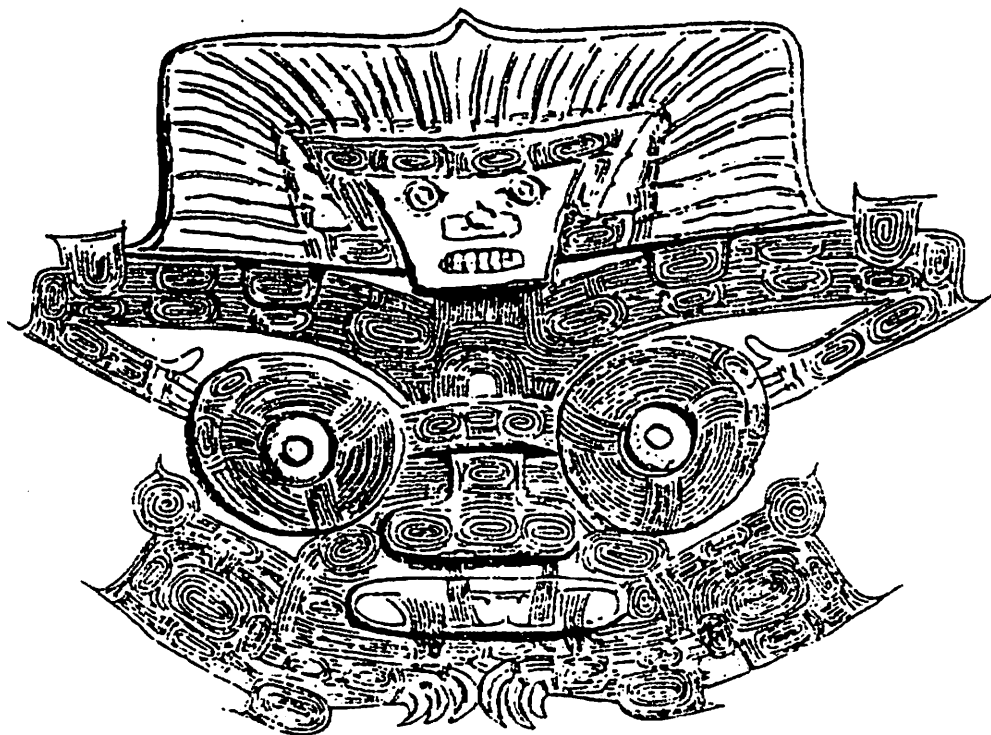


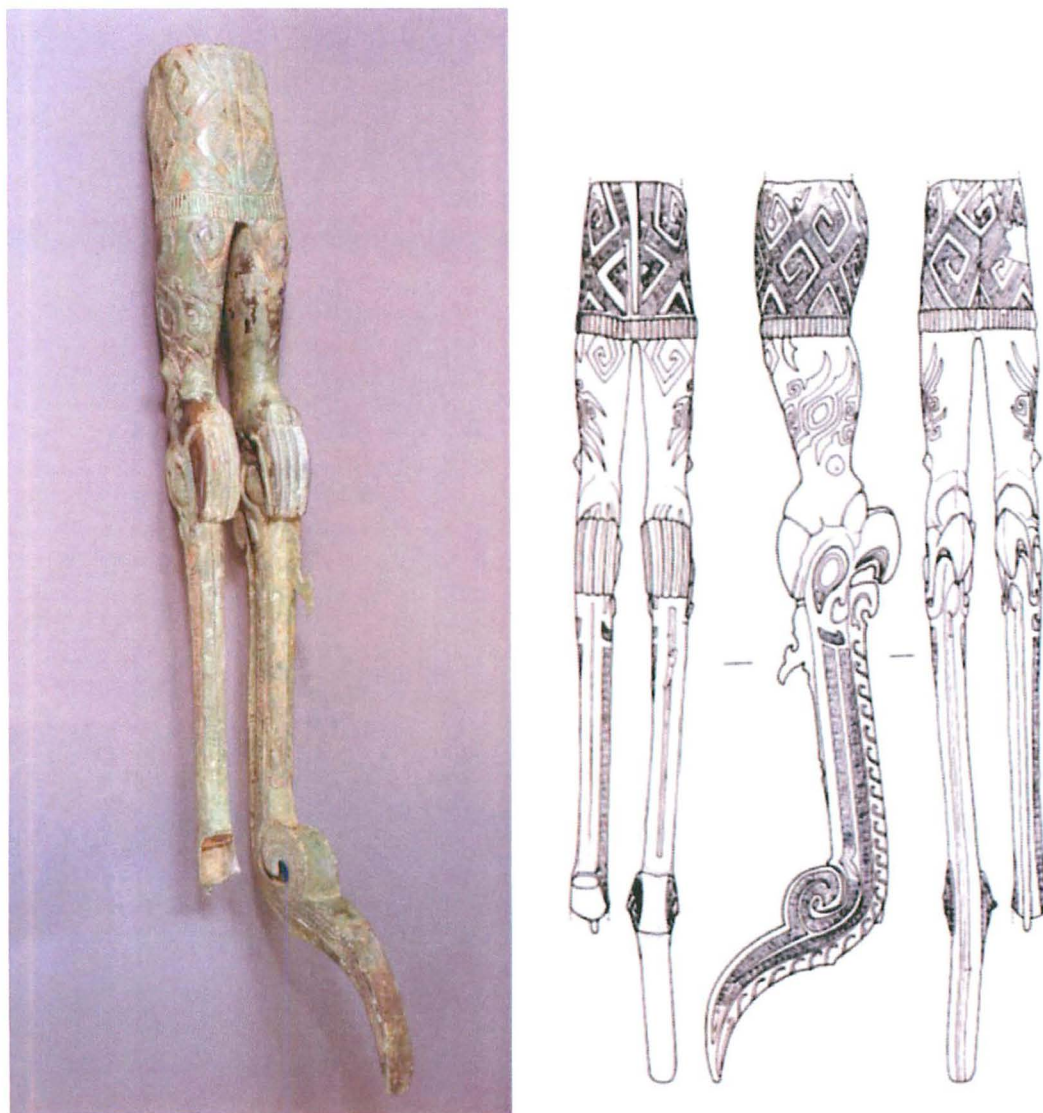
Diagram of the tripartite system of Sanxingdui Culture studies.

Figure 2



Motif on a Liangzhu jade *cong* (M12:98). Fanshan. After Whitfield 1990, p.58.

Figures 3a and 3b



Hybrid figure standing on birds (fragment) [K2(3):327]. Bronze. Overall height 81.4cm, width between arms 10.8cm, height of figure 30cm, height of birds 51.4cm, weight 8.065kg. Excavated from Sanxingdui Pit 2. After Bagley 2001, p.129.

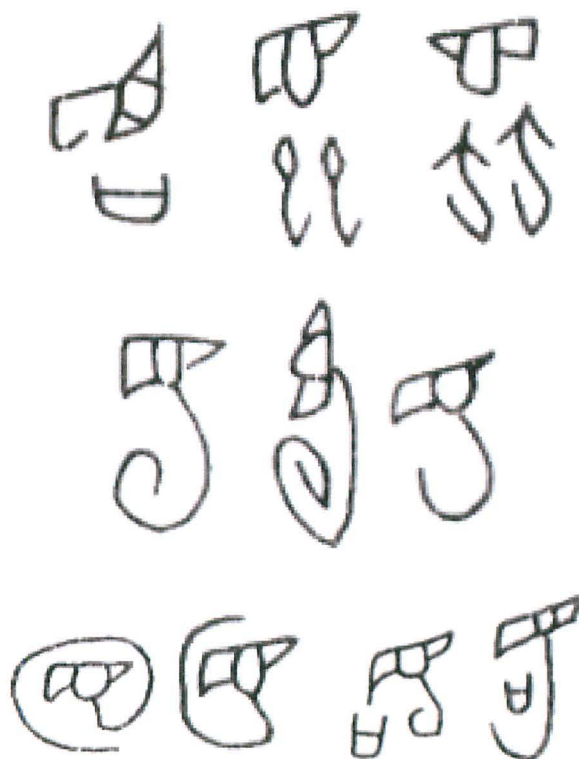
Hybrid figure standing on birds [K2(3):327]. Line drawing after Bagley 2001, p.128, reproduced after Beijing 1999, *Sanxingdui jisikeng*, p.171, figure 87.

Figure 4



Bird with human head [K2(3):154]. Bronze. Height 12cm. Excavated from Sanxingdui Pit 2. After Bagley 2001, p.121.

Figure 5



Oracle bone graphs variously interpreted as 蜀, 巴, 蟲, 甸, among others. After Matsumaru and Takashima 1993, pp.359-360.

Figure 6a



Figure on a pedestal [K2(2):149, 150]. Bronze. Overall height 260.8cm, height of figure 172cm, weight 180kg. Excavated from Sanxingdui Pit 2. After Bagley 2001, p.73.

Figure 6b

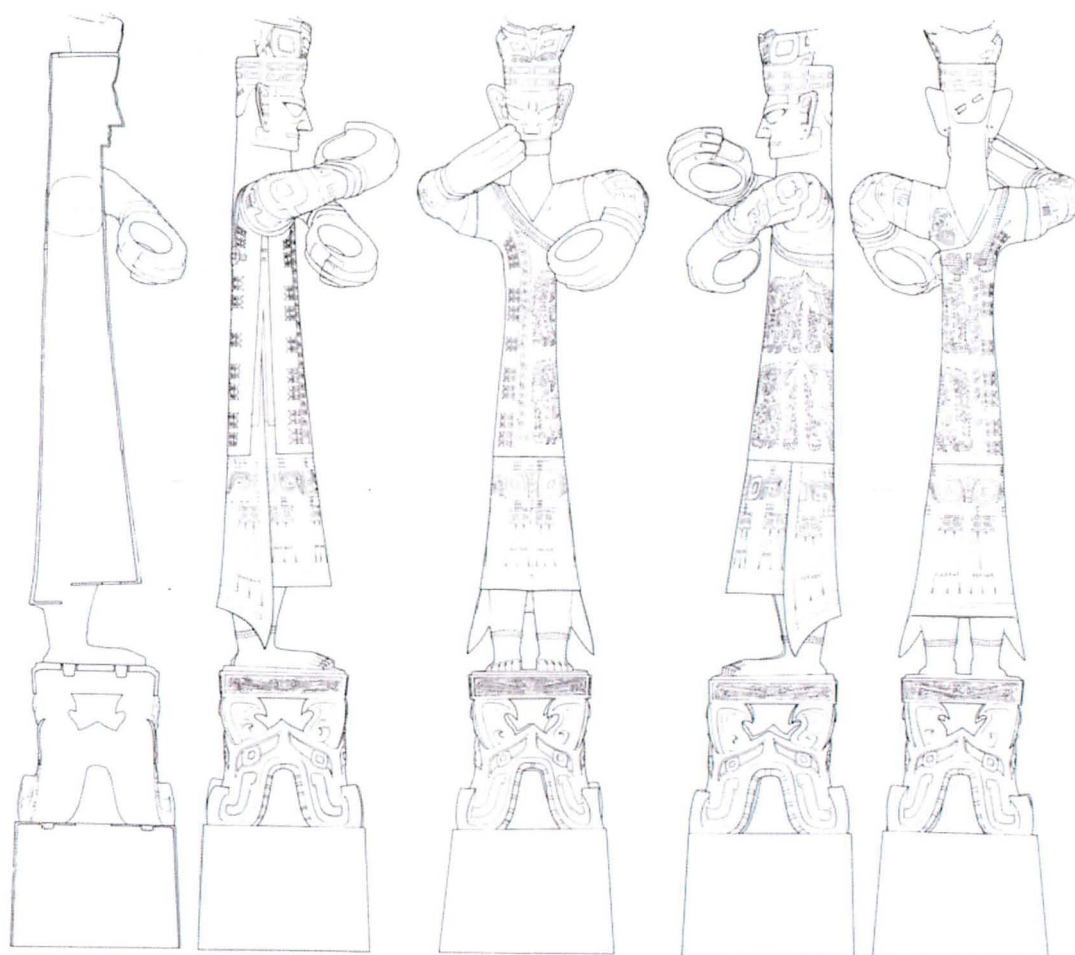


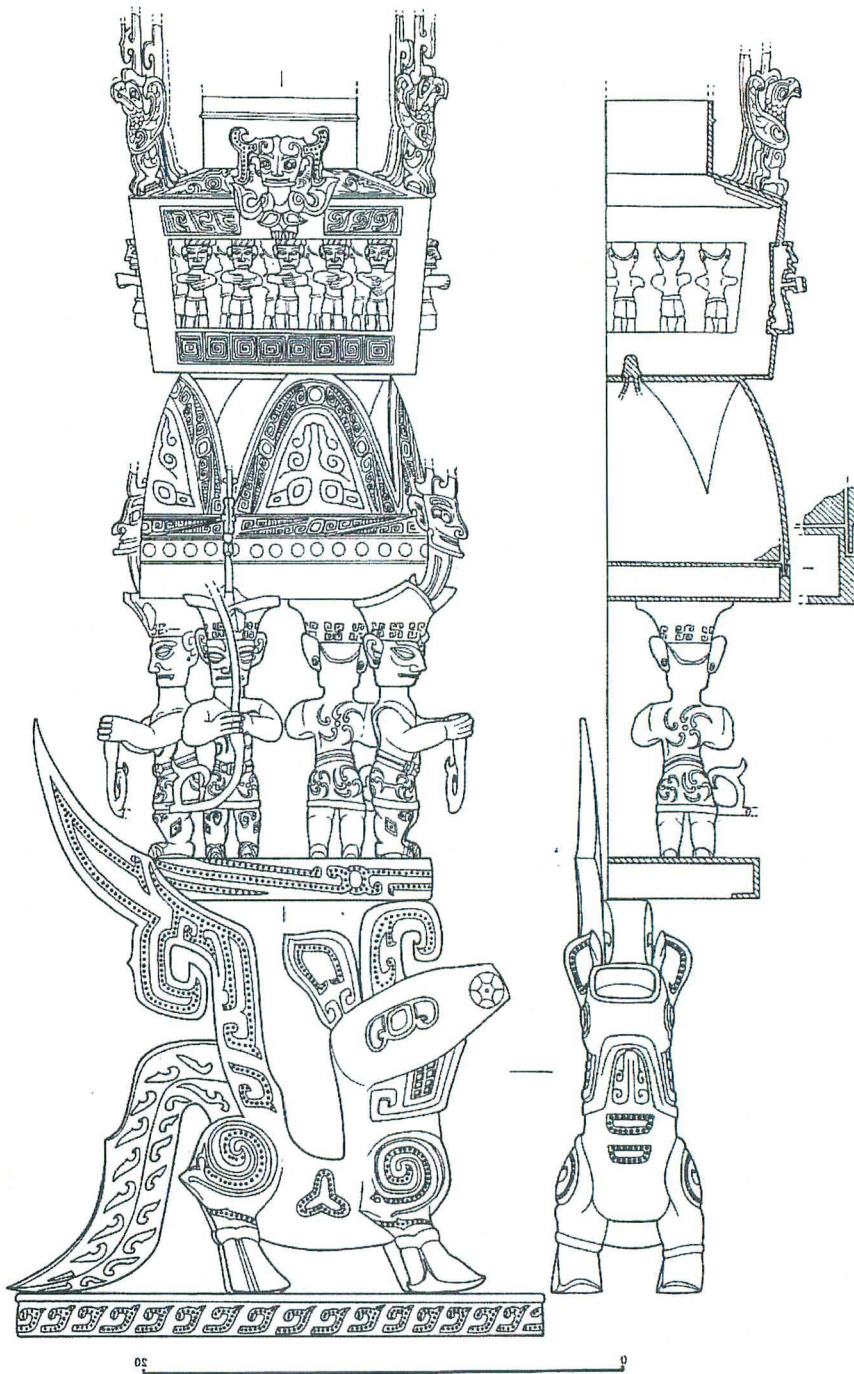
Figure on a pedestal [K2(2):149, 150]. Line drawing. After Bagley 2001, p.72, reproduced after Beijing 1999, *Sanxingdui jisikeng*, foldout following p.162.

Figure 7



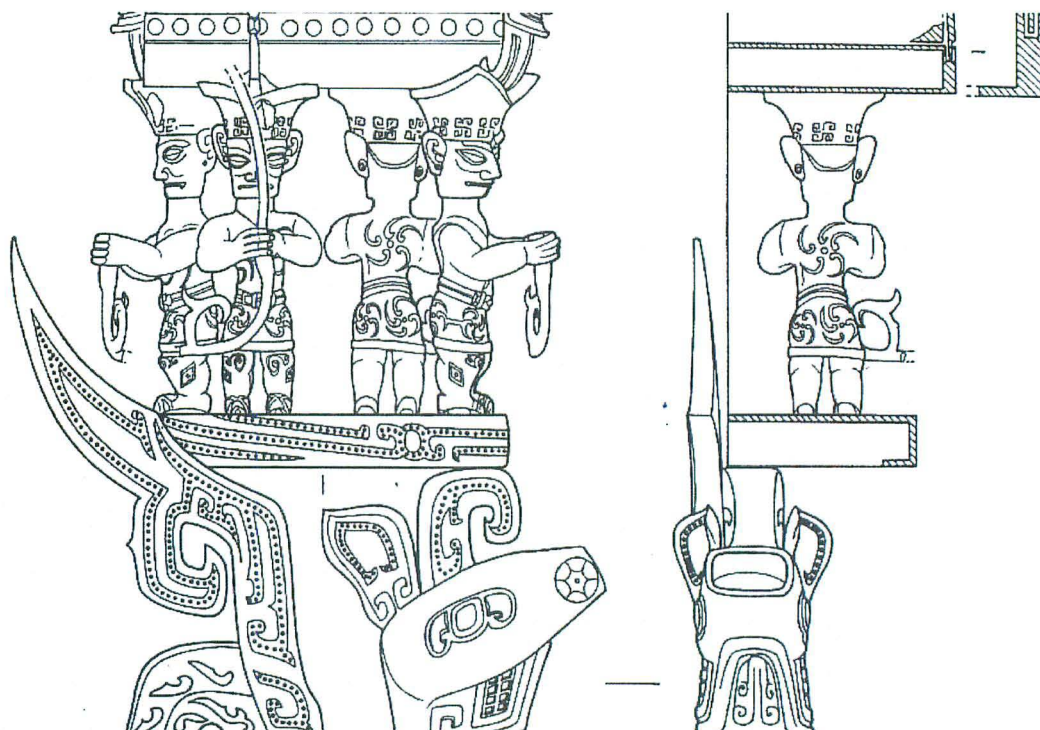
Head [K2(2):45]. Bronze with gold foil. Height 42.5cm, greatest width 19.6cm, width at top of head 12.6cm, weight 2.55kg. Excavated from Sanxingdui Pit 2. After Bagley 2001, p.90.

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Bronze altar? [K2(3):296]. Reconstruction drawing based on surviving fragments. Height about 54cm. After Bagley 2001, p.31, reproduced after Beijing 1999, *Sanxingdui jishikeng*, p.233, figure 129.

Figure 8b



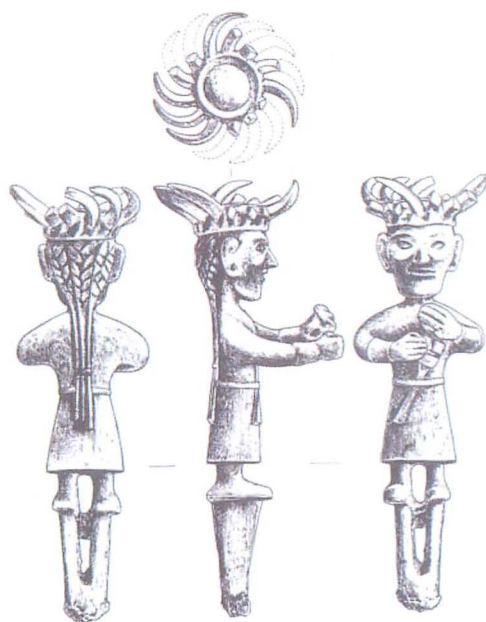
Bronze altar? [K2(3):296]. Detail.

Figure 9



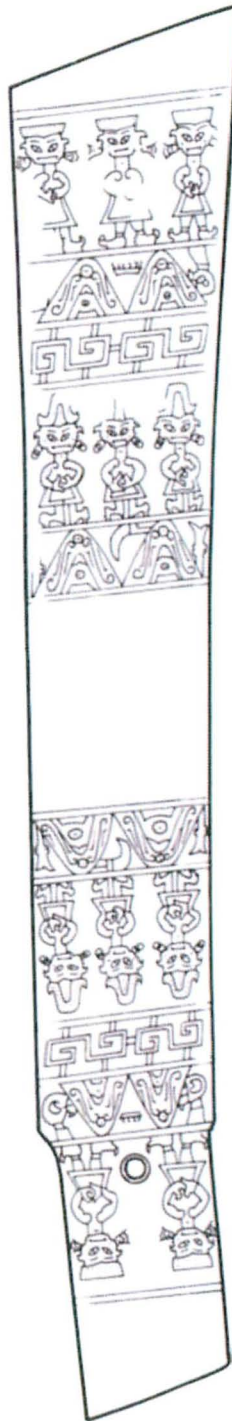
Kneeling woman bearing a *zun* [K2(3):48]. Bronze. Overall height 15.6cm, height of base 5.3cm, diameter of base 10cm, weight 236g. Excavated from Sanxingdui Pit 2. After Bagley 2001, p.139.

Figures 10a and 10b



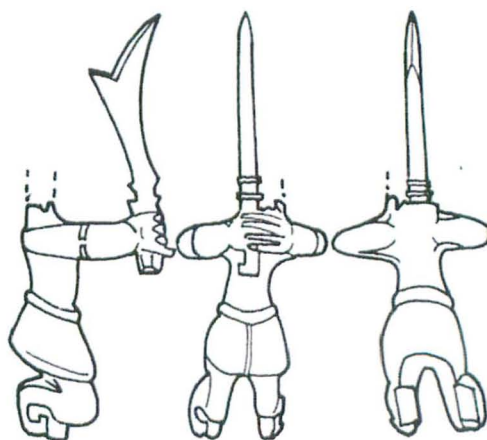
Standing figure [2001CQJC:17]. Copper. Overall height 19.6cm, height of the human 14.61cm, height of base 4.99cm, weight 641g. After Beijing 2002, p.44.

Figure 11



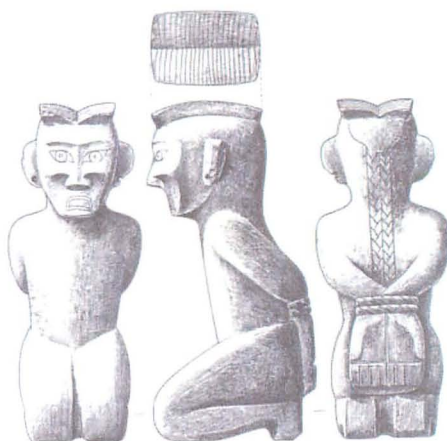
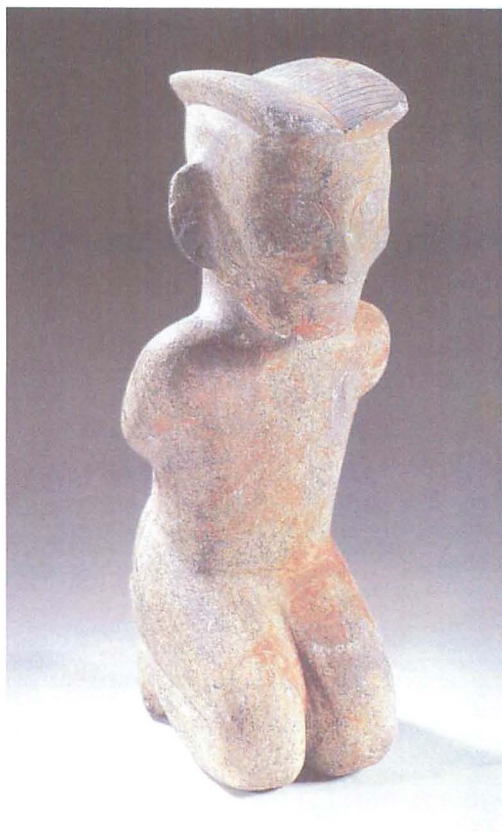
Blade with incised figures [K2(3):201-4]. Line drawing. After Bagley 2001, p.162, reproduced after Beijing 1994, *Shangdai Shu ren mibao*, *Sichuan Guanghan Sanxingdui yizhi*. (*Zhongguo kaogu wenwu zhi mei*, vol. 3), p.128.

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Kneeling figure holding a forked blade [K2(3):325]. Bronze. Overall height 4.7cm, width 1.8cm. Excavated from Sanxingdui Pit 2. After Bagley 2001, p.151.

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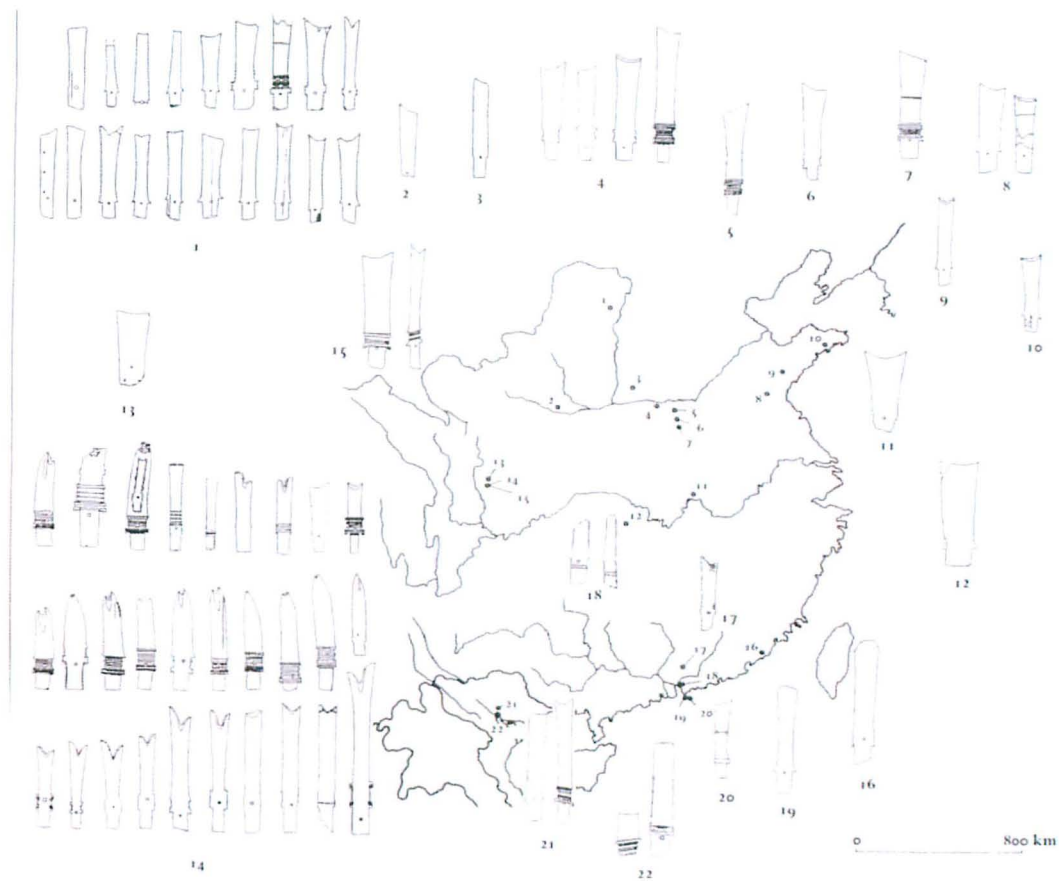
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Head [K2(2):58]. Bronze. Height 51.6cm, greatest width 23.8cm, width at top of head 14.6cm, weight 5.8kg. Excavated from Sanxingdui Pit 2. After Bagley 2001, p.97.

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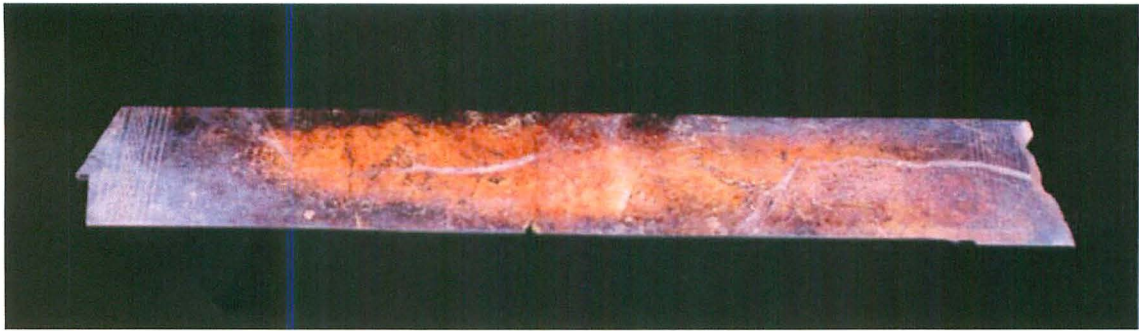
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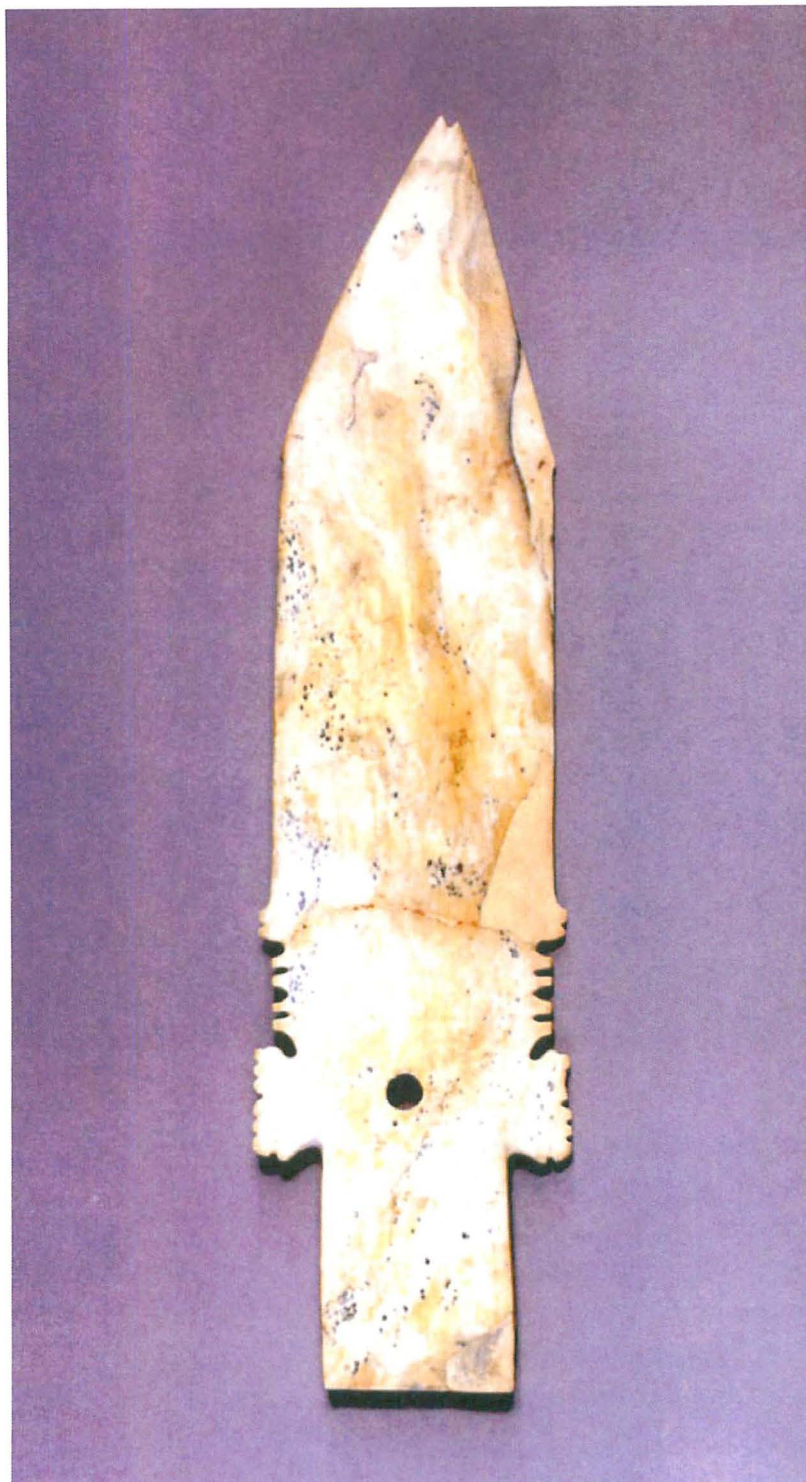
Jade forked, notched blade [2001CQJC:955]. Length 42.25cm, width 4.32 – 9.18cm, thickness 0.36 - 0.55cm, weight 332g. After Beijing 2002, p.109.

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Knife (?) damaged [no excavation number listed]. Micaceous quartz. Length 162cm, greatest width 22.5cm, thickness 1.8cm. Excavated from Sanxingdui Pit 1. After Bagley 2001, p.154.

Figure 18



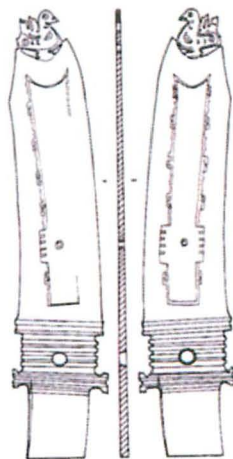
Ge blade with notched tang [K1:84]. Dolomitic limestone. Length 32cm, width 7.9cm, thickness 0.7cm. Excavated from Sanxingdui Pit 1. After Bagley 2001, p.168.

Figure 19



Jade collared, notched, *bi* [2001CQJC:11]. Outer diameter 26.4cm, diameter of the center 5.3 – 5.5cm, height of the collar 2.37cm, width of outer ring 0.7 – 0.83cm, weight 1.11kg. After Beijing 2002, p.97.

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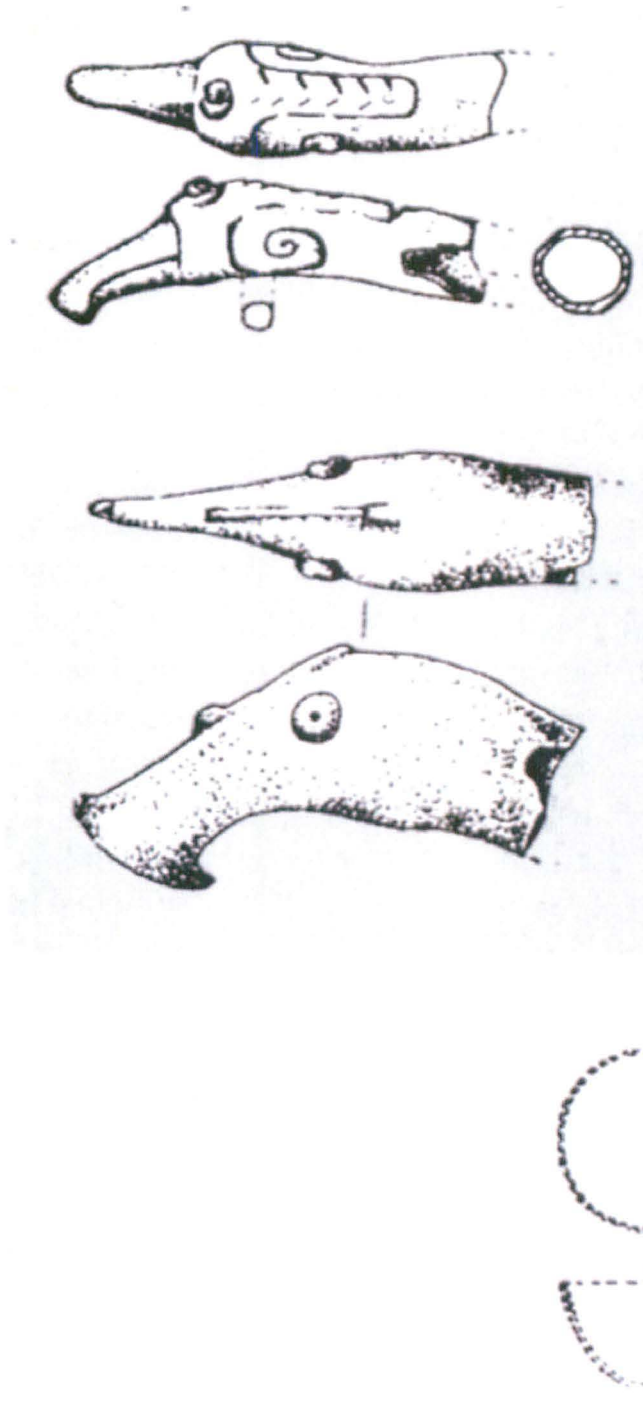
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Jade *cong* [2001CQJC:61]. Overall height 22.26cm, diameter of the outer rim at the top of the centre ring 6.89cm, diameter of the inner rim at the top 5.76 - 5.59cm, height of the center ring 1.16cm, diameter at the outer rim at the base of the center ring 6.25cm, diameter of the inner rim at the base 5.07 - 5.2cm, height of the base ring 1.05cm, width of the top 6.95 - 6.92cm, width at the base 6.3cm, weight 1.36kg. After Beijing 2002, p.82.

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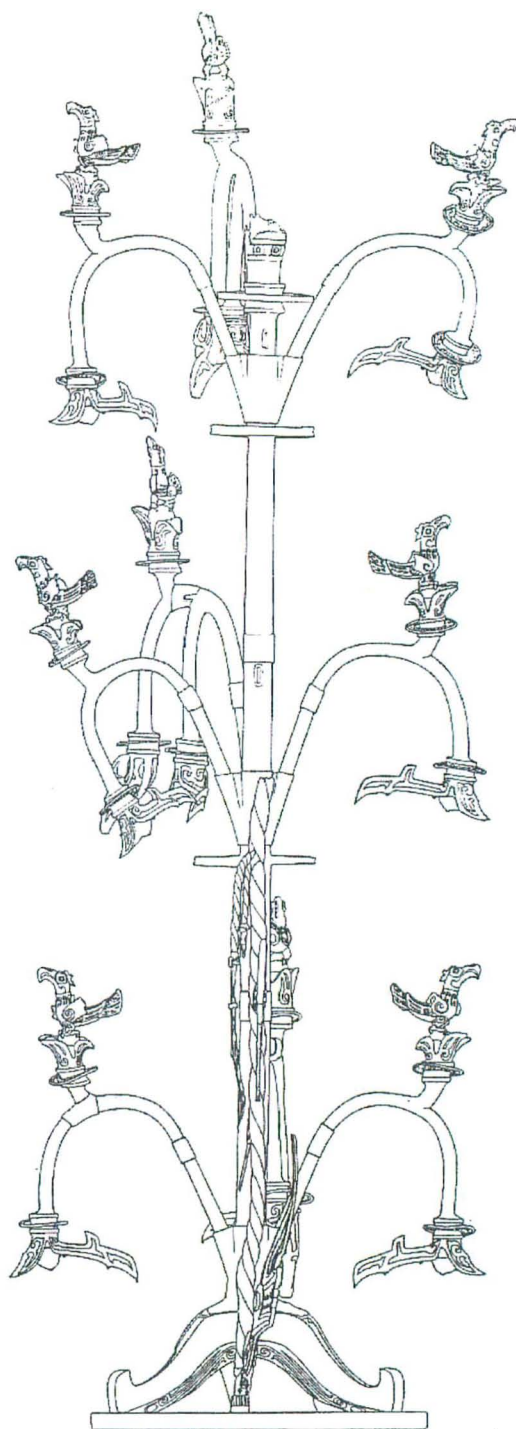
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Figure 23a



Tree [K2(2):94]. Bronze. Overall height 396cm, height of trunk 359cm, diameter of the base 93cm. Excavated from Sanxingdui Pit 2. After Bagley 2001, p.117.

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Figure 24



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Figure 25



Gold foil disc [2001CQJC:477]. Diameter of outer rim 12.5cm, diameter of center ring 5.29cm, thickness 0.02cm, weight 20g. After Beijing 2002, p.29.

Figure 26



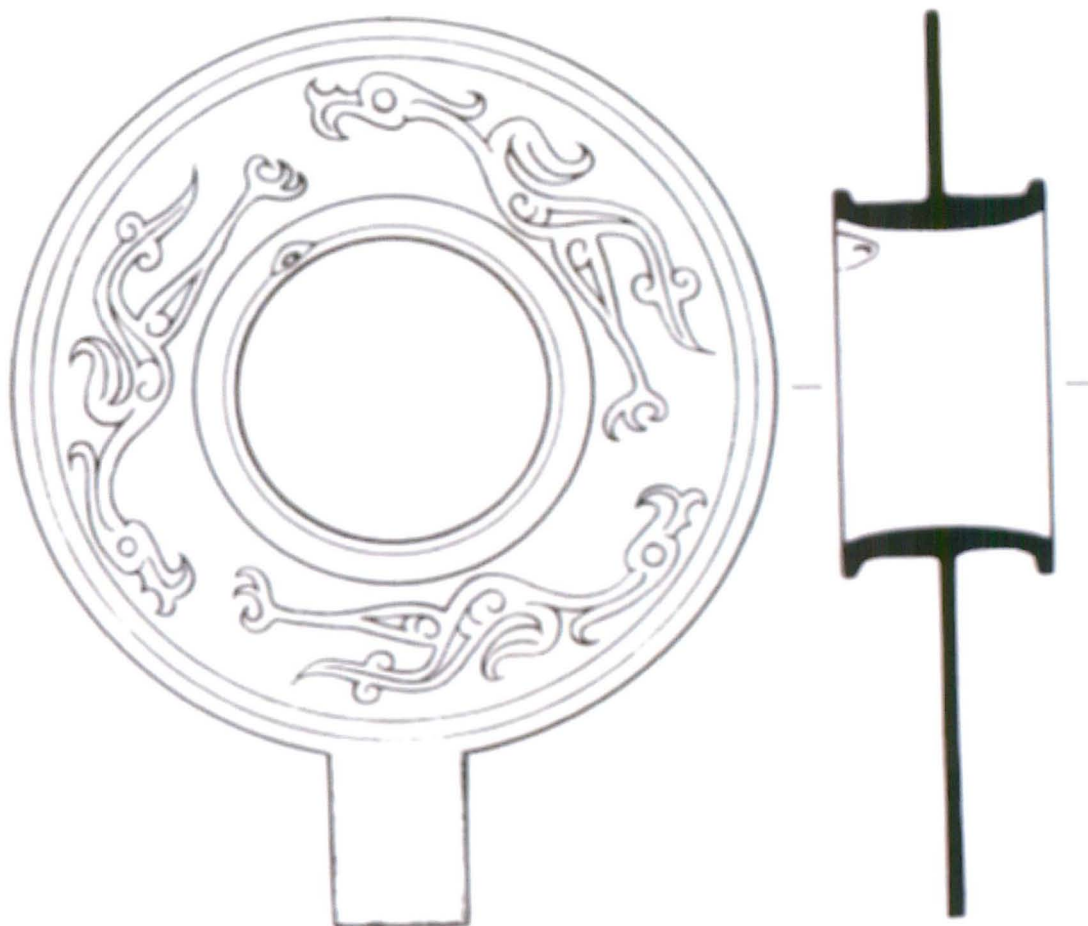
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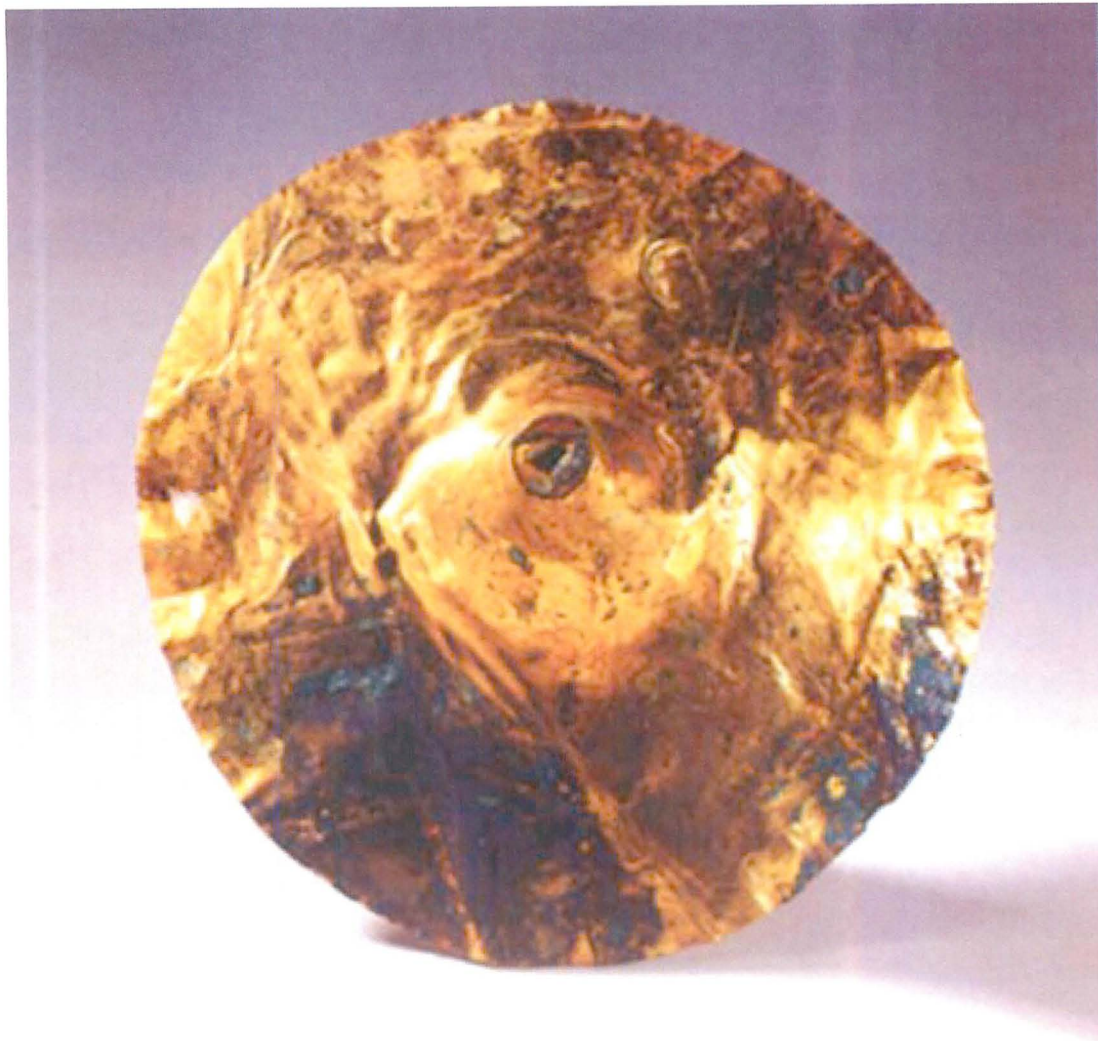
Collared disc with incised birds [2001CQJC:588]. Bronze. Diameter of outer rim 10.24 – 10.36cm, diameter of the center ring 4.03 – 4.31cm, height of the collar 2.9cm, width of the outer rim 2.67cm, length of the handle 2.26cm, thickness 0.2 – 0.33cm, weight 280g. After Beijing 2002, p.60.

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Collared disc with incised birds [2001CQJC:588]. Bronze. Line drawing Beijing 2002, p.60.

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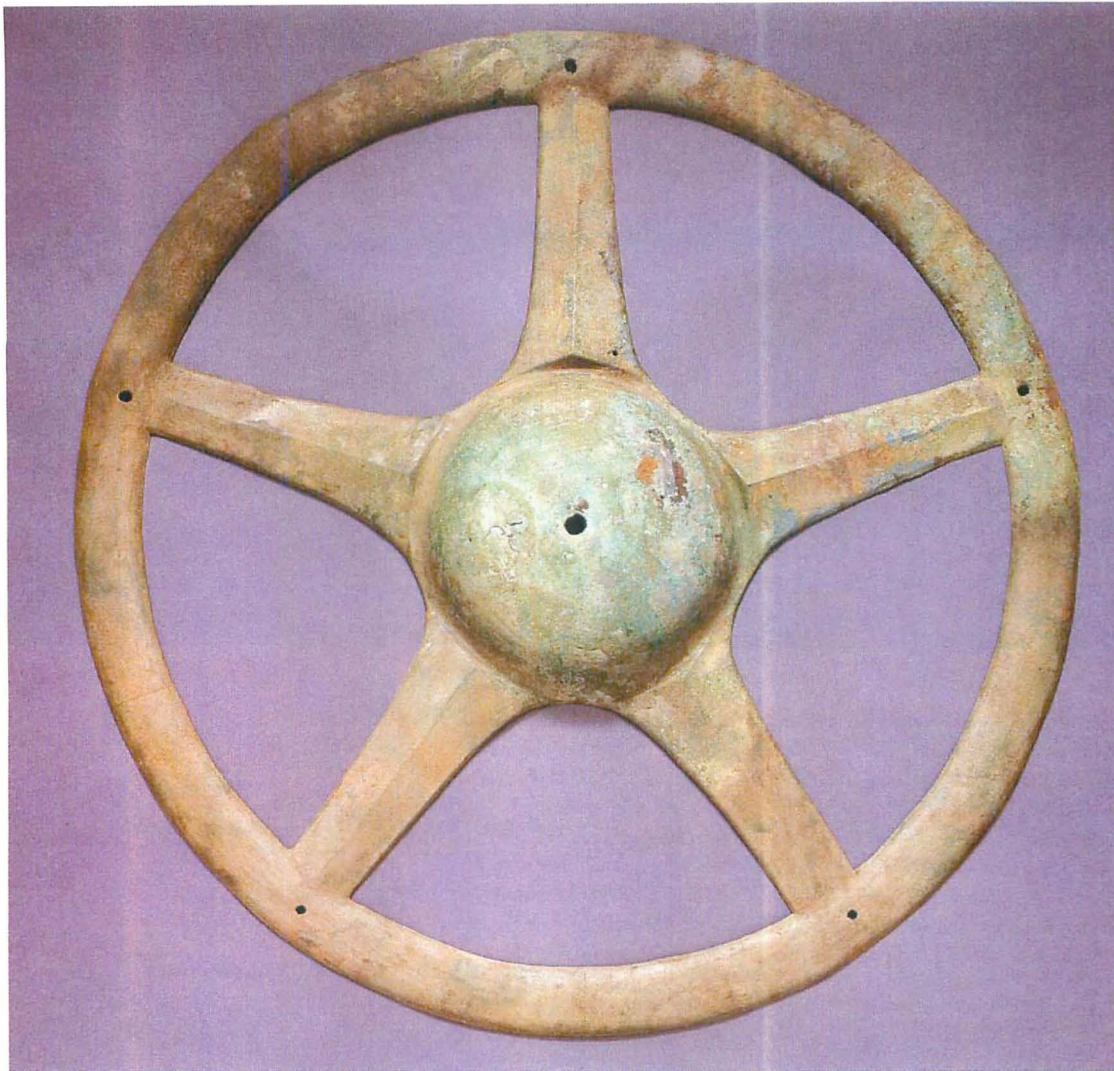
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Figure 30



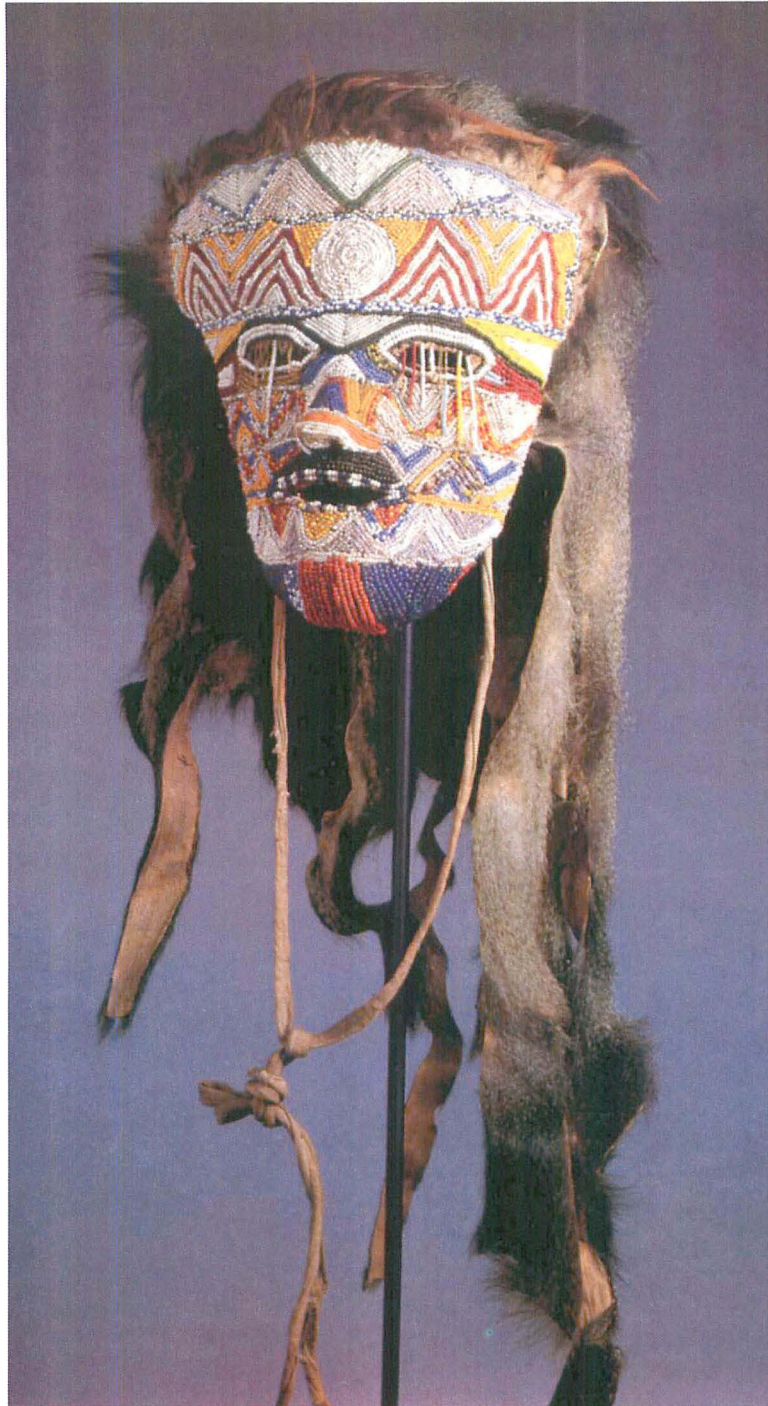
Circular appliqué [K2(3):1]. Bronze. Overall diameter 84cm, diameter of central roundel 28cm, height of central roundel 6.5cm. Excavated from Sanxingdui Pit 2. After Bagley 2001, p.134.

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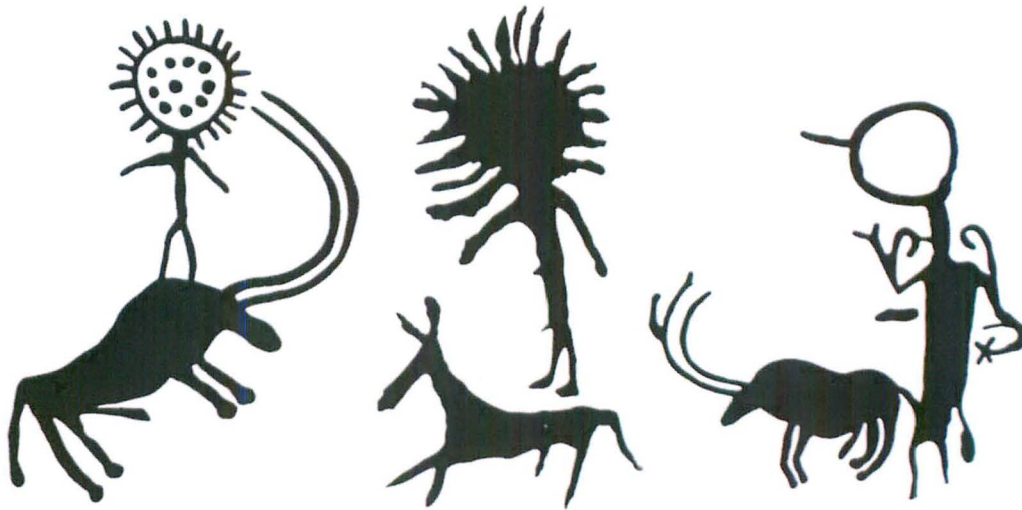
Tabwa mask of glass beads, feathers, pelts, leather, thongs, and vegetable fiber. The central solar motif is encompassed by a triangular 'rising of a new moon' symbol (*balam wez*). From the collection of the University of Iowa Museum of Art, Iowa City, Stanley Collection of African Art. After Singh 1993, p.334.

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Gold pectoral of Khepri in which the scarab beetle is combined with the sun disc to form one of the King's names, Neb-Kheperu-Re. It was found in the tomb of Tutankhamun c 1332-1322 BCE, and is in the collection of the Egyptian Museum, Cairo. After Singh 1993, p.321.

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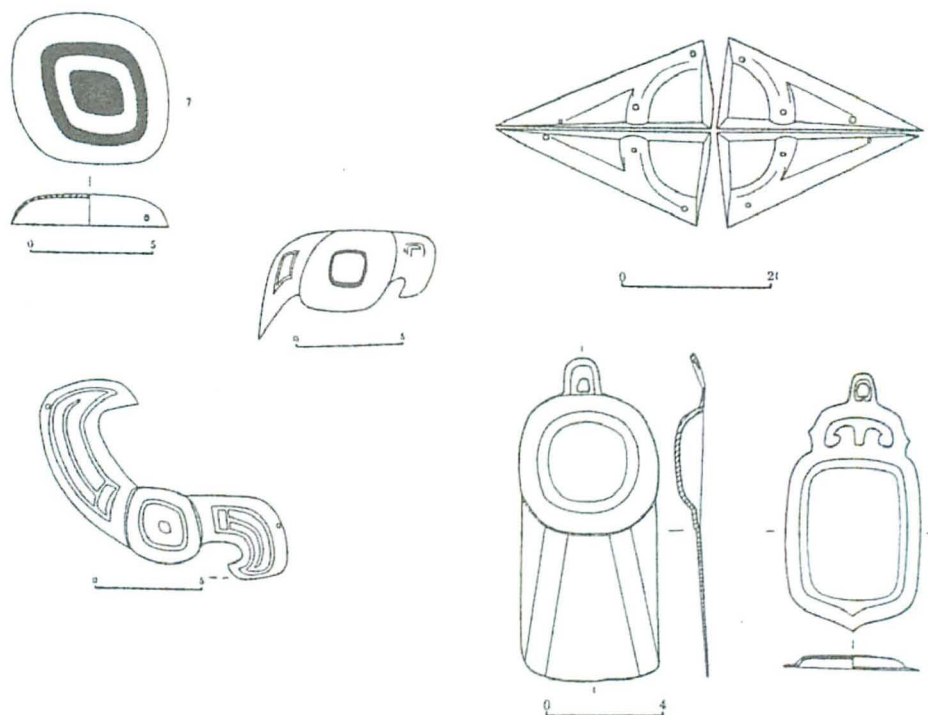
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Chinese Character Glossary

Characters appear in Traditional (Unsimplied) form. Names of cities are listed below the county, archaeological sites within cities are listed below the city name.

Anyang 安陽

Yinxu 殷墟

Ba 巴

Ba-Shu 巴蜀

Baodun 寶墩

Baoji 寶雞

bi 璧

Cancong 蠶叢

Chengdu 成都

Fangchijie 方池街

Jinshacun 金沙村

Shierqiao 十二橋

Yangzishan 羊子山

Chengdu Plain 成都平原

Chuci 楚辭

cong 琮

Daxi 大溪

Di 蒂

Shang-Di 上帝

ding 鼎

earthly branches 地支

Emeishan 峨眉山

Erligang 二里崗

Fanchi Street 方池街

Fuqinxiaoqu 撫琴小區

Fusang 夫桑

gaomei 高媒

ge 戈

Guanghan 广汉

Sanxingdui 三星堆

Han dynasty 漢

heavenly stem 天干

Hemudu 河姆渡

Henan 河南

Hongshan 紅山

Huainanzi 淮南子

Hubei 湖北

Huaxia 華夏

Huayang guozhi 華陽國志

Jiangsu Province 江蘇

Jiangxi Province 江西

Jinshacun 金沙村

Junpingjie 君平街

lei 壘

Liangzhu 良渚

Liji 禮記

Min River 岷江

Minshanfandian 岷山飯店

Panlongcheng 盤龍城

qian 建

Qin 秦

Qingyanggong 青羊宮

sanglin 桑林

Sanxingdui 三星堆

Shang 商

Shangshu 尚書

Shanhaijing 山海經

Shierqiao 十二橋

ShiJi 史記

Shijiahe 石家河

Shu kingdom 蜀國

Shuwang benji 蜀王本紀

Sichuan 西川

Sima Xiangru 司馬相如

taotie 饕餮

tiangan 天干

Tuo River 沱江

Wucheng 吳城

WuDing 武丁

Xihe 羲和

Xindu 新都

Majiexiang 馬家鄉

Xin'gan 新干

Xinjiang 新疆

Xinyicun 新一村

Yan 燕

Yanbulake (Yanbulaq) 焉不拉克

Yangzi 楊子江

Yangzishan 羊子山

Yao 堯

Yellow River 黃河

Yi 后羿

Yinxu 殷墟

Yueliangwan 月亮灣

zhang 璋

yazhang 牙璋

Zhengzhou 鄭州

zhi 觶

Zhihuijie 指揮街

Zhongyuan 中原

Zhou 周

Zhouli 周禮

Zhushujinian 竹書記年

Zhuwajie 竹瓦街

zongmu 縱目

zun 尊

References

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Allan, Sarah 1984, 'Drought, Human Sacrifice and the Mandate of Heaven in a Lost Text from the 'Shang shu'', *Bulletin of the School of Oriental and African Studies, University of London*, vol. 47, no. 3, pp.523-539.

Allan, Sarah 1990, 'Art and Meaning', *The Problem of Meaning in Early Chinese Ritual Bronzes* Colloquies on Art & Archaeology in Asia, no. 15, June 1990 (Roderick Whitfield ed.), Percival David Foundation of Chinese Art, School of Oriental and African Studies, University of London, London, pp.9-33.

Allan, Sarah 1991, *The Shape of the Turtle, Myth, Art, and Cosmos in Early China*, State University of New York Press, Albany.

Bagley, Robert W. 1990, 'Meaning and Explanation', *The Problem of Meaning in Early Chinese Ritual Bronzes* Colloquies on Art & Archaeology in Asia, no. 15, June 1990 (Roderick Whitfield ed.), Percival David Foundation of Chinese Art, School of Oriental and African Studies, University of London, London, pp.34-55.

Bagley, Robert W. 1993, 'An Early Bronze Age Tomb in Jiangxi Province', *Oriental Art*, July 1993, pp.20-36.

Bagley, Robert W. (ed.) 2001, *Ancient Sichuan Treasures from a Lost Civilization*, Seattle Art Museum, Seattle, Washington.

Barbieri-Low, Anthony J. 2000, 'Wheeled Vehicles in the Chinese Bronze Age c 2000-741 BCE', *Sino-Platonic Papers*, vol. 99 (February 2000).

Beijing 2002, *Jinsha tao zhen* 金沙掏珍, Chengdu Institute of Archaeology, Peking University Department of Archaeology, Cultural Relics Publishing House, Beijing.

Birrell, Anne 1993, *Chinese Mythology An Introduction*, The Johns Hopkins University Press, Baltimore and London.

Cass, Stephanie 1997, 'Horus', *Encyclopedia Mythica*, [Online] Available at <http://www.pantheon.org/articles/h/horus.html>

Chang, K.C. 1986, *The Archaeology of Ancient China* (4th Edition), Yale University Press, New Haven and London.

Chang, K.C. 1994, 'Shang Shamans', *The Power of Culture Studies in Chinese Cultural History*, The Chinese University Press, Hong Kong, pp.10-36.

Chang, Ruth H. 2000, 'Understanding Di and Tian, Deity and Heaven from Shang to Tang Dynasties', *Sino-Platonic Papers*, vol. 108 (September 2000).

Chen Fangmei 1999, 'Bronze Weapons from the South, the Xin'gan Case', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao eds), Eastern Art Publishing, London, pp.125-136.

Chen Shen 2002, *Anyang and Sanxingdui Unveiling the Mysteries of Ancient Chinese Civilizations*, Royal Ontario Museum, Toronto.

Chen Xiandan 1999, 'The Sacrificial Pits at Sanxingdui, Their Nature and Date', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao eds), Eastern Art Publishing, London, pp.165-171.

Cheng Te-k'un 1967, *Archaeological Studies in Szechwan*, Cambridge University Press, Cambridge.

Dye, D.S. 1930, 'Some Ancient Circles, Square, Angles and Curves in Earth and in Stone in Szechwan, China', *Journal of the West China Border Research Society*, vol. IV, 1930-31.

Egtved girl reconstruction by National Museum of Denmark, Lejre Archaeological Centre, [Image Online] Available at http://www.oakview.demon.co.uk/bronze_age/egtved.html

Feng Hanji 冯汉骥 and Tong Enzheng 童恩正 1979, 'ji Guanghan chutu de yushi qi 记广汉出土的玉石器', *Wenwu* 1979.2, pp.31-37.

Freedberg, David 1989, *The Power of Images, Studies in the History and Theory of Response*, The University of Chicago Press, Chicago and London.

Galindo Trejo, Jesús 2000, 'Recent Advances in Mesoamerican Archaeoastronomy', *Archaeoastronomy*, University of Texas Press, Austin, pp.32-42.

Gao DaLun 高大伦 2002, 'Chengdu Jinsha shangzhou yizhi chutu 'yu yanxing qi ' de chubu yanjiu 成都金沙商周遗址出土'玉眼形器'的初步研究', *Sichuan Wenwu* 四川文物 2002.2, pp.22-24.

Ghose, Madhuvanti 2002, *The Origins and Early Development of Anthropomorphic Indian Iconography*, PhD Dissertation, School of Oriental and African Studies, University of London.

Graham, David C. 1934, 'A Preliminary Report of the Hanchow Excavation', *Journal of the West China Border Research Society*, vol. VI, 1933-34.

Hayashi Minao 1991, 'Chapter 6' of *Chūgoku kogyokyu no kenkyū*, Kōbunkan, Taipei, Yishu Tushu 1997 Chinese translation. In Japanese.

Kimberley Te Winkle, "A Sacred Trinity: God, Mountain, and Bird. Cultic Practices of the Chengdu Plain" *Sino-Platonic Papers*, 149 (May, 2005)

Ito Michiharu and Takashima Kenichi 1996, *Studies in Early Chinese Civilization, Religion, Society, Language, and Paleography* vol. 1 (Text) and vol. 2 (Tables and Notes) Gary F. Arbuckle (ed.), The Intercultural Research Institute, Kansai Gaidai University, Osaka.

'Jiangxi Xin'gan Dayangzha Shangmu fajue jianbao 江西信干大洋洲 商墓发掘简报', *Wenwu* 文物 1991.1, pp.1-26.

Keightley, David N. 1978, *Sources of Shang History The Oracle-Bone Inscriptions of Bronze Age China*, University of California Press, Berkeley, Los Angeles, London.

Keightley, David N. 1995, 'Neolithic and Shang Periods' Chinese Religions – The State of the Field, Part I, Early Religious Traditions, The Neolithic Period through the Han Dynasty (c 4000 BCE to 220 CE) Daniel L. Overmyer (ed.), *The Journal of Asian Studies* vol. 54, no. 1, pp.128-145.

Keightley, David N. 1997a, 'Graphs, Words, and Meanings, Three Reference Works for Shang Oracle-Bone Studies, with an Excursus on the Religious Role of the Day or Sun', *Journal of the American Oriental Society*, vol. 117, no. 3, pp.507-524.

Keightley, David N. 1997b, 'Shang Oracle-Bone Inscriptions', *New Sources of Early Chinese History, An Introduction to the Reading of Inscriptions and Manuscripts*, Birdtrack Press, The Society for the Study of Early China, New Haven.

Keightley, David N. 2001, 'The 'Science' of the Ancestors, Divination, Curing, and Bronze-Casting in Late Shang China', *Asia Major*, Third Series, vol. XIV, part 2, pp.143-187.

Laufer, Berthold 1912, *Jade A Study in Chinese Archaeology and Religion*, Field Museum of Natural History, Chicago.

Le Roy, Monsignor A. 1922, *The Religion of the Primitives*, translation by Newton Thompson, MacMillan, New York.

Lewis, Mark Edward 1990, *Sanctioned Violence in Early China*, State University of New York Press, Albany.

Li Huilin 1983, 'The Domestication of Plants in China, Ecogeographical Considerations', *The Origins of Chinese Civilization* (David Keightley ed.), University of California Press, Berkeley.

Li Shuicheng 1999, 'A Discussion on Sino-Western Cultural Contacts and Exchange in the Second Millennium BCE Based on Recent Archaeological Discoveries', *Sino-Platonic Papers*, vol. 97 (December 1999).

Li Xueqin 1990, 'Liangzhu Culture and the Shang Dynasty Taotie Motif', *The Problem of Meaning in Early Chinese Ritual Bronzes Colloquies on Art & Archaeology in Asia*, no. 15, June 1990 (Roderick Whitfield ed.), Percival David Foundation of Chinese Art, School of Oriental and African Studies, University of London, London, pp.56-66.

Kimberley Te Winkle, "A Sacred Trinity: God, Mountain, and Bird. Cultic Practices of the Chengdu Plain" *Sino-Platonic Papers*, 149 (May, 2005)

Liu Yang 2002, 'The False Face of an Ancient Society', *Oriental Art*, vol. XLVIII no. 3, pp.2-16.

Matsumaru Michio and Takashima Kenichi 1993, *Kokotsu moji jishaku sōran*, Tokyō Daigaku Tōyō Bunka Kenkyūjo, Tokyō.

Nylan, Michael 2001, 'The Legacies of the Chengdu Plain', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.309-325.

Pankenier, David W. 1981-82, 'Astronomical Dates in Shang and Western Zhou', *Early China*, vol. 7, pp.2-37.

Pankenier, David W. 1983, *Early Chinese Astronomy and Cosmology, The 'Mandate of Heaven' as Epiphany*, PhD Dissertation, Stanford University.

Peng Bangben 2002, 'In Search of the Shu Kingdom, Ancient Legends and New Archaeological Discoveries in Sichuan', *Journal of East Asian Archaeology*, vol. 4, no. 1-4, pp.75-99.

Pritchard, James B. 1988, *Sarepta IV The Objects from Area II, X*, The University Museum of the University of Pennsylvania Excavations at Sarafand, Lebanon, Publications de L'Université Libanaise, Beyrouth.

Qiu Dengcheng 邱登成, 'Sanxingdui wenhua taiyang shen chongbai qianshuo 三星堆文化太阳神崇拜浅说', *Sichuan Wenwu* 四川文物 2001.2, pp.17-21.

Rawson, Jessica 1998, 'Chinese Burial Patterns, Sources of Information on Thought and Belief', *Cognition and Material Culture, the Archaeology of Symbolic Storage* (Colin Renfrew and Chris Scarre eds), McDonald Institute for Archaeological Research, University of Cambridge, Cambridge, pp.107-133.

Rawson, Jessica 2001, 'Tombs and Tomb Furnishings of the Eastern Han Period', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.253-307.

Sage, Steven 1992, *Ancient Sichuan and the Unification of China*, State University of New York Press, Albany.

Saint-Germain-du-Puy 2003, *Chine, l'énigme de l'homme de bronze*, Achevé d'imprimer, Saint-Germain-du-Puy.

Salviati, Filippo 1999, 'Decorated Pottery and Jade Carving of the Liangzhu Culture', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao eds), Eastern Art Publishing, London, pp.213-226.

Serruys, Paul 1974, 'Studies in the Language of the Shang Oracle Inscriptions', *T'oung Pao*, vol. LX, no. 1-3, pp.12-120.

Kimberley Te Winkle, "A Sacred Trinity: God, Mountain, and Bird. Cultic Practices of the Chengdu Plain" *Sino-Platonic Papers*, 149 (May, 2005)

Shaughnessy, Edward L. 1989, 'Historical Geography and the Extent of the Earliest Chinese Kingdoms' *Asia Major*, Third Series, vol. II, part 2, pp.1-22.

Shaughnessy, Edward L. (ed.) 1997, *New Sources of Early Chinese History, An Introduction to the Reading of Inscriptions and Manuscripts*, Birdtrack Press, The Society for the Study of Early China, New Haven.

Singh, Madanjeet (Compiled by) 1993, *The Sun in Myth and Art*, Thames and Hudson with UNESCO, London.

So, Jenny F. 2001, 'Jade and Stone at Sanxingdui', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.153-175.

Sun Hua 2003, 'Le site de Jinsha à Chengdu, une vue d'ensemble', *Chine, l'énigme de l'homme de bronze*, Achevé d'imprimer, Saint-Germain-du-Puy, pp.167-173.

Sun Zhixin 1993, 'The Liangzhu Culture, Its Discovery and Its Jades', *Early China*, vol. 18, pp.1-40.

Tang Jigen 1999, 'The Burial Ritual of the Shang Dynasty, a Reconstruction', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao (eds)), Eastern Art Publishing, London, pp.173-181.

Te Velde, H. 1985-96, 'Egyptian Hieroglyphs as Signs, Symbols and Gods', *Visible Religion Annual for Religious Iconography*, vol. 4-5, (H.G. Kippenberg ed.), E.J. Brill, Leiden.

Thote, Alain 2003, 'Plaque en forme d'œil', *Chine, l'énigme de l'homme de bronze*, Achevé d'imprimer, Saint-Germain-du-Puy, pp.180-81.

Tong Enzheng 2002, 'Magicians, Magic, and Shamanism in Ancient China', (Lothar von Falkenhausen ed.), *Journal of East Asian Archaeology*, vol. 4, no. 1-4, pp.27-73.

von Falkenhausen, Lothar 2001, 'The Chengdu Plain in the Early First Millenium BC, Zhuwajie', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.177-201.

Wang Tao 1990, 'A Textual Investigation of the Taotie', *The Problem of Meaning in Early Chinese Ritual Bronzes Colloquies on Art & Archaeology in Asia*, no. 15, June 1990 (Roderick Whitfield ed.), Percival David Foundation of Chinese Art, School of Oriental and African Studies, University of London, London, pp.102-118.

Wang Yi 王毅, Yan Jingsong 颜劲松, 'Renzhong xueji gu DNA fenxi zai Chengdu Jinshacun yizhu ji xiang guan zhu yicun yanjiu zhong de yingyong 人种学及古 DNA 分析在成都金沙遗址及相关诸遗存研究中的应用', *Wenwu* 2004.3, pp.93-95.

Ward, Mike 2004, Social Science Data Lab, University of Colorado at Boulder. [Online]
Available at
<http://www.sobek.colorado.edu/LAB/GODS/horus.html>

Wu Hung 1997, 'All About the Eyes, Two Groups of Sculptures from the Sanxingdui Culture', *Orientations*, September 1997, pp.58-66.

Xia Nai 1986, 'The Classification, Nomenclature, and Usage of Shang Dynasty Jades', *Studies of Shang Archaeology* (K.C. Chang ed.), Yale University Press, New Haven and London, pp.207-236.

Xu, Jay 2001a, 'Sichuan Before the Warring States Period', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.21-37.

Xu, Jay 2001b, 'Bronze at Sanxingdui', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.59-151.

Xu, Jay 2003, 'Personnage agenouillé', *Chine, l'énigme de l'homme de bronze*, Achevé d'imprimer, Saint-Germain-du-Puy, pp.178-79.

Yu Duan 1999, 'The Origin, Structure and Networks of Early Shu Cities', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao eds), Eastern Art Publishing, London, pp.95-103.

Zhang Chi & Hidenori Okamura 1999, 'Excavation of Cities, Shijiahe and Yinxiaocheng', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao eds), Eastern Art Publishing, London, pp.87-94.

Zhou ErTai 周尔泰 2003, 'Chengdu City Fangchijie GuWenhua Yizhi Chu Tan 成都市方池街古文化遗址初探', *Sichuan Wenwu* 四川文物 2003.1, pp.22-28.

Zhu Zhangyi 朱章义, Zhang Qing 张擎, Wang Feng 王方 2002, 'Chengdu Jinsha yizhi de faxian, fajue yu xiang yi 成都金沙遗址的发现, 发掘与意义', *Sichuan Wenwu* 四川文物 2002.2, pp.3-10.

Bibliography

Allan, Sarah 1984, 'Drought, Human Sacrifice and the Mandate of Heaven in a Lost Text from the 'Shang shu'', *Bulletin of the School of Oriental and African Studies, University of London*, vol. 47, no. 3, pp.523-539.

Allan, Sarah 1990, 'Art and Meaning', *The Problem of Meaning in Early Chinese Ritual Bronzes* Colloquies on Art & Archaeology in Asia, no. 15, June 1990 (Roderick Whitfield ed.), Percival David Foundation of Chinese Art, School of Oriental and African Studies, University of London, London, pp.9-33.

Allan, Sarah 1991, *The Shape of the Turtle, Myth, Art, and Cosmos in Early China*, State University of New York Press, Albany.

Bagley, Robert W. 1990, 'Meaning and Explanation', *The Problem of Meaning in Early Chinese Ritual Bronzes* Colloquies on Art & Archaeology in Asia, no. 15, June 1990 (Roderick Whitfield ed.), Percival David Foundation of Chinese Art, School of Oriental and African Studies, University of London, London, pp.34-55.

Bagley, Robert W. 1993, 'An Early Bronze Age Tomb in Jiangxi Province', *Oriental Art*, July 1993, pp.20-36.

Bagley, Robert W. (ed.) 2001, *Ancient Sichuan Treasures from a Lost Civilization*, Seattle Art Museum, Seattle, Washington.

Barbieri-Low, Anthony J. 2000, 'Wheeled Vehicles in the Chinese Bronze Age c 2000-741 BCE', *Sino-Platonic Papers*, vol. 99 (February 2000).

Beijing 2002, *Jinsha tao zhen* 金沙掏珍, Chengdu Institute of Archaeology, Peking University Department of Archaeology, Cultural Relics Publishing House, Beijing.

Birrell, Anne 1993, *Chinese Mythology An Introduction*, The Johns Hopkins University Press, Baltimore and London.

Bodde, Derk 1994, 'What and Why in Chinese Civilization', *The Power of Culture Studies in Chinese Cultural History*, The Chinese University Press, Hong Kong, pp.344-358.

Cass, Stephanie 1997, 'Horus', *Encyclopedia Mythica*, [Online] Available at <http://www.pantheon.org/articles/h/horus.html>

Chalfant, Frank H. 1906, *Early Chinese Writing*, Memoirs of the Carnegie Museum, vol. 4, no. 1 (September 1906).

Kimberley Te Winkle, "A Sacred Trinity: God, Mountain, and Bird. Cultic Practices of the Chengdu Plain" *Sino-Platonic Papers*, 149 (May, 2005)

Chang, K.C. (ed.) 1986, *Studies of Shang Archaeology* Selected Papers from the International Conference on Shang Civilization, Yale University Press, New Haven and London.

Chang, K.C. 1986, *The Archaeology of Ancient China* (4th Edition), Yale University Press, New Haven and London.

Chang, K.C. 1994, 'Shang Shamans', *The Power of Culture Studies in Chinese Cultural History*, The Chinese University Press, Hong Kong, pp.10-36.

Chang, Ruth H. 2000, 'Understanding Di and Tian, Deity and Heaven from Shang to Tang Dynasties', *Sino-Platonic Papers*, vol. 108 (September 2000).

Chen Chung-Yu 1995, 'Decorative Art on Bone Ssu from Yinxu', *Bulletin of the Institute of History and Philology*, Academia Sinica, vol. 66, part 3 (September 1995) pp.813-919.

Chen Fangmei 1999, 'Bronze Weapons from the South, the Xin'gan Case', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao eds), Eastern Art Publishing, London, pp.125-136.

Chen Shen 2002, *Anyang and Sanxingdui Unveiling the Mysteries of Ancient Chinese Civilizations*, Royal Ontario Museum, Toronto.

Chen Xiandan 1999, 'The Sacrificial Pits at Sanxingdui, Their Nature and Date', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao eds), Eastern Art Publishing, London, pp.165-171.

Cheng Te-k'un 1967, *Archaeological Studies in Szechwan*, Cambridge University Press, Cambridge.

Dye, D.S. 1930, 'Some Ancient Circles, Square, Angles and Curves in Earth and in Stone in Szechwan, China', *Journal of the West China Border Research Society*, vol. IV, 1930-31.

Egtved girl reconstruction by National Museum of Denmark, Lejre Archaeological Centre, [Image Online] Available at http://www.oakview.demon.co.uk/bronze_age/edtvled.html

Eno, Robert 1990, *The Confucian Creation of Heaven: Philosophy and the Defense of Ritual Mastery*, State University of New York Press, Albany.

Errington, Elizabeth and J. Cribb (eds) 1992, *The Crossroads of Asia: Transformation in Image and Symbol*, The Ancient India and Iran Trust, Cambridge.

Fracasso, Riccardo 1988, *A Technical Glossary of Jiaguology (Oracle Bone Studies)*, Supplemento n.56 agli ANNALI vol. 48 (1988), fasc. 3, Istituto Universitario Orientale, Rome: Rome.

Kimberley Te Winkle, "A Sacred Trinity: God, Mountain, and Bird. Cultic Practices of the Chengdu Plain" *Sino-Platonic Papers*, 149 (May, 2005)

Feng Hanji 冯汉骥 and Tong Enzheng 童恩正 1979, 'ji Guanghan chutu de yushi qi 记广汉出土的玉石器', *Wenwu* 1979.2, pp.31-37.

Freedberg, David 1989, *The Power of Images, Studies in the History and Theory of Response*, The University of Chicago Press, Chicago and London.

Galindo Trejo, Jesús 2000, 'Recent Advances in Mesoamerican Archaeoastronomy', *Archaeoastronomy*, University of Texas Press, Austin, pp.32-42.

Gao DaLun 高大伦 2002, 'Chengdu Jinsha shangzhou yizhi chutu 'yu yanxing qi' de chubu yanjiu 成都金沙商周遗址出土'玉眼形器'的初步研究', *Sichuan Wenwu* 四川文物 2002.2, pp.22-24.

Ghose, Madhuvanti 2002, *The Origins and Early Development of Anthropomorphic Indian Iconography*, PhD Dissertation, School of Oriental and African Studies, University of London.

Graham, David C. 1934, 'A Preliminary Report of the Hançhow Excavation', *Journal of the West China Border Research Society*, vol. VI, 1933-34.

Hayashi Minao 1991, 'Chapter 6' of *Chūgoku kogyokyu no kenkyū*, Kōbunkan, Taibei, Yishu Tushu 1997 Chinese translation. In Japanese.

Ito Michiharu and Takashima Kenichi 1996, *Studies in Early Chinese Civilization, Religion, Society, Language, and Paleography* vol. 1 (Text) and vol. 2 (Tables and Notes) Gary F. Arbuckle (ed.), The Intercultural Research Institute, Kansai Gaidai University, Osaka.

'Jiangxi Xin'gan Dayangzha Shangmu fajue jianbao 江西信干大洋洲 商墓发掘简报', *Wenwu* 文物 1991.1, pp.1-26.

Jao Tsung-I 1991, 'Questions on the Origins of Writing Raised by the Silk Road', *Sino-Platonic Papers* vol. 26 (September 1991).

Keightley, David N. 1978, *Sources of Shang History The Oracle-Bone Inscriptions of Bronze Age China*, University of California Press, Berkeley, Los Angeles, London.

Keightley, David N. 1995, 'Neolithic and Shang Periods' Chinese Religions – The State of the Field, Part I, Early Religious Traditions, The Neolithic Period through the Han Dynasty (c 4000 BCE to 220 CE) Daniel L. Overmyer (ed.), *The Journal of Asian Studies* vol. 54, no. 1, pp.128-145.

Keightley, David N. 1997a, 'Graphs, Words, and Meanings, Three Reference Works for Shang Oracle-Bone Studies, with an Excursus on the Religious Role of the Day or Sun', *Journal of the American Oriental Society*, vol. 117, no. 3, pp.507-524.

Kimberley Te Winkle, "A Sacred Trinity: God, Mountain, and Bird. Cultic Practices of the Chengdu Plain" *Sino-Platonic Papers*, 149 (May, 2005)

Keightley, David N. 1997b, 'Shang Oracle-Bone Inscriptions' *New Sources of Early Chinese History, An Introduction to the Reading of Inscriptions and Manuscripts*, Birdtrack Press, The Society for the Study of Early China, New Haven.

Keightley, David N. 2001, 'The 'Science' of the Ancestors, Divination, Curing, and Bronze-Casting in Late Shang China', *Asia Major*, Third Series, vol. XIV, part 2, pp.143-187.

Laufer, Berthold 1912, *Jade A Study in Chinese Archaeology and Religion*, Field Museum of Natural History, Chicago.

Le Roy, Monsignor A. 1922, *The Religion of the Primitives*, translation by Newton Thompson, MacMillan, New York.

Lewis, Mark Edward 1990, *Sanctioned Violence in Early China*, State University of New York Press, Albany.

Li Dingkai (ed.) *Ba-Shu Bronze Ware* 巴蜀青铜器, Compiled by the Provincial Museum of Sichuan, Chengdu Publishing House and Macau Sinobrothers and Publications Ltd., Chengdu.

Li Huilin 1983, 'The Domestication of Plants in China, Ecogeographical Considerations', *The Origins of Chinese Civilization* (David Keightley ed.), University of California Press, Berkeley.

Li Shuicheng 1999, 'A Discussion on Sino-Western Cultural Contacts and Exchange in the Second Millennium BCE Based on Recent Archaeological Discoveries', *Sino-Platonic Papers*, vol. 97 (December 1999).

Li Xueqin 1990, 'Liangzhu Culture and the Shang Dynasty Taotie Motif', *The Problem of Meaning in Early Chinese Ritual Bronzes Colloquies on Art & Archaeology in Asia*, no. 15, June 1990 (Roderick Whitfield ed.), Percival David Foundation of Chinese Art, School of Oriental and African Studies, University of London, London, pp.56-66.

Lin, ShuenFu 1994, 'The Language of the 'Inner Chapters' of the *Chuang Tzu*', *The Power of Culture Studies in Chinese Cultural History*, The Chinese University Press, Hong Kong, pp.47-69.

Liu Yang 2002, 'The False Face of an Ancient Society', *Oriental Art*, vol. XLVIII no. 3, pp.2-16.

Lo, Vivienne 2001, '*Huangdi Hama jing* (Yellow Emperor's Toad Canon)', *Asia Major* Third Series, vol. XIV, part 2, pp.61-99.

MacKenzie, Colin Christopher 1990, *Southern Traditions of Bronze-Work in China During the Eastern Zhou Period (770-221 BC)*, PhD Thesis, School of Oriental and African Studies, University of London.

Mair, Victor H. 1990, 'History of Chinese Turkistan in the Pre-Islamic Period', *Sino-Platonic Papers* vol. 16 (March 1990).

Kimberley Te Winkle, "A Sacred Trinity: God, Mountain, and Bird. Cultic Practices of the Chengdu Plain" *Sino-Platonic Papers*, 149 (May, 2005)

Matsumaru Michio and Takashima Kenichi 1993, *Kokotsu moji jishaku sōran*, Tokyō Daigaku Tōyō Bunka Kenkyūjo, Tokyō.

Mei, TsuLin 1994, 'Notes on the Morphology of Ideas in Ancient China', *The Power of Culture Studies in Chinese Cultural History*, The Chinese University Press, Hong Kong, pp.37-46.

Nelson, Sarah 1994, 'The Development of Complexity in Prehistoric Northern China', *Sino-Platonic Papers* vol. 63 (December 1994).

Nylan, Michael 2001, 'The Legacies of the Chengdu Plain', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.309-325.

Pankenier, David W. 1981-82, 'Astronomical Dates in Shang and Western Zhou', *Early China*, vol. 7, pp.2-37.

Pankenier, David W. 1983, *Early Chinese Astronomy and Cosmology, The 'Mandate of Heaven' as Epiphany*, PhD Dissertation, Stanford University.

Peng Bangben 2002, 'In Search of the Shu Kingdom, Ancient Legends and New Archaeological Discoveries in Sichuan', *Journal of East Asian Archaeology*, vol. 4, no. 1-4, pp.75-99.

Peterson, Willard J. 1994 'Ssu-ma Ch'ien as Cultural Historian', *The Power of Culture Studies in Chinese Cultural History*, The Chinese University Press, Hong Kong, pp.70-79.

Pritchard, James B. 1988, *Sarepta IV The Objects from Area II, X*, The University Museum of the University of Pennsylvania Excavations at Sarafand, Lebanon, Publications de L'Université Libanaise, Beyrouth.

Qiu Dengcheng 邱登成, 'Sanxingdui wenhua taiyang shen chongbai qianshuo 三星堆文化太阳神崇拜浅说', *Sichuan Wenwu* 四川文物 2001.2, pp.17-21.

Rawson, Jessica 1998, 'Chinese Burial Patterns, Sources of Information on Thought and Belief', *Cognition and Material Culture, the Archaeology of Symbolic Storage* (Colin Renfrew and Chris Scarre eds), McDonald Institute for Archaeological Research, University of Cambridge, Cambridge, pp.107-133.

Rawson, Jessica 2001, 'Tombs and Tomb Furnishings of the Eastern Han Period', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.253-307.

Sage, Steven 1992, *Ancient Sichuan and the Unification of China*, State University of New York Press, Albany.

Saint-Germain-du-Puy 2003, *Chine, l'énigme de l'homme de bronze*, Achevé d'imprimer, Saint-Germain-du-Puy.

Salviati, Filippo 1999, 'Decorated Pottery and Jade Carving of the Liangzhu Culture', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao eds), Eastern Art Publishing, London, pp.213-226.

Serruys, Paul 1974, 'Studies in the Language of the Shang Oracle Inscriptions', *T'oung Pao*, vol. LX, no. 1-3, pp.12-120.

Shaughnessy, Edward L. 1989, 'Historical Geography and the Extent of the Earliest Chinese Kingdoms' *Asia Major*, Third Series, vol. II, part 2, pp.1-22.

Shaughnessy, Edward L. (ed.) 1997, *New Sources of Early Chinese History, An Introduction to the Reading of Inscriptions and Manuscripts*, Birdtrack Press, The Society for the Study of Early China, New Haven.

Shigeki Kaizuka 1960, *Catalogue of the Oracle Bones in the Kyoto University Research Institute for Humanistic Studies*, Zinbun Kagaku Kenkyuso, Kyoto University, Kyoto.

Singh, Madanjeet (Compiled by) 1993, *The Sun in Myth and Art*, Thames and Hudson with UNESCO, London.

So, Jenny F. 2001, 'Jade and Stone at Sanxingdui', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.153-175.

Strassberg, Richard E. 2002, *A Chinese Bestiary, Strange Creatures from the Guideways Through Mountains and Seas*, University of California Press, Berkeley.

Sun Hua 2003, 'Le site de Jinsha à Chengdu, une vue d'ensemble', *Chine, l'énigme de l'homme de bronze*, Achevé d'imprimer, Saint-Germain-du-Puy, pp.167-173.

Sun Zhixin 1993, 'The Liangzhu Culture, Its Discovery and Its Jades', *Early China*, vol. 18, pp.1-40.

Tang Jigen 1999, 'The Burial Ritual of the Shang Dynasty, a Reconstruction', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao (eds)), Eastern Art Publishing, London, pp.173-181.

Te Velde, H. 1985-96, 'Egyptian Hieroglyphs as Signs, Symbols and Gods', *Visible Religion Annual for Religious Iconography*, vol. 4-5, (H.G. Kippenberg ed.), E.J. Brill, Leiden.

Thote, Alain 2003, 'Plaque en forme d'œil', *Chine, l'énigme de l'homme de bronze*, Achevé d'imprimer, Saint-Germain-du-Puy, pp.180-81.

Tong Enzheng 2002, 'Magicians, Magic, and Shamanism in Ancient China', (Lothar von Falkenhausen ed.), *Journal of East Asian Archaeology*, vol. 4, no. 1-4, pp.27-73.

von Falkenhausen, Lothar 1995, 'Reflections on the Political Role of Spirit Mediums in Early China: the *Wu* Officials in the *ZhouLi*', *Early China* vol. 20, pp.279-300.

von Falkenhausen, Lothar 2001, 'The Chengdu Plain in the Early First Millenium BC, Zhuwajie', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.177-201.

Wang Tao 1990, 'A Textual Investigation of the *Taotie*', *The Problem of Meaning in Early Chinese Ritual Bronzes* Colloquies on Art & Archaeology in Asia, no. 15, June 1990 (Roderick Whitfield ed.), Percival David Foundation of Chinese Art, School of Oriental and African Studies, University of London, London, pp.102-118.

Wang Yi 王毅, Yan Jingsong 颜劲松, 'Renzhong xueji gu DNA fenxi zai Chengdu Jinshacun yizhu ji xiang guan zhu yicun yanjiu zhong de yingyong 人种学及古 DNA 分析在成都金沙遗址及相关诸遗存研究中的应用', *Wenwu* 2004.3, pp.93-95.

Ward, Mike 2004, Social Science Data Lab, University of Colorado at Boulder. [Online] Available at <http://www.sobek.colorado.edu/LAB/GODS/horus.html>

Weld, Susan 1997, 'The Covenant Texts from Houma and Wenxian', *New Sources of Early Chinese History: An Introduction to the Reading of Inscriptions and Manuscripts*, Birdtrack Press; The Society for the Study of Early China, New Haven.

White, William C. 1945, *Bone Culture of Ancient China: An Archaeological Study of Bone Material from Northern Honan, Dating about the Twelfth Century, B.C.*, Museum Studies, no. 4, The University of Toronto Press, Toronto.

Wu Hung 1997, 'All About the Eyes, Two Groups of Sculptures from the Sanxingdui Culture', *Oriental Arts*, September 1997, pp.58-66.

Xia Nai 1986, 'The Classification, Nomenclature, and Usage of Shang Dynasty Jades', *Studies of Shang Archaeology* (K.C. Chang ed.), Yale University Press, New Haven and London, pp.207-236.

Xu, Jay 2001a, 'Sichuan Before the Warring States Period', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.21-37.

Xu, Jay 2001b, 'Bronze at Sanxingdui', *Ancient Sichuan Treasures from a Lost Civilization* (Robert Bagley ed.), Seattle Art Museum, Seattle, Washington, pp.59-151.

Xu, Jay 2003, 'Personnage agenouillé', *Chine, l'énigme de l'homme de bronze*, *Achévé d'imprimer*, Saint-Germain-du-Puy, pp.178-79.

Yang Jidong 1998, 'Siba: Bronze Age Culture of the Gansu Corridor', *Sino-Platonic Papers* vol. 86 (October 1998).

Kimberley Te Winkle, "A Sacred Trinity: God, Mountain, and Bird. Cultic Practices of the Chengdu Plain" *Sino-Platonic Papers*, 149 (May, 2005)

Yu Duan 1999, 'The Origin, Structure and Networks of Early Shu Cities', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao eds), Eastern Art Publishing, London, pp.95-103.

Zhang Chi & Hidenori Okamura 1999, 'Excavation of Cities, Shijiahe and Yinxiangcheng', *Exploring China's Past New Discoveries and Studies in Archaeology and Art* (Roderick Whitfield and Wang Tao eds), Eastern Art Publishing, London, pp.87-94.

Zhou ErTai 周尔泰 2003, 'Chengdu City Fangchijie GuWenhua Yizhi Chu Tan 成都市方池街古文化遗址初探', *Sichuan Wenwu* 四川文物 2003.1, pp.22-28.

Zhu Qingzhi 1995, 'Some Linguistic Evidence for Early Cultural Exchange between China and India', *Sino-Platonic Papers* vol. 66 (March 1995).

Zhu Zhangyi 朱章义, Zhang Qing 张擎, Wang Feng 王方 2002, 'Chengdu Jinsha yizhi de faxian, fajue yu xiang yi 成都金沙遗址的发现, 发掘与意义', *Sichuan Wenwu* 四川文物 2002.2, pp.3-10.

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