THE MEANING OF ANIMAL MOTIFS IN NEOLITHIC CHINA
based on examples of jade figurines and shell mosaics

The history of animal images in world art probably begins some 40,000 years ago in the Palaeolithic period. The figures of animals, or their stylised (more or less) patterns, once presented in the form of paintings and sculptures, made it possible to present various meanings and values. Learning about animals probably helped to understand many relationships in life, and thus to create a slightly clearer picture of the forces of nature. Since ancient times, the Chinese have been aware of the fundamental principles that govern all things, not only people but also animals and the heavens. They demonstrated this awareness through creative activity, an excellent example of which are figurines and patterns made of jades, as well as shells inspired by animal figures, made in the Neolithic times. This article is an attempt to read these meanings, which could also influence the perception of the world today.

JADE ANIMAL FIGURINES

Jades are of special importance to the Chinese. They were once valued more than gold and silver for their beauty and the properties attributed to them. Nowadays, the term “jade” means the common name of two rocks that look very similar to each other: jade and nephrite. Initially, it was thought that both were the same mineral, but in the 19th century it was proved that this
is not the case. They differ in structure: jade is formed by pyroxenes, and nephrite is formed by amphiboles. In terms of density, jade is harder and dissolves in hydrochloric acid: only jade has this ability when melted in a blower flame. As for their occurrence, jades are much rarer, and so are more appreciated. Nevertheless, in Chinese tradition, both are referred to as yu玉.

Their extraordinary durability as well as aesthetic values, especially transparency, colour and gloss effect, which can be obtained after polishing the surface of the stone, were discovered by the Chinese as long as 7,000 years ago. The beauty, resilience, and hardness of jades made them suitable ornaments for the elite to reflect all the positive aspects of their earthly power. Among the various shapes that the ornaments took, many represented animals. They were often pendants that served as amulets to protect the living and the dead from evil spirits. Figures made by artists living in the northeastern areas, i.e. where the Hongshan 紅山 culture once developed (today’s Liaoning 遼寧 province, and Inner Mongolia, mainly archaeological sites such as: Niuheliang 牛河梁, Sanguandianzi 三官甸子 and Dongshanzui 东山嘴, c. 5000–2500 BC).

One of the most important ornaments of Hongshan culture was yu zuulong 玉豬, or “pig-dragon jade” placed separately in the graves of men of undoubtedly high social status (Fig. 1). It was usually found at the deceased’s chest, which means that the amulet was hung around the neck (thanks to a hole drilled for this purpose), most likely believing in its successful driving force in the afterlife, as well as the correct emphasis on the position of the deceased person. The early form of this ornament was standardised, although the specimens could differ in size – from a few to several centimetres. What distinguishes it the most is its shape very similar to a slit-ring earring. It is associated with the curled body of an animal, whose tail is almost in contact with the mouth. While the tail is a smooth extension of the body, the mouth clearly resembles a folded pig’s snout, while the ears resemble those of a real pig. Nevertheless, the large eyes marked in many figurines of this type should be understood rather as an attempt to express some emotions. Pigs have poorly developed eyesight and their eyes are small in relation to their entire body weight, so the special emphasis on this part of the head in the jade

---

1) Amédée Damour made the discovery in 1863. See Damour (1863: 861–65).
2) Rawson (1995: 13).
3) Childs-Johnson (2017: 10).
The meaning of animal motifs in Neolithic China

figures can be understood as a desire to present a state of tension or careful observation – which does not exclude the other.4

The shape of the figurine itself is probably derived from the previous jue 玖 rings with a characteristic slit that allows the ornaments to be worn on the ears (Fig. 2).5 The form of rings, on the other hand, resembles the coiled silhouette of a snake, which is probably the prototype of a dragon. It is true that there is no agreement among researchers as to which of the animals – a snake, a fish or a crocodile – was the direct inspiration for creating a fancy creature,6 it seems that the snake was quite crucial in this regard.

There is no doubt that since time immemorial snakes have aroused in man fear mixed with admiration. According to the myths contained in the ancient anonymous geographic fantasy treatise Shanhaijing 山海經 (Book of Mountains and the Seas) created between the 4th and 2nd centuries BC, snakes were treated as attributes of various deities.7 They were perceived holy guardians of the tombs, though in excessive numbers they could herald a flood or drought. Due to their ability to shed skin, snakes had powers of regeneration and the possibility of a new life. For this reason, it seems that the combination of the form of a snake – as a “self-renewable” creature, often dangerous and difficult to domesticate – with the figure of a pig that played an important role in the daily life of the Hongshan community, is a symbolic fusion of wild, out-of-control nature with a being totally dominated by man and subject to his will. Perhaps this was how the balance was seen and why it was given such an emblematic form.

While the zhulong figure could be called a prototype of the dragon, the green jade sculpture discovered in the village of Sanxingtala 三星 他 拉 (Inner Mongolia) should definitely be called a dragon (Fig. 3). It is a 26 cm tall figurine dating back to the development of the Hongshan culture, narrowed down to 3500–2500 BC. It is made of one piece of green jade, circularly shaped and resembling the Latin letter C. The form delights with its slenderness

4) However, emphasising the size of the eyes in Neolithic representations (and of different cultures) may also be related to hypnagogic experiences, i.e. visions or hallucinations induced by neurologically in the semi-conscious state, or with the help of such means as alcohol, rhythmic music, dance or psychotropic drugs. See Allan (2016: 33); compare with Pearce and Lewis-Williams (2005).
5) Rawson (1995: 116).
6) Cahill (2012: 426).
7) Birrell (1999: 13, 69, 102, 116–117, 136, 145, 193, 258).
and balance of each element. An elongated face with an upturned nose and longitudinally chiselled eyes gives the impression of a faint smile, and the undulating mane on its back seems to maintain the dragon’s balance. It looks like a hibernating creature with extraordinary mental strength. Its meaning, although not entirely clear, is probably related to religious rituals. Considering the fairly large dimensions of the sculpture and the fact that it could be hung on a string thanks to a hole drilled almost in the centre of the circular form, it is likely that it was a totem of some tribal group, perhaps even used in sacrificial rites.

More similar “jade dragons” have been discovered in the area of the Hongshan culture, which may indicate a peculiar cult of this supernatural being. Nevertheless, the figurine from Sanxingtala seems to be exemplary and unique in terms of the perfection of craftsmanship. Perhaps for the tribes there it was a manifestation of the highest degree of integration between Heaven and Earth – a materialised entity, whose presence sanctioned the established order, while helping to experience some spiritual practices.

In order to create transcendental bonds between people and nature, the Hongshan people used jades to create other figurines based on animal models. Most often they were birds, turtles, cicadas and silkworms, whose observed natural features probably prompted the use of their images in a ritual and funeral context. For example, bird figures with the appearance of an eagle – *yu ying* (jade eagle) were most likely a symbol of communication with Heaven and the journey of the deceased, which was due to the ability to fly, or generally to soar into the skies. Their shapes were usually similar to each other: clearly spread wings (often with the appearance of rounded plates with vertical grooves), a more or less cut tail, a flattened head with marked (or not) eyes and ears, and a rectangular body on which various patterns (suggesting plumage) could be seen (Fig. 4).

In turn, the figurines of turtles (Fig. 5), whose prototype was believed to have the ability to move between the Earth and the Great Ocean, were identified, among others, with the symbol of the spiritual journey to the underworld. Not without reason, as Rui Oliveira Lopes notes, so-called “oracle bones” – which are largely turtle shells – were used especially in the later Shang Dynasty in the rituals of divination and communication with Heaven, which suggests a continuity of Neolithic ritual practice. Nevertheless, the

---

8) Lopes (2014: 197).

9) Lopes (2014: 203).
The meaning of animal motifs in Neolithic China

figures of turtles carved from jades were supposed to favour their owners not only after death but also during their lifetime as talismans. Many sculptures of this type are characterised by an almost round, flattened form of shell with four protruding front and rear limbs (with marked claws), as well as the head and tail. Often on the underside, at the base of the “head-neck” of jade turtles, there are two holes used to force a string or a thong through them. 10) Wearing this type of talisman was supposed to guarantee two things observed in the life of real turtles: long life and numerous offspring.

Figures of cicadas and silkworms (Figs. 6, 7), on the other hand, hung as talismans or amulets around the necks of the deceased, reflected the idea of transitioning to a new form of life or existence. 11) Cicadas spend most of their lives (even many years) underground as larvae, feeding on the sap of the roots. After reaching maturity, they come to the surface and undergo a spectacular metamorphosis shedding the outer layer of their armour, then copulate, lay eggs and die...

It is similar with silkworms, living above the ground, but mainly wrapped in a silk cocoon of their own production. The pupation process is as effective as in the case of cicadas, but this “magical” skill did not stop humans from using insects to produce silk, the acquisition of which involves the simultaneous killing of larvae that are almost ready for metamorphosis. 12)

Figures of cicadas from the early period of Hongshan culture are presented mainly in the form of cocoons, indicating the “underground” and long-term stage of their life. It seems, then, that it was not the metamorphosis itself that was important, but the waiting for it in the form of a chrysalis secured in a cocoon.

10) Youngman (2008: 35, cat. no 11).
11) Lopes (2014: 203). Fung, Yeung (1996: 11).
12) China was the first country in the world to launch large-scale silkworm farming, and thus silk production. Archaeological research shows that the first examples of silk come from the Neolithic period (ca. 3200–2200 BC). See Cultural Heritage 2008: 20. Nevertheless, the process of obtaining fibres was not only complicated, but also painful, as it consisted in manually unwinding the cocoons previously immersed in boiling water. The hot water, unfortunately, killed the pupae, but it was the only way to avoid the destruction of the cocoons that had occurred during the transformation and the release of the moth. Moreover, the boiling water helped to dissolve the sericin, which is a natural protein sticking silk fibres together, whose length after unfolding could reach up to 1000 meters, with a diameter ranging from 0.006 mm to 0.009 mm. See Xia Nei (1983: 54).
One of the most durable and representative fantastic creature patterns in the iconography of ancient China is called Taotie 饕餮. Its character consists of a double shi 食, that means “eat”, hence the term “glutton” is sometimes used interchangeably. The term taotie itself appears for the first time in Zuo zhuan 左傳 (Commentary [on the Chronicle of Springs and Autumn] by Mr Zuo), a work most likely compiled during the Warring States period (403–389 BC) to denote one of the four wicked beings to which the greedy and voracious descendant of the Jinyun 縉雲 clan was compared, who lived in the times of the legendary Yellow Emperor.\(^\text{13}\) The anonymous narrator Zuo Zhuan left the following message:

“[The officer] Jinyun [In the time of Huangdi] had a descendant who was devoid of ability and virtue. He was greedy of eating and drinking, craving for money and property. Ever gratifying his lusta, and making a grand display, he was insatiable, rapacious in his exactions, and accumulating stores of wealth. He had no idea of calculating where he should stop, and made no exceptions in favour of the orphan and widow, felt no compassion for the poor and exhausted. All the people under heaven likened him to the three other wicked ones, and called him Glutton.” \(^\text{14}\)

Taotie also appears in Shanhaijing 山海經 (Book of Mountains and Seas) as Paoxio 狍鴞 – a creature with a goat’s body, a human face, human hands, tiger teeth, and eyes behind its armpits. It makes a sound like a child and lives in the Gouwu 鉤吾 mountains.\(^\text{15}\) In a later commentary on Shanhaijing by Guo Pu’s 郭璞 (276–324) from the Jin 晉 dynasty (265–420), there is information that the same animal was very greedy (tanlan 貪婪) and capable of hurting a person. Guo Pu believes that this is the Taotie mentioned in Zuo zhuan.

Taotie as a pattern appearing on bronze vessels in the Zhou era is discussed in a fragment from Lüshi Chunqiu 呂氏春秋 (Master Lü’s Spring and Autumn Annals), a text compiled around 239 BC:

\(^{13}\) Legge (1872.6: 283).
\(^{14}\) Legge (1872.6: 283).
\(^{15}\) Strassberg (2002: 128).
The meaning of animal motifs in Neolithic China

“Taotie on ding bronzes from the Zhou has a head but no body. It ate a man, but, before it could swallowed him, it damaged own body.”[16]

Li Zehou, interpreting the myth related to Taotie, suggests that this creature had a symbolic protective meaning for its own clan, while the others unfamiliar with it were surely afraid of its strength. [17] If so, perhaps Taotie’s dual caring-destructive nature must have found its reflection in art that sees beauty in what is wild, frightening and mysterious. However, we do not have any information to suggest that the term taotie itself appeared anywhere before the advent of the Zhou Dynasty (c. 1046–256 B.C.). [18] Thus, we identify some of the patterns that appear especially on ancient jades, somewhat intuitively, as representing Taotie. [19]

It is an ambiguous motif appearing in a symmetrical arrangement, which makes it possible to see either a single animal or two joined. [20] One of the oldest representations of this type we know of was engraved on a jade bracelet excavated from a tomb (around 3000 BC) discovered in the area of the present Jiangsu Province in Zhanglingshan 張陵山 (Fig. 8).[21] Some scholars have suggested that this creature is a variation of the pig-dragon, appearing in the form of jade amulets in northern China in the areas where the Hongshan culture developed.[22] If so, then we would have – as Jessica Rawson points out – evidence of the transfer of pattern from one cultural region to another, but without transferring the same meaning. [23] Pendants or talismans in the shape of a dragon with a pig’s head in their form were practically unchanged. In turn, the patterns that appeared in the vicinity of Tai Lake (today’s Zhejiang and Jiangsu provinces), where the Liangzhu Culture (c. 3400–2250

[16] 周鼎著饕餮，有首無身，食人未咽，害及其身，以言報更也。Lüshi Chunqiu, text accessed online: https://ctext.org/lv-shi-chun-qiu/xian-shi/zh
[17] Li Zehou (1994: 30–31).
[18] Allan (1991: 145, 148); Allan (2016: 27–28).
[19] Some researchers believe, however, that the term taotie is inappropriate for Neolithic patterns appearing on jades, and that both in form and historical context it does not correlate with patterns appearing on Shang bronzes. Hence, in the literature, you can also find names such as: “motif with two eyes” or “animal face”. See Allan (2016: 28).
[20] Schwartz (2011: 20).
[21] Forsyth (1991: 74). Cf. Rawson (1995: 34); Salviati (1994: 134–135).
[22] Rawson (1995: 34).
[23] Rawson (1995: 34).
BC) developed, indicate a considerable diversity of “monster” motifs that undergo a process of individualisation. Instead, flat and relief forms were used to create them, making the patterns similar to masks. Numerous jades excavated from tombs in Fanshan 磚山 are good examples. Among them was also a mysterious jade cong (Figs. 9, 10), i.e. a low rectangular form with a cylindrical opening, probably with a symbolic meaning, but perhaps also a functional one. On the outer walls and corners of the cong there are complex figural motifs that differ slightly in appearance. The ones in the middle (two, one above the other) are almost identical, each looking like a human figure with a rich feather headdress embracing a monster with huge eyes. Its reduced form – just the eyes – also appears on the corners of the cong. So, is there a relationship between the pattern and the jade cuboid itself? Congs may have been used in Earth’s thanksgiving rituals. The form of the earth was then perceived as rectangular and the sky as round. Considering that taotie masks appear only on the outer side, it can be assumed that they have a symbolic protective function, preventing “evil forces” from penetrating into the heavens.

If we accept the hypothesis that this Neolithic pattern is a combination of a pig and a dragon, it is possible that its symbolic meaning concerned the relationship between this what earthly and heavenly. Moreover, it seems that the later version of taotie motifs (from the Shang 商 (1600–1046 BC) and the Zhou 周 (1046–256 BC)), appearing mainly on bronze vessels, was to some extent related to the image of the mythical Kui 蘷 dragon, whose graphic notation resembling a figure with the face of a “demon” with horns, two hands, tail and one leg we find around 1300–1000 BC on oracle bones (Fig. 11). Nevertheless, in Chinese mythology, Kui was sometimes considered a benevolent creature capable of restraining greed.

---

24) Shao Wangping (2005: 110–120).
25) As suggested by David Keightley, the congs, for example, could have been used as a “stalk container for offering plants”, or, as Deng Shuping suggests, plinths, or joints for wooden posts. See Keightley (1998: 775). Cited from Feng Qu (2017: 511); Deng Shuping (1985: 163.) Cited from Feng Qu (2017: 511). Cf. also Hamada (1971: 51); Chang Kwang-Chih (1989: 38).
26) Liu Jing (2014: 30).
27) Chang Kwang-Chih (1989: 38).
28) Zhang Fa (2016: 26–30, especially figs. 1.10, p. 28).
29) Williams (2006: 149).
maybe the *taotie* pattern should be seen as an evolving symbol signifying at times the relationship of two forces and at other times the dual nature of things.

**SHELL MOSAICS**

In Chinese culture, the dragon is considered to be a creature with various symbolic meanings; therefore, its images from the Hongshan culture period resembling a crescent or a broken ring have little in common with the representations of dragons composed of shells of molluscs at the burial site in Xishuipo 西水坡 (near Puyang 濮阳, Henan 河南), (Figs. 12, 13).\(^{30}\) This burial probably dates back to around 3300 BC i.e. the period of the development of the Yangshao culture and contains three groups of large-format mosaic images related to the figure of a deceased mature man (1.84 cm tall), whose skeleton was found in the tomb marked with the number 45.\(^{31}\) The first group of mosaic images in the form of a dragon, a tiger and an ambiguous form composed of shells and two human bones – variously interpreted as the asterism of the Big Dipper or the constellation of the Chariot (shell arrangement) in conjunction with the Gemini constellation (tibia arrangement)\(^{32}\) – were found in the immediate vicinity of the main tomb owner. The second, featuring images of a dragon, a tiger, a bird and a deer, was discovered 20 meters south of the main grave, and the third one consisting of a dragon and the rider, tiger, bird and presumably other less identifiable animals were unearthed even further, some 15 meters to the south. All the mosaic images are extremely spectacular, and their meaning is still questionable.

The very figure of the dragon depicted three times in Xishuipo looks like the prototype of all the others, which over time became the decoration of imperial banners, clothes, pavilions, etc. However, its silhouette is very different from any amulets presenting twisted dragons and is nowhere to be found in the Neolithic period (at least at the present state of knowledge). It looks like it is following the accordion-like movement of snakes. Nevertheless, its long,
writhing body is most likely not only an effect of the imagination but, as John C. Didier suggests, a reflection of the astronomical knowledge possessed at that time (perhaps only in this place).\textsuperscript{33} Well, according to the author of \textit{In and Outside the Square}, both the mosaic images and the arrangement of the body of the deceased man in the main tomb No. 45 are an accurate reflection of several stellar configurations seen by Neolithic Chinese in the night sky, especially in the part of the North Celestial Pole. And so, in the shape of a dragon’s head and neck, Didier sees a reconstruction of the constellation Ursa Major (according to Western cultural terminology) combined with other celestial bodies. In turn, in the silhouette of the tiger lying in front of it, according to the researcher, one can see the outline of the western constellation Draco (Draconis) and the Little Dipper. Moreover, the position of the deceased man’s skeleton along the meridian, between the dragon – placed on the eastern side of the body, and the tiger on its west side, is supposed to correlate with the position of the northern celestial pole in the period between 4500–3000 BC. David W. Pankenier – the author of \textit{Astrology and Cosmology in Early China} is rather sceptical of the pan-Asian “square” constellation theory that Didier presents in his book,\textsuperscript{34} but sees a connection between the figure of the dragon and the tiger and the cardinal directions emerging some three thousand years later in Chinese correlation cosmology.\textsuperscript{35} According to this concept, the Blue or Azure Dragon is a character identified with the eastern direction, which consists of the constellations of Virgo and Scorpio, while the White Tiger is figuratively the western direction corresponding to the constellations of Andromeda and Orion. Is it possible then that the Xishuipo mosaics are a kind of map of the night sky, one of the oldest examples of combining stars into symbolic animal shapes? And if so, could they be related to religious practice, considering that in the tomb 45, besides the deceased himself, three other people were buried, most likely sacrificed?

\textsuperscript{33} Didier (2009: 5–8, especially fig. 3, p. 6).

\textsuperscript{34} Pankenier (2013: 106–107).

\textsuperscript{35} Correlative cosmology, or correlative resonance (\textit{ganying} 感應), is an idea that appeared in the philosophical discourse during the Warring States period (475–221 BCE). It refers to the principle of “stimulus and reaction” between things of the same kind, and also speaks of the homology between human affairs and the cosmic orders governed by certain cycles, rhythms, or patterns of change. See Schwartz (1985: 350–382); Sharf (2002: 77–133); Glahn (2004: 35–39).
Nothing can be excluded, but also confirmed. One thing, however certain, is that the distinctive image of the dragon discovered at Xishuipo is the only one discovered so far in the development of Chinese Neolithic cultures, indicating that it was not a common image at the time.\textsuperscript{36} Nevertheless, it does appear during the Warring States period, which is perfectly illustrated by a lacquer box with dragon and tiger patterns excavated from the tomb of Marquis Yi of Zeng (Zeng hou yi mu 曾侯乙墓) buried in 433 BCE (Leigudun 擂鼓墩 archaeological site in Suizhou 隨州, Hubei) (Figs. 14).\textsuperscript{37} However, a similar arrangement is not everything. This time the dragon and the tiger have an undeniable relationship with the constellations observed in the sky. This is evidenced by the names of the so-called Twenty-Eight Lunar Mansions (ershiba xiu 二十八宿) or twenty-eight constellations along the Moon’s rotation path around the Earth.\textsuperscript{38} These names surround the archaic form of the dou sign, meaning the Big Dipper, placed in the centre of the casket lid. The display of this very name was most likely associated with the role assigned to the Great Dipper near the Pole Star. The ancient Chinese, observing the annual movement of the Cart’s “handle”, noticed a certain relationship between the directions of the world and the seasons of the year. And so, if the handle was directed to the East, it indicated spring, and if to the South, it notified summer, moving towards the West, it announced autumn and towards the North, winter. So it acted like a blue clock.

Back to the Neolithic mosaics, one should pay attention to another issue, namely the concept of dualism found in ancient cosmology.\textsuperscript{39} The fact that the dragon appeared together with the tiger indicates the original reflection of the thought about yang and yin, which in the context of religious Taoism sounded out only centuries later, i.e. during the Six Dynasties (420–589). Nevertheless, at the time when in Xishuipo the images of the dragon and the tiger were arranged from the shells, it is quite possible that attempts were also made to depict the vision of two cosmic forces guiding the movement and changes of the qi 氣 vital energy that permeates everything.\textsuperscript{40} Not without

\textsuperscript{36} Feng Qu (2017: 528).
\textsuperscript{37} Pankenier (2013: 57–58); Didier (2009: 3–5).
\textsuperscript{38} Kalinowski (1996: 55–81).
\textsuperscript{39} Little (2000: 130). Ho (2016: 100).
\textsuperscript{40} Stephen Little presents this theory in his study of the Two Sarcophagus Panels of the Northern Wei Dynasty (c. 500–534) in Taoism and the Arts of China. Little (2000: 130). Cf. Ho (2016: 100).
reason were the mosaics made of clamshells. After all, these molluscs, covered with two, usually symmetrical shell halves could, through their shape, and the movement of their rhythmic opening and closing, evoke associations – for example, with the cyclicality of certain events, such as alternation of day and night, or the life of the sun, moon and stars. Judy Chungwa Ho suggests that if the shells were stars in this case, then they could also indicate constellations if clustered together.41)

Apart from the astral plot, what certainly attracts attention is the quite realistic visualisation of two wild animals. The mosaic figure of a dragon with a prominent head, open mouth, clawed limbs and a long tail resembles a Chinese alligator. In turn, a tiger composed of a shell perfectly imitates a large lurking cat with a bowed head and front leg raised. Looking at the whole image – including the skeleton in the centre – one may form the impression that the animals are guarding or holding a dead man who, having acquired magical knowledge, perhaps tried to take control of some events on earth. In any case, it seems that the example from Xishuipo shows a deep awareness of the ties between man, the animal world and stars.

By presenting only a fragmentary picture of the early history of animal images in Chinese art, I merely wished to signal various social and political practices that influenced the acquisition of knowledge about animals, and thus discovering their role not only in human life, but also in the world in general. Looking at animals from the perspective of art, we can discover the former relationship of humans and animals in the context of religion, magic, aesthetics and the spiritual life of both. Today’s interspecies relations have, in my opinion, been destroyed by man. It is difficult for us to comprehend the inner life of a second species, because we rarely take into account that it exists. Therefore, it is sometimes worth looking back and trying to repair our interspecies bonds. The art of Neolithic China seems to be a great field for reflection on the contemporary human condition.

BIBLIOGRAPHY

Allan (1991) = Sarah Allan, The shape of the turtle: myth, art, and cosmos in early China. SUNY series in Chinese philosophy and culture. SUNY Press 1991.

41) Ho (2016: 100).
Allan (2016) = Sarah Allan, „The Taotie Motif on Early Chinese Ritual Bronzes”, w: The Zoo
morphic Imagination in Chinese Art and Culture (ed. Jerome Silbergeld i Eugene Y. Wang). Honolulu: University of Hawai‘i Press 2016.
Cahill (2012) = Michael A. Cahill, Paradise Rediscovered: The Roots of Civilisation, volume I. Brisbane Carindale: Glass House Books 2012.
Chang Kwang-Chih (1989) = Chang Kwang-Chih, „An Essay on Cong”. In: Orientations 20(6): 37–43.
Childs-Johnson (2017) = Elizabeth Childs-Johnson, „Jade Dragons and Dragon Origins”. In: Mythical Beasts (The Power of the Dragon), Catalogue. New York: Throckmorton Fine Art 2017: 9–19.
Cultural Heritage (2008) = Exhibition of Ancient Chinese Inventions Artifacts. (State Administration of Cultural Heritage China Association for Science and Technology – Compilation) Beijing: Cultural Relics Press 2008.
Damour (1863) = Amédée Damour, „Notice et analyse sur le jade vert: réunion de cette matière minérale à la famille des Wernerites”. Comptes Rendus 56: 861–65.
Deng Shuping (1985) = Deng Shuping 邓淑萍, 中华五千年 文物集刊 (Zhonghua wuqian nian wenwu jikan), Vol. 1. Taibei: National Palace Museum 1985.
Didier (2009) = John C. Didier, ”In and Outside the Square: The Sky and the Power of Belief in Ancient China and the World, c. 4500 BC – AD 200”, Sino-Platonic Papers, 192, vol. 2 Representations and Identities of High Powers in Neolithic and Bronze China September, 2009: 1–265.
Feng Qu (201) = Feng Qu, “Anthropology and Historiography: A Deconstructive Analysis of K. C. Chang’s Shamanic Approach in Chinese Archaeology”. In: Numen 64 (2017) 497–544.
Feng Shi (1996) = Feng Shi 冯时, 星汉流年: 中国天文考古录 (Xing han liu nian: Zhongguo tianwen kao gu lu). Chengdu: Sichuan jiao yu chu ban she, 1996.
Feng Shi (2007) = Feng Shi 冯时. 中国天文考古学 (Zhongguo tianwen kaogu xue). Beijing: Zhongguo shenhui kexue chubanshe, 2007.
Forsyth (1991) = Forsyth Angus, “Neolithic Chinese Jades. Hemudu to Erlitou Period”. In: Roger Keverne (Ed.), Jade. New York: Springer Science + Business Media New York 1991: 49–87.
Fung, Yeung (1996) = Fung Sydney S. K., Yeung Chun-tong, Exquisite jade carving: figures, animals, ornaments (Exhibition held at the University Museum and Art Gallery, University of Hong Kong on Dec. 6, 1995-Feb. 6, 1996). Hong Kong: University Museum and Art Gallery, University of Hong Kong 1996.
Glahn (2004) = Richard von Glahn, The Sinister Way: The Divine and the Demonic in Chinese Religious Culture. Berkeley, Los Angeles, London: University of California Press 2004.
Hamada (1971) = Hamada Sosaku 浜田耕作, “Youzhuzai cang duyu pu 有竹斋藏古玉谱”. Taibei: Taiwan zhonghua shuju 1971.
Ho (2016) = Judy Chungwa Ho, “Representing the Twelve Calendrical Animals as Beastly, Human, and Hybrid Beings in Medieval China”. In: The Zoomorphic Imagination in Chinese Art. and Culture (ed. by Jerome Silbergeld and Eugene Y. Wang). Honolulu: University of Hawai‘i Press, 2016: 95–136.
Kalinowski (1996) = Marc Kalinowski, “The Use of the Twenty-eight Xiu as a Day-Count in Early China”. In: Chinese Science, No. 13, 1996: 55–81, published by International Society of East Asian Science, Technology, and Medicine
https://www.jstor.org/stable/43290380
Keightley (1998) = David N. Keightley, “Shamanism, Death, and the Ancestors: Religious Mediation in Neolithic and Shang China (ca. 5000–1000 B.C.)”. In: Asiatische Studien 52: 763–830.
Legge (1872) = James Legge, The Chinese Classics with a Translation, Critical and Exegetical Notes, Prolegomena, and Copious Indexes by James Legge Confucian analects, the Great learning, and the doctrine of the mean. Vols. 1–5. London: Trübner 1872. Online version: https://archive.org/details/chineseclassics01legggoog/page/n4
Li Liu, Xingcan Chen (2012) = Li Liu, Xingcan Chen, The Archaeology of China: From the Late Paleolithic to the Early Bronze Age. Cambridge: Cambridge University Press 2012.
Li Zehou (1994) = Li Zehou, Path of Beauty: A Study of Chinese Aesthetics. Oxford in Asia paperbacks. New York: Oxford University Press 1994.
Little (2000) = Stephen Little, Taoism and the Arts of China. Chicago: Art Institute of Chicago (in association with University of California Press) 2000.
Liu Jing (2014) = Liu Jing , “Jade cong decorated with stylised taotie masks” (Polish version). In: 5000 lat sztuki chińskiej. Warszawa: Wydawnictwo Arkady 2014: 30.
Lopes (2014) = Rui Oliveira Lopes, “Securing the Harmony between the High and the Low: Power Animals and Symbols of Political Authority in Ancient Chinese Jades and Bronzes”. In: Asian Perspectives. Vol. 53, No. 2 (Fall 2014), pp. 195–225.
Pankenier (2013) = David W. Pankenier, Astrology and Cosmology in Early China Conforming Earth to Heaven. New York: Cambridge University Press 2013.
Pearce, Lewis-Williams (2005) = David Pearce, David Lewis-Williams, Inside the Neolithic Mind. London: Thames and Hudson 2005.
Rawson (1995) = Jessica Rawson, Chinese Jades. From the Neolithic to the Qing. London: The British Museum Press 1995.
Salviati (1994) = Filippo Salviati. „BIRD AND BIRD-RELATED MOTIFS IN THE ICONOGRAPHY OF THE LIANGZHU CULTURE”, Rivista Degli Studi Orienitali 68, no. 1/2 (1994): 133–60. Accessed October 16, 2020. http://www.jstor.org/stable/41880803.
Schwartz (1985) = Benjamin Isadore Schwartz, The world of thought in ancient China. Belknap Press of Harvard University Press. 1985.
Schwartz (2011) = Adam C. Schwartz, “Shang Sacrificial Animals Material Documents and Images”. In: Sterckx, Siebert, Schäfer 2011. Roel Sterckx, Martina Siebert, Dagmar Schäfer, Animals Through Chinese History. Earliest Times to 1911. Cambridge University Press 2011: 20–45.
Shao Wangping (2005) = Shao Wanping 2005. Shao Wanping, „The Formation of Civilization. The interaction sphere of the Longshan period”. In: Chang Kwang-chih (ed.), The Formation of Chinese Civilization. An Archaeological Perspective. Yale University Press and New World Press 2005.
The meaning of animal motifs in Neolithic China

Sharf (2002) = Robert H. Sharf. *Coming to Terms with Chinese Buddhism: A Reading of the Treasure Store Treatise*. Honolulu: University of Hawaii Press, 2002.

Strassberg (2002) = Richard E. Strassberg (Edited and Translated with Commentary), *A Chinese Bestiary. Strange Creatures from the Guideways through Mountains and Seas*. Berkeley Los Angeles London: University of California Press 2002.

Williams (2006) = C.A.S. Williams *Chinese symbolism and art motives*. Fourth Revised Edition. Tokyo, Rutland, Vermont, Singapore: Tuttle Publishing, 2006.

Xia Nai (1983) = Xia Nai, *Jade and Silk of Han China*, translated and edited by Chu-tsing Li, The Franklin D. Murphy Lectures III, Helen Foresman Spencer Museum of Art & The University of Kansas 1983.

Youngman (2008) = Robert P. Youngman, *The Youngman Collection of Chinese Jades from Neolithic to Qing*. Chicago: Art Media Recourses 2008.

Zhang Fa (2016) = Zhang Fa, *The History And Spirit Of Chinese Art: From Pre-History To The Tang Dynasty* (Volume 1). Enrich Professional Publishing, English edition: 2016 (Chinese edition: 2003).
1. *Yu zhulong* (jade pig-dragon) figurine. Jade, height 7.2 cm, width 5.2 cm. Neolithic, Hongshan culture (5000–2500 BC), Nuheliang. Institute of Cultural Relics and Architecture of the Province of Liaoning. Photo Bogna Łakomska.

2. *Jue* ring (earring). Jade, diameter 4.8 cm. Neolithic, Hongshan culture (5000–2500 BC). J.J. Lally & Co., New York. Photo taken from https://www.sothebys.com/en/auctions/ecatalogue/2019/robert-youngman-collection-chinese-jade-ii-hk0868/lot.3434.html?locale=en

3. Dragon figurine. Jade, height 26 cm. Neolithic, Hongshan culture (5000–2500 BC), Sanxingtala. National Museum of China, Beijing. Photo Bogna Łakomska.

4. Eagle figurine. Jade, width: 5.2 cm. Neolithic, Hongshan culture (5000–2500 BC), Liaoning (?). The British Museum, London. Image license purchased from The British Museum.
5. Turtle figurine. Jade, 4.7 x 4.5 cm. Neolithic, Hongshan culture (5000–2500 BC). The Robert Youngman collection of Chinese jades. Photo taken from https://www.sothebys.com/en/auctions/ecatalogue/2019/robert-youngman-collection-chinese-jade-ii-hk0868/lot.3426.html

6. Cicada figurine. Jade, length 5.9 cm. Neolithic, Hongshan culture (5000–2500 BC). The Zhirouzhai collection. Photo taken from http://www.sothebys.com/en/auctions/ecatalogue/lot.2365.html/2008/jade-the-zhirouzhai-collection-hk0293

7. A pair of silkworm-shaped pendants. Jades, late Hongshan culture (c. 3500–3000 BC). Jades, width 4.4 cm. Origin: The Yangdetang Collection, Taipei. Photo taken from https://www.christies.com/lotfinder/lot/a-pair-of-jade-silk-worm-form-pendants-6104517-details.aspx?from=salesummery&intobjectid=6104517&sid=40fd226f-eff0-4df2-a3b8- ed8596a29e54
8. Bracelet decorated with the motif of a "monster with two eyes". Jade, width 10 cm. Excavated from a tomb at Zhanglingshan, Jiangsu (c. 3000 BC). Photo source: Rawson 1995: 34.

9. A ritual object cong in the shape of a cuboid with a hollow round hole. Jade, Liangzhu Culture (c. 3400–2250), Tomb no.12, Fanshan, Jiangsu. Collection of Zhejiang Institute of Archaeology. Photo Bogna Łakomska

10. Fragment of the cong from Fanshan, with the image of the mask motif combined with the human figure. Fanshan 菩山, Jiangsu. Photo Bogna Łakomska
11. Oracle script for Kui (夔) demon. Photo taken from https://en.wikipedia.org/wiki/Kui_(Chinese_mythology)#/media/File:%E5%A4%94-oracle.svg

12. Human burial and shell mosaics, c. 3300 BC, tomb 45 (M45) Xishuipo (near Puyang, Henan). Photo taken from https://commons.wikimedia.org/wiki/File:Human_Burial_and_shell_mosaics.National_Museum._Beijing.JPG
13. A drawing of human burial and shell mosaics from the tomb 45 (M45) at Xishuipo. Photo source Dider 2009: 3 (the author used the drawing after Feng, Shi 冯时, “Henan Puyang Xishuipo 45 hao mu de tianwenxue yanjiu” 河南西水坡 45 号幕 的天文学研究. Wenwu 文物 1990.3: 53.)

14. Lid of the lacquer box with dragon and tiger patterns and 28 Xiu. Dimensions: 71 cm × 47 cm × 40.5 cm. 433 BC. Tomb of Marquis Yi of Zeng, Leigudun, Suizhou, Hubei. Hubei Provincial Museum. Photo Bogna Łakomska.