



KEYWORDS: *China – Rock art research – History – Interpretation – Western influence*

# THE WESTERN INFLUENCE ON THE STUDY OF CHINESE ROCK ART

Xu Feng

**Abstract.** This essay examines Western scholars' influence on Chinese rock art research from several perspectives, including the discovery and interpretations, analysis and preservation science. The interaction and mutual learning between China and the West are the fundamental driving force for Chinese rock art research.

## 1. Introduction

Since the 1980s, Chinese rock art research has been the most dynamic and productive sub-discipline closely linked to archaeology and ethnography. Local archaeologists, rock art scholars and international collaborators found many new sites and started further explorations. Within this process, Western scholars played a particularly vital role. The cooperation and mutual learning between Chinese and international scholars are always essential in Chinese rock art research history.

## 2. Discovery

Rock art, comprising pictograms (e.g. paintings) and petroglyphs, can be found in various regions of China. The earliest record on rock art in Chinese history was written by Northern Wei (386–534 CE) geographer Li Daoyuan. Li's book *Shui jing zhu*, a geographical book about rivers, records many rock art sites spread over northern China. However, the study with modern scientific methods in Asia and China began with a survey conducted by Huang Zhongqin from Lingnan University at Xianzitan, Huanan, in 1915.

In the first half of the 20th century, some foreign scholars also found several rock art sites in China's frontier regions, paradises for adventurers at that time. In 1927, the Sino-Swiss Scientific Mission to north-western China investigated the Yinshan rock art and found a small number of images (Zhang et al. 2019: 46).

Tibet is a magical land that attracts many foreign pilgrims and explorers. From the end of the 19th century, Western explorers started to leave a strong imprint on discovering rock art in this land. For instance, in 1902, August Hermann Francke found many petroglyphs in Kalatse and other places in Ladakh (Francke 1998: 24–27). His findings and recordings marked the origin of Tibetan rock art research (Tang 2020: 46).

Between 1928 and 1948, Giuseppe Tucci, the most illustrious Italian scholar of Tibetan art and religion, made eight expeditions to Tibet. During these expeditions, Tucci documented what he learned about the local history, art and religion. He also discovered several rock engravings in Ladakh and Tibet (Dalui 2018: 59).

From 1992 to 1998, American scholar John Vincent Bellezza investigated the ancient cultural sites in northern and western Tibet. Most of the relics are from the pre-Buddhist period, before the seventh century CE, among which more ten new rock art sites were than found (Bellezza 2002: 3).

Undoubtedly, Western scholars are forerunners in the discovery and research of Tibetan rock art. By the mid-1980s, when Francke's findings began to echo and resonate in academic circles, Chinese archaeologists had investigated around twenty counties/cities in the Tibet Autonomous Region. They found 150 rock art sites containing more than 1000 individual panels and about 10 000 single motifs. These discoveries are impressive results in Chinese rock art research (Tang 2020: 46).

Since the 1950s, rock art sites have been found in Guangxi, Yunnan, Inner Mongolia, Jiangsu, Qinghai and some other provinces in China. Throughout the process, most of the rock art was revealed by local archaeologists, and there were also a few Western rock art scholars involved in the investigation and discovery.

## 3. Academic exchange

Before the reform and opening up in 1978, Chinese and international scholars could not communicate on rock art findings. Both sides were not familiar with the scholarship on the other side. In 1983, UNESCO commissioned Emmanuel Anati to write a report on the general situation of rock art research in the world. This report briefly introduced rock art and its preserva-



**Figure 1.** International cooperation of rock art scholars (photograph courtesy of Tang Huisheng).

tion and research status in all continents of the world. Unfortunately, in its Asian part, there is no mention of Chinese rock art (Chen and Xing 1993: 136).

In the 1980s, with the country's opening, communication and collaboration between China and the West in various fields became more frequent. Chinese rock art scholars now began to have the opportunity to go abroad to learn about rock art in a more systematic manner. Many of the leading rock art scholars in contemporary China used to be visiting scholars at different international scientific research institutes like the Centro Camuno di Studi Preistorici in Valcamonica, Italy, an international centre for pre-Historic and ethnological studies. In 1985, Chen Zhaofu became the first visiting Chinese scholar guided by Professor Emmanuel Anati. Since then, in thirty years, several other Chinese scholars came to study in Valcamonica. Most of them have successfully achieved professional positions in universities, museums and other research institutions in China (Anati 2014: 9). These scholars include Tang Huisheng, who visited and studied there from 1992 to 1993, and Zhang Yasha and Yang Chao.

Another example is Song Yaoliang, a scholar on the theory of literature and art at first who moved on to the field of rock art and worked at Harvard University as an international visiting professor under the guidance of Kwang-Chih Chang in the 1990s. The overseas study experience opened up the horizon of these scholars. In the words of Tang Huisheng: 'I exposed myself to the countless materials and scholarship on rock art all over the world' (Tang and Zhang 2001: 278). As a result, we can see the influence of Western thoughts and methodologies embodied in these Chinese scholars' research.

At the same time, scholars outside China frequently participated in the investigation and academic conferences on Chinese rock art since the 1980s. They kept frequent communications with local scholars on rock

art dating, protection and research. Many renowned scholars, such as Emmanuel Anati, Robert G. Bednarik, Paul Bahn, Giriraj Kumar, Jean Clottes, Paul Taçon, Benjamin Smith and so on, have visited China many times to participate in academic activities related to rock art. Australian Robert G. Bednarik is particularly active in participating in many investigation and dating projects in China. We can see that he is closely working with Tang Huisheng on many Chinese rock art sites now (Tang et al. 2014, 2017, 2020). Bednarik influenced and guided the development of contemporary Chinese rock art in many ways that we will discuss later (Fig. 1).

The cooperation between Chinese and international rock art scholars increased gradually during the past four decades. As Bednarik recalls, on 3 September 1988 in Darwin, Australia, Chen Zhaofu [then the President of the Rock Art Research Association of China], together with eight other leaders in international rock art studies, founded IFRAO and helped provide it with an altruistic guiding framework that has led to its great success (Bednarik 2014).

Since then, great leaps have been achieved in establishing a close liaison between China and the Western world.

#### 4. Interpretations of rock art

It is widely known that the essential task of the Chinese archaeological field in the 1980s and 1990s was to establish cultural genealogy, which also applies to Chinese rock art. With the continuous discovery of rock art in different regions of China, some scholars attempted to classify rock art in terms of regions, techniques and styles (Gai 1996; Chen 1991). Chinese scholars undertake mainly this work. More detailed work on chronology and classification is still in progress. In the meantime, numerous interpretations based on the popular theory were made from time to time. Since the 1980s, along with a new upsurge in cultural study, scholars in humanities and social sciences began to be familiar with different theories imported from abroad. There have been several theories that have played an essential role in the interpretations of rock art.

Until the 1970s, the hunting magic theory remained the most popular interpretation of rock art. In the 1980s, the pictures portrayed mundane scenes and served practical goals dominant in the studies. Some archaeologists believed that these images represented the so-called 'hunting magic' (Znamenski 2007: 143). Hunting magic, partially based on the related concept of 'sympathetic magic' (Keyser and Whitley 2006: 4-5), is a common theory to explain rock art's origin and meaning. In the early twentieth century, Sir James Frazer, one of the pioneers founding modern anthropology, articulated this view well. He wrote that the drawings represented ancient hunters' symbolic efforts

to multiply the number of game animals they were going to procure (Dickson 1990: 127). Grant Campbell once claimed that: wherever naturalistic rock pictures depicting animals are found, it is almost certain that they were made as hunting magic or made to increase the supply of game (Campbell 1967: 32). Gai Shanlin adopted this theory in his interpretations of the hunting images in Chinese rock art (Gai 1996: 55); Hu Xiaohui also agreed with the importance of hunting magic in primitive hunting activities (Hu 1993). This theory also reflected a materialistic interpretation, as did that of some images of 'copulation'. Chinese scholars often cite two kinds of production from Engels' theory to explain these two kinds of ideas. This explanation is the influence of Marxism. Marxism is pre-eminently a materialist philosophy, which maintains that to understand human beings, one must begin by examining how they sustain life (Trigger 1993: 162). For a long time in Chinese history, even now, Marx's historical materialism has a significant influence on China's political and economic thought and scholarship.

In the 1950s and 1960s, when structuralism came into fashion, the well-known French archaeologist André Leroi-Gourhan added the psychoanalytic interpretation from structuralism to sort rock art imagery into orderly pairs. He claimed that the European cave drawings and paintings could be grouped into 'male' and 'female' images (Leroi-Gourhan 1968). Although Leroi-Gourhan has produced a compelling and impressive argument favouring a symbolic motivation for Palaeolithic art in western Europe, it may be doubted whether enough data has been assembled to support it.

Chinese scholars have noticed his classification perspective. Inspired by dualist structuralism, archaeologist Tang Huisheng was the first scholar to use a dualistic framework to re-approach the Qinghai petroglyphs (Tang and Zhang 2001). As mentioned above, Tang was once a visiting scholar in Valcamonica, Italy, where he was guided by Emmanuel Anati, who put forward the theory of 'syntax'. To be more specific, that is to treat rock art as a primitive language and sentence to find out rock art's meaning (Anati 1994: 39).

Shamanic interpretation of rock art is the most attractive and controversial approach, even for scholars in this era. Andrei A. Znamenski's book reveals how in the 1970s and the 1980s, the popular shamanism concept entered archaeology and served some scholars as an impressionistic explanatory tool to interpret ancient remains (Znamenski 2007). According to Znamenski's review, the 'shamanic' revision of rock art was sparked by the German writer Andreas Lommel in the 1960s. Lommel believed that rock art production is a religious behaviour under the guidance of shamanism (Lommel 1966). He suggested that the 'wounded man' in the Lascaux shaft-scene might be an Upper Palaeolithic shaman.

In the 1980s, shamanic interpretation was shaped into a consistent theory by David Lewis-Williams, a South African anthropologist-turned archaeologist.

Lewis-Williams and Dowson also tend to explain rock art with shamanism. They linked the specific drawing and surrounding rock art to shamanism and modern San tribes (Lewis-Williams and Dowson 1988). Their 'neuropsychological hypothesis' connecting neuropsychological research with archaeological remains to interpret pre-Historic art is controversial. The use of 'shamanism and/or neuropsychology' in the interpretation of rock art imagery has been much contested, with opinions often polarised between so-called 'shamaniacs' and 'shamanophobes' (Wallis 2002: 736).

Many scholars support the use of shamanism to explain rock art. For example, David Whitley argued that Historic and pre-Historic rock art in the Coso Range and other Great Basin areas was mostly produced by shamans during their vision quests in a state of trance when they were seeking spiritual powers (Whitley 1998). Andrzej Rozwadowski addressed the relationship between shamanism and rock art in central Asia (Rozwadowski 2004).

Critics hold that this neuropsychological model exposed a methodological problem whereby a table of 'diagnostic images' became the primary means of 'proving/disproving' the shamanic nature of rock art. This idea suggests that neuropsychological sources for specific imagery homogenised all rock art traditions (Wallis 2002; Kehoe 2004: 79).

Robert G. Bednarik said hallucinogen or trance-induced phosphores account for only a tiny fraction of such experiences. Lewis-Williams and Dowson concentrate their attention on the San, ignoring the authentic shamanistic cultures in southern Africa (Bednarik 1990). Archaeologist Layton metaphorically exclaims: 'The shamanic hypothesis is a voracious beast which could too easily devour the world's hunter-gatherer rock art (Layton 2000). In any case, 'shamanism' as a conceptual means of interpreting other societies has a long-lasting impact on rock art research, which cannot be expunged (Crook 1999: 25).

The shamanic interpretation has also had a clear impact on the research of Chinese archaeology and rock art. Inspired by Mircea Eliade and Peter Furst's studies, Kwang-Chih Chang popularised the hypothesis of ancient Chinese shamanism in the 1980s. In this approach, the Neolithic images found in the Yangshao, Longshan and Liangzhu cultures, as well as the animal masks cast on bronze ritual wares of the Shang period, are seen as 'depicting shamanic visions, metamorphoses, or helping spirits' (Chang 1994a). Chang's hypothesis has been followed by some archaeologists (Guo 2008; Xu 2017). There are also many examples of using shamanism to interpret Chinese rock art. Tang Huisheng identified universal shamanic traits in the art of Qinghai petroglyphs. Notably, he singled out several motifs like squatting anthropomorphous figures, images portraying people or animals fighting animals, as well as drawings made in the so-called x-ray style (Tang and Zhang 2001). Incidentally, shamanic interpretation still influences the young generation of rock

art scholars (Xiao 2016).

### 5. Cross-cultural comparison

Cross-cultural comparison is helpful for the indirect dating and interpretation of rock art. There are several types of images widely distributed around the world. For example, squatting anthropomorphous figures, images in x-ray style, cupules, 'human face' rock art, handprint. The interpretations of some images by Chinese rock art scholars are based on cross-cultural comparison studies.

Gai Shanlin compares the handprint caves in the Yabulai mountains (Inner Mongolia) and western European Palaeolithic caves. He found that there is 'striking consistency' in the painting environment, picture preservation, use of pigments, painting methods, hand shape characteristics and arrangement, indicating that the two traditions are similar (Gai 1996: 52–56). Chen Zhaofu once pointed out that this squatting anthropomorphous figure is more common in Pacific islands such as Fiji, Melanesia and Hawaii (Chen and Xing 1993).

The 'human face' petroglyph is a classic case thought to reflect cultural communication. Human face motifs are referred to as the particular type of rock art with a form of a human face, and they are widely distributed in the Pacific Rim region. In the 1970s, Canadian scholars described in detail the investigation of petroglyphs along the northwest Pacific coast of Canada. They believed that the petroglyphs found on the northwest coast of North America represented an art tradition generated by the ancient civilisations in China, diffused around the Pacific Ocean (Hill and Hill 1974: 19). Later, Song Yaoliang, one of the researchers studying 'human face' petroglyphs, pointed out that many similar forms of human face petroglyphs in North America, Russia and China result from the inter-continental spread of homologous culture (Song 1998).

Rock art in x-ray style is also a worldwide phenomenon. Tang Huisheng believes that its distribution is closely related to the spread of shamanism (Tang and Zhang 2001: 115).

Huang Yaqi studied boat-themed rock art traditions and she argued that Austronesian peoples have advanced boatbuilding technologies and navigation knowledge. The variously styled boat-themed rock art distributed in the areas reflect the history of migration and cultural dissemination several centuries ago (Huang 2016).

In short, through cross-cultural comparisons, Chinese scholars have learned many Western theories, ideas and perspectives which serve as promising tools in the interpretation of rock art.

### 6. Rock art science

Since the 1980s, archaeologists began to pay less attention to the economy, technology and human adaptation to the environment and more to the role of the individual, symbolism and religion. However,

archaeology is more inclined to positivism and materialism than any other humanity. In recent years, archaeology's adherence to science and quantitative methods has returned. According to Tang Huisheng, rock art science will be an important paradigm in the future (Tang 2014). This paradigm is closely related to Bednarik's orientation and practice.

From my observation, Robert G. Bednarik has the closest contact and interaction with the Chinese rock art academic circle since the beginning of the 21st century. Bednarik has always been critical of the cultural interpretation of images in the study of rock art. In his view, the literature on rock art is filled with subjective comments. Countless explanations cannot apply to the entire body of such rock art as there are always numerous exceptions (Bednarik 2001). In terms of shamanism, Bednarik summed up the crux of the problem:

The proposition that all rock art is the work of shamans is easily refuted. There is not a single instance on record, anywhere in the world, of a rock art motif having been made by a shaman (Bednarik 2003a: 77).

Dissatisfied with over-interpretation and employment of an inadequate epistemological framework in the study of rock art, Bednarik suggests turning the humanistic discipline into a scientific one. This would not be by using more scientific data imported from other fields but replacing the traditional naive uniformitarianism with a falsifiable universal theory (Bednarik 2003b). His idea included adopting international research standards, global terms of rock art, academic norms and systems suitable for operation, and scientific research methods to establish the rock art research norms. Specific rock art analysis methods should be considered, covering colour calibration, microscopy, nanostratigraphy and, rarely, physical sampling (Bednarik 2001: 169–175). This scientific paradigm embodies the current scientific and technological trend of Chinese archaeology.

The dating of rock art is an essential part of rock art science, which has long been regarded as one of the most delicate problems in rock art studies (Bednarik 1992a). Since he put forward the concept of 'direct dating of rock art' in the early 1980s, many scholars have attempted to conduct a direct dating of rock art utilising modern science and technology. During the second half of the 20th century, rock art researchers have been trying to date rock art with current scientific technology measurements using <sup>14</sup>C, AMS, Th/U, cation-ratio and microerosion analysis. As a pioneer in rock art dating, Bednarik experimented with dating methods on rock art from many different countries. Thirty years ago, he and Li Fushun reviewed the methodology applied to rock art dating in China and attempted to provide an appropriate strategy for future endeavours to estimate the ages of Chinese rock art (Bednarik and Li 1991).

Microerosion dating is one of the direct dating approaches, which has been applied to many rock art sites throughout the world (Bednarik 1992b). According to Bednarik, the term microerosion refers exclusively to solution processes whose effects can be seen only at

the microscopic level. Microerosion analysis is not one specific method but a cluster of possible ways around a fundamental concept (Bednarik 2001). Microerosion dating distinguishes between two types of rocks, of which only the first can be considered for the application of microerosion methods:

- (1) those on which individual grains or crystals which were fractured, exposed or truncated during the manufacture of a petroglyph are capable of remaining *in situ* for periods exceeding the age of the petroglyph;
- (2) those sedimentary rocks subjected to relatively swift granular exfoliation or chemical corrosion, such as carbonate-cemented sandstones, calcite and dolomite (Tang and Zhang 2001: 265).

The advantages of microerosion analysis as a method of age estimation of petroglyphs are that it is relatively inexpensive and straightforward; and that in contrast to most other known 'direct' rock art dating methods, it refers to criteria that are functions of the actual age of the petroglyphs in question (Tang et al. 2017: 40). Robert G. Bednarik, Giriraj Kumar and Tang Huisheng used this method to apply rock art dating in China and achieved excellent results. Tang Huisheng's work in Qinghai Province is a perfect example of applied microerosion dating analysis acquiring direct dating results that resembled the age expected by synthetic analysis.

Microerosion dating witnessed the interaction and mutual benefit between Chinese rock art scholars and Western scholars. Such dating has been carried out in more than twenty rock art sites in Henan, Hubei, Jiangsu, Ningxia, Qinghai, Inner Mongolia, Xinjiang and other provinces. It is worth noting that most of these dating projects were done by Bednarik and Tang (Tang et al. 2017).

In China, many inscriptions on tombstones, cliffs and statues show chronological records, which may provide many reliable calibration ages for microerosion dating. It should be recognised that microerosion dating has been developed and perfected in China's practice, and it also promotes scientific methods in Chinese rock art research.

Besides microerosion dating, uranium-series dating (Th/U) is also prevalent. It was widely applied in rock art dating and has been in use for dozens of years. Western scholars are pioneers in this field. Now, Chinese and Australian scholars began to cooperate in the dating of rock art. For example, a research team first employed the uranium-series approach in the absolute dating of rock art on Jinsha River rock painting. Their research indicates that Jinsha River rock art is older than other forms of rock art in the region for the first time. Besides, it shows that rock art probably extends back to at least the transitional period between the Palaeolithic and Neolithic, in this part of China (Taçon et al. 2012).

By cooperating with Chinese rock art scholars, this scientific paradigm of rock art will continue to impact

Chinese rock art research significantly. We have recently seen some studies influenced by this paradigm. Take cupules as an example: Bednarik cited 71 proposals of interpretation listed in the literature, most of which are devoid of any empirical justification (Bednarik 2010). Jin Anni, formerly from Nanjing Normal University, agreed with this empirical paradigm and conducted a preliminary study on cupules discovered in China. Due to the lack of historical documents and ethnographic materials, she criticises the discussion on the interpretation of cupules in the Chinese rock art academic circle and turns to the forensic science of cupules (Jin 2019; Jin and Chao 2019; cf. Bednarik 2016).

### 7. Rock art conservation

Rock art is both a valuable heritage and an essential subfield of archaeology. Its preservation is crucial. Due to industrial pollution and destruction, rock art in many areas has been damaged. In the 21st century, local cultural officers and experts are aware of the importance of rock art protection. Carrying out systematic, scientific and accurate recording and analytical research on rock art in fieldwork is an effective means to actively protect rock art heritage.

For a long time, Chinese rock art scholars have kept close contact with international colleagues on the management, protection and research of rock art. For example, Zhang Yasha edited a monograph of rock art research and protection (Zhang 2014). The Centre of Ningxia Rock Art Research also edited several volumes of works on rock art study. In these collections, the protection and management methods applied at many foreign rock art sites have been introduced. Therefore, Chinese scholars have learned various valuable experiences. Cultural heritage preservation workers are more and more aware of the importance of rock painting protection.

### 8. Conclusion

Retrospecting Chinese rock art research's development history in the past 100 years, interaction and mutual learning between China and the West are a vital driving force for Chinese rock art research. On the one hand, local cultural officers and experts discovered many rock art remains and carried out the corresponding historical research. On the other hand, different kinds of theories from the West participate in the interpretation of rock art, which significantly enriches the understanding of rock art.

Kwang-Chih Chang listed 'three suggestions' for developing Chinese archaeology: theory diversification, method systematisation and technology internationalisation (Chang 1994b). These three suggestions are also of practical significance for the development of Chinese rock art research.

In the future, Chinese rock art academia, especially the younger generation of rock art scholars, must continue to interact with international colleagues, learn from each other's strengths, and overcome each side's

limitations. With the more frequent communication and regularised collaboration among the international field, we could expect rock art science to achieve more remarkable development in the new era.

#### Acknowledgments

The author is grateful to the RAR peer reviewers for helping him to improve this paper.

Associate Professor Xu Feng  
School of Social Development  
Nanjing Normal University  
No. 122, Ninghai Road, Gulou District  
Nanjing, Jiangsu Province  
China  
beaconhsu@163.com

#### REFERENCES

- ANATI, E. 1994. *World rock art – The primordial language*. Edizioni del Centro Camuno di Studi Preistorici, Capo di Ponte, Italy.
- ANATI, E. 2014. Preface Chinese journal. In Zhang Y. (ed.), *Academic research of rock art 1*, pp. 9–17. Minzu University of China Press, Beijing.
- BEDNARIK, R. G. 1990. On neuropsychology and shamanism in rock art. *Current Anthropology* 31(1): 77–84.
- BEDNARIK, R. G. 1992a. Developments in rock art dating. *Acta Archaeologica* 63: 141–155.
- BEDNARIK, R. G. 1992b. A new method to date petroglyphs. *Archaeometry* 34(2): 279–291.
- BEDNARIK, R. G. 2001. *Rock art science: the scientific study of palaeoart*, pp. 153–160. Brepols Publishers, Belgium (2nd edn 2007, Aryan Books International, New Delhi; Chinese translation 岩画科学—远古艺术的科学研究 by Jin A. 2020, Shaanxi People's Education Press, Xi'an).
- BEDNARIK, R. G. 2003a. Review of J. L. Pearson, 'Shamanism and the ancient mind: a cognitive approach to archaeology'. *Rock Art Research* 20(1): 76–78.
- BEDNARIK, R. G. 2003b. A major change in archaeological paradigm. *Anthropos* 98: 511–520.
- BEDNARIK, R. G. 2010. The Interpretation of cupules. In R. Querejazu Lewis and R. G. Bednarik (eds), *Mysterious cup marks: proceedings of the First International Cupule Conference*, pp. 67–73. BAR International Series 2073, Archaeopress, Oxford.
- BEDNARIK, R. G. 2014. Preface. *岩画学论丛 (Academic Research of Rock Art)* 1: 21–23, Minzu University of China Press, Beijing.
- BEDNARIK, R. G. 2016. Forensic science of cupules. *Rock Art Research* 33(1): 49–64.
- BEDNARIK, R. G. and Li F. 1991. Rock art dating in China: past and future. *The Artefact* 14: 25–33.
- BELLEZZA, J. V. 2002. *Antiquities of Upper Tibet: an inventory of pre-Buddhist archaeological sites on the high plateau*. Adroit Publishers, Delhi.
- CAMPBELL, G. 1967. *Rock art of the American Indian*. Promontory Press, New York.
- CHANG, K. C. 1994a. Shang shamans. In W. J. Peterson, A. Plaks and Ying-shih Y. (eds), *The power of culture: studies in Chinese cultural history*, pp. 10–36. Chinese University of Hong Kong Press, Hong Kong.
- CHANG, K. C. 1994b. 从俞伟超、张忠培二先生论文谈考古学理论 Cong yu weichao, zhang zhong pei er xian sheng

- lun wen tan kao gu xue li lun, 中国文物报 *zhong guo wen wu bao*, 8 May (newspaper).
- CHEN Z. 1991. 中国岩画发现史 *Zhong guo yan hua fa xian shi (Discovery history of Chinese rock art)*. Shanghai Renmin Press, Shanghai.
- CHEN Z. and XING L. 1993. 外国岩画发现史 *Wai guo yan hua fa xian shi (Discovery history of Foreign rock art)*. Shanghai Renmin Press, Shanghai.
- CROOK, S. 1999. Rock art and shamanism. *Anthropology Today* 15(2): 24–25.
- DALUI, A. 2018. Giuseppe Tucci's travel to Tibet from 1928 to 1948 C.E. *International Journal of Humanities and Social Science Invention* 7(12): 58–61.
- DICKSON, D. B. 1990. *The dawn of belief: religion in the Upper Paleolithic of southwestern Europe*. The University of Arizona Press, Tucson.
- FRANCKE, A. H. 1998. *A history of western Tibet: one of the unknown empires*. Motilal Banarsidass Publishers Private Limited, Delhi.
- GAI S. 1996. 中国岩画 *Zhong guo yan hua (China's rock paintings)*. Guangdong Travel & Tourism Press, Guangzhou.
- GUO D. 2008. 红山文化“玉巫人”的发现与“萨满式文明”的有关问题 *Hong shan wen hua 'yu wu ren' de fa xian yu 'sa man shi wen ming' de you guan wen ti*. *文物 Wenwu* 11: 80–96.
- HU X. 1993. 原始猎牧岩画与巫术思维 *Yuan shi lie mu yan hua yu wu shu si wei*. 喀什师范学院学报 *ka shen shi yuan xue bao* 1: 53–68.
- HUANG Y. 2016. Voyagers of the Pacific: ship-shaped rock arts of Austronesians. *东南文化 Southeastern Culture* 6: 76–83.
- HILL B. and R. HILL 1974. *Indian petroglyphs of the Pacific Northwest*. Hancock House Publishers, Saanichton, Canada.
- JIN A. 2019. A preliminary investigation and research of cupules in China. Unpubl. PhD thesis, Nanjing Normal University.
- JIN A. and CHAO G. 2019. The 2018 expedition to Fangcheng cupule sites in central China. *Rock Art Research* 36(2): 157–163.
- KEHOE, A. B. 2004. Testing for 'shamanic trance' in rock art: a comment on Greer and Greer. *Plains Anthropologist* 49(189): 79–80.
- KEYSER, J. D. and D. S. WHITLEY 2006. Sympathetic magic in western North American rock art. *American Antiquity* 71(1): 3–26.
- LAYTON, R. 2000. Shamanism, totemism and rock art: *les chamanes de la préhistoire* in the context of rock art research. *Cambridge Archaeological Journal* 10(1): 171–174.
- LEROI-GOURHAN, A. 1968. *The art of prehistoric man in western Europe*. Thames & Hudson, London.
- LEWIS-WILLIAMS, J. D and T. A. DOWSON 1988. The signs of all times: entoptic phenomena in Upper Paleolithic art. *Current Anthropology* 29(2): 201–245.
- LOMEL, A. 1966. *Prehistoric and primitive man*. McGraw-Hill Book Co., New York.
- ROZWADOWSKI, A. 2004. *Symbols through time: interpreting the rock art of central Asia*. Institute of Eastern Studies, Adam Mickiewicz University, Poznan.
- SONG Y. 1998. Prehistoric human-face petroglyphs of the North Pacific region. *Arctic Studies Center (Supplement)*, Washington, DC, National Museum of Natural History, Smithsonian Institution 1: 1–4.
- TAÇON, P. S. C., M. AUBERT, LI G., YANG D., LIU H., S. K. MAY, S. FALLON, JI X., D. CURNOE and A. I. R. HERRIES 2012. Uranium-series age estimates for rock art in southwest China. *Journal of Archaeological Science* 39(2): 492–499.
- TANG H. 2014. 岩画学科的范式及相关问题 *Yan hua xue ke*

- de fan shi ji xiang guan wen ti. *南方文物 Nan fang wen wu* 4: 4–14.
- TANG H., R. G. BEDNARIK and G. KUMAR 2014. Preliminary report of the 2014 rock art dating expedition of China. *Purakala* 24: 63–75.
- TANG H., G. KUMAR, LIU W., XIAO B., YANG H, ZHANG J., LU X., YUE J., LI Y, GAO W. and R. G. BEDNARIK 2017. The 2014 microerosion dating project in China. *Rock Art Research* 34(1): 40–54.
- TANG H., G. KUMAR, JIN A. and R. G. BEDNARIK 2020. Rock art of Heilongjiang Province, China. *Journal of Archaeological Science: Reports* 31: 1–8.
- TANG H. and ZHANG W. 2001. 青海岩画 *Qing hai yan hua (Qinghai rock art)*. Science Press, Beijing.
- TANG L. 2020. Review of Tibetan rock art research. *Rock Art Research* 37(1): 46–52.
- TRIGGER, B. G. 1993. Marxism in contemporary Western archaeology. *Archaeological Method and Theory* 5: 159–200.
- WALLIS, R. J. 2002. The bwili or 'flying tricksters' of Malakula: a critical discussion of recent debates on rock art, ethnography and shamanisms. *The Journal of the Royal*

- Anthropological Institute* 8(4): 735–760.
- WHITLEY, D. S. 1998. Meaning and metaphor in the Coso petroglyphs: understanding Great Basin rock art. In E. Younking (ed.), *Coso rock art: a new perspective*, pp. 109–174. Maturango Press, Ridgecrest, CA.
- XIAO B. 2016. 左江岩画的萨满教属性 *Zuo jiang yan hua de sa man jiao shu xing*. *民族艺术 Min Zu Yi Shu (National Arts)* 5: 138–143.
- XU F. 2017. The maintenance of the sacred body: comparing shaman outfits and jade objects in tombs. *社会科学战线 She Hui Ke Xue Zhan Xian* 265(7): 111–119.
- ZHANG Y. 2014. 中外岩画保护论文集 *Zhong wai yan hua bao hu lun wen ji (A monograph of rock art research and protection)*. Zhong guo Zangxue Press, Beijing.
- ZHANG W., ZHANG J., ZHANG X. and ZHANG Y. 2019. Rock art in northern China, p. 46. In J. Clottes and B. Smith (eds), *Rock art in east Asia: a thematic study*. ICOMOS, Charenton-le-Pont, France.
- ZNAMENSKI, A. 2007. *The beauty of the primitive: shamanism and the Western imagination*. Oxford University Press, Oxford.
- RAR 39-1371

The Fourth AURA Congress and  
the IFRAO-2024 Congress  
are to be held in  
Perth, Western Australia, July 2024  
Please see page 124 for First Announcement

Some fieldtrip destinations of the event

