THE YANGSHAO CULTURE IN CHINA. A SHORT REVIEW OF OVER 100 YEARS OF ARCHAEOLOGICAL RESEARCH (II)

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4. Pottery Technology

The investigation of Yangshao pottery technology begun in the 1920s when T. J. Arne (with some help from an Austrian chemist) carried out chemical analysis on two pieces of Yangshao culture pottery fragments with black motifs¹. Issues of Arne's concern include vessel forming methods, composition of the clay, firing temperature and surface treatment². Over an extended duration, researchers derived their conclusions about Yangshao pottery technology primarily through visual observation, engaging in simulation exercises, and conducting a few chemical analyses. One of the most cited publications by Li (1984) presents the results of visual examination and simulation experiment on the clay composition, production process and wheel painting technology. Over the past two decades, an array of scientific methods, such as Raman spectroscopy and X-ray diffraction analysis, have been seamlessly integrated into the archaeological investigations of Yangshao pottery³.

In the following sections, we will outline the distinctive technological aspects of Yangshao pottery, encompassing vessel forming methods, painting techniques, firing technologies, and surface treatments. Presently, there is a lack of differentiation

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¹ T. J. Arne, Colored pottery of the Stone Age in Henan Province, in Geological Survey of China ed., Palaeontologia Sinica, Ding 1 (2), 1925.

² Ibidem.

³ X. S. Li, Shixi 'Yangshao Wenhua Caitao de Niliao Zhizuogongyi Lunhuijishu he Yishu', in Zhongyuan Wenwu (Cultural Relics of Central China), 1, 1984, p. 53-59.

between the technological traditions of Yangshao culture and Majiayao culture in current studies. Consequently, this article will incorporate relevant insights from the technological studies of Majiayao pottery when necessary.

4.1. Selection of Clay

The selection of clay is the first step in the production of painted pottery. Through Li's experiments, the clay for the painted pottery is proved to be yellow clay and red clay that had been naturally panned and precipitated by the Yellow River and its tributaries⁴. In Cui's field investigations, it has been found that the chemical composition of the pottery from the Gouwan site of Yangshao is essentially the same as that of the clay layers on the sides of the river, which is not far from the west of the site⁵.

4.2. Vessel Forming Method

There are several forming methods reported concerning Yangshao pottery. Yangshao pottery is frequently debated to have been crafted by hand, primarily employing coiling techniques, with occasional use of moulding and slab construction. Vessels are sometimes reported to be assembled from separately formed parts. Some researchers report the traces of wheel thrown or wheel finishing in Yangshao pottery.

Specifically, Arne argues that some vessels were made by hand while others were made with the help of wheel⁶. Bishop reports that Yangshao pottery was handmade by coiling⁷. Chang infers that Yangshao pottery is handmade by moulding or coiling⁸. Similarly, Li and Huang argue that Yangshao pottery is made by hand, mostly by coiling while occasionally by slab construction⁹. Hung reports that some vessels in Majiayao culture were formed by assembling different parts together, the technological tradition of which is often considered to be the same as that of Yangshao culture¹⁰. Ma *et alii* report that the potters' wheel appeared in the early Yangshao phase, initially used to shape the handmade vessels whereas later to turn the vessels¹¹. Similarly, in another article by Wang and Andrews samples of Yangshao pottery sherds from

⁴ X. S. Li, op. cit.

⁵ T. X. Cui et al., Henan Xichuan Gouwan Yizhi Shiqian Caitao Gongyi Yanjiu, in Zhongyuan Wenwu (Cultural Relics of Central China), 4, 2019, p. 122-128.

⁶ T. J. Arne, op. cit.

⁷ C. W. Bishop, *The Neolithic Age in Northern China*, in *Antiquity*, 7, 1933, p. 389-404.

⁸ K.-C. Chang, The Archaeology of Ancient China, Yale University Press, New Haven, 1968.

⁹ W. Y. Li, S. Y. Huang, Huanghe Liuyu Xinshiqi Shidai Zhitao Gongyi de Chengjiu, in Huaxia Archaeology, 3, 1993, p. 66-87.

¹⁰ L.-Y. Hung, Pottery Production, Mortuary Practice, and Social Complexity in the Majiayao Culture, NW China (cA. 5300-4000 BP) (PhD Thesis), Washington University in St. Louis, 2011.

¹¹ Q. L. Ma, X. Li, Gansu Gudai ge Wenhua Shiqi Zhitao Gongyi Yanjiu, in Kaogu (Archaeology), 3, 1991, p. 263-273; Q. L. Ma et al., Gansu Qingan Dadiwan Yizhi Chutu Caitao (Caihuitao) Yanliao yiji Kuaizhuang Yanliao Fenxi Yanjiu, in Wenwu (Cultural Relics), 8, 2001, p. 84-92.

Houzhuangwang and Yiquanma sites (both in Henan province) are argued to be either wheel thrown, or wheel finished¹².

To sum up, Yangshao pottery is frequently described as being handmade through coiling techniques, with moulding and slab construction being relatively infrequent. Traces of wheel use in pottery production have been noted in certain instances.

4.3. Composition and Source of Coating and Pigment

The application of the pottery coat is an important step in Yangshao painted pottery. The colours of the Yangshao pottery coats are mainly divided into red and white coats¹³, with a small number of beige coats, which are made from suspension of extremely finely ground clay. X-ray fluorescence and laser Raman spectroscopy are used to analyse the composition of the pottery coats from different areas.

At the Miaodigou site¹⁴ and the Gouwan site¹⁵, Fe in hematite is detected as the main substance that shows colour in the red pottery coats. Although the trace elements differ, the test results basically conclude that the raw material for the red pottery coats of the Yangshao pottery is laterite suspension with hematite as the main component. And the raw material of the white pottery coat is divided into two different types – high alumina type and high calcium type, one with kaolinite as the main raw material and the other associated with limestone¹⁶.

Following the application of the pottery, the painting is applied with different mineral pigments. The colours are mainly red, black, and white. In the early period, red and black are mainly used as single colours, but in the middle period, black and red or red and brown are gradually developed to be applied¹⁷, with white colours. After identifying the black pigment from sites such as the Miaodigou site and the Gouwan site, it can be found that the composition of the black is magnetite and hematite, mainly magnetite, and some of the black pigments are mixed with graphitic carbon particles¹⁸. The composition of red pigment is mainly hematite and clay, but with a higher iron

¹² Q. Wang, K. C. Andrews, Technological Investigation of the Decorative Coatings on Yangshao Pottery from Henan, China, in Archaeometry, 44, 2002, p. 241-250.

¹³ Henan Provincial Institute of Cultural Relics and Archaeology, Wuyang Jiahu, Science Press, Beijing, 2015.

¹⁴ L. W. Zhao et al., Miaodigou yizhi chutu Yangshaowenhua caitao de kexue yanjiu, in Spectroscopy and Spectral Analysis, 5, 2018, p. 1420-1429.

¹⁵ X. K. Lu et al., Xinshiqi Shidai Zhongwanqi Huanghe Liuyu Taoyi Jishu de Fazhan Yanjiu, in Huaxia Archaeology, 2, 2017, p. 66-73.

¹⁶ Ibidem.

¹⁷ Y. M. Liao, Dahecun Xinshiqi Shidai de Caitao Yishu, in Zhongyuan Wenwu (Cultural Relics of Central China), 4, 1984, p. 40-48.

¹⁸ L. W. Zhao et al., op. cit.

content of 10% to 15%¹⁹. From the results of the X-ray diffraction analysis, the white pigment is relatively pure quartz powder with few impurities²⁰. Also, through the XRD physical phase analysis technique, it is found that the composition of the white painted pottery of the late Yangshao culture contains a small amount of gypsum in addition to calcite²¹.

4.4. Painting Technique

Concentric and clothoid spirals on Majiayao jars are argued to have been produced by using the wheel painting technique with evidence of simulation exercise²².

4.5. Firing Temperature and Firing Devices

Of the two sherds analyzed in Arne's article²³, one is reported to have been fired at $1300-1400^\circ$, the other at $1100-1200^\circ$. Later researchers hold reserved opinions about his findings. For instance, in another article²⁴, the firing temperature is reported to be around 950-1050°. The kilns from different phases of Yangshao culture vary, including mono chambered kilns and vertical and horizontal up-draught kilns (Fig. 1-6)²⁵.

4.6. Surface Treatment

Some Yangshao painted pottery are slipped before painting. As for after-firing treatment in pottery, burnish is reported in Arne's book²⁶. Later researchers specify that the pottery is polished with wood ash²⁷, cord²⁸ or cobble²⁹. Additionally, in late Yangshao period, there are traces of glue-like materials applied to the pottery surface³⁰.

5. Burials

Previous investigations into the burials of the Yangshao culture have predominantly focused on several dimensions, encompassing the arrangement of

²¹ B. Y. Zhou, Q.L. Ma, Gansu Qinan Dadiwan Yizhi Chutu Baise Kuaizhuang Yanliao Chenfen Fenxi, in Sciences of Conservation and Archaeology, 4, 2019, p. 87-99.

²⁴ R. Zhou et al., Woguo Huanghe Liuyu Xinshiqi Shidai he Yinzhou Shidai Zhitao Gongyi de Kexue Zongjie, in Kaogu Xuebao (Acta Archaeological Sinica), 1, 1964, p. 1-27.

¹⁹ M. Li et al., Dahecun Yizhi Chutu Yangshao Shidai Caitao Yangliao ji Kuangzhuang Yanliao Chubu Fenxi, in Archaeology of Luoyang, 2, 2018, p. 90-95.

²⁰ Q. L. Ma et al., op. cit.

²² X. S. Li, op. cit.; W. Y. Li, S. Y. Huang, op. cit.

²³ T. J. Arne, op. cit.

²⁵ D.X. Ji, Weishui Liuyu Shiqian Taoyao Fenqi Chutan, in Zhongyuan Wenwu (Cultural Relics of Central China), 6, 2008, p. 17-24.

²⁶ T. J. Arne, op. cit.

²⁷ C. W. Bishop, op. cit.

²⁸ Q. L. Ma et al., op. cit.

²⁹ Ibidem.

³⁰ *Ibidem*, p. 91.

cemeteries, burial methods, funerary artefacts, and the societal implications inferred from these burials. Broadly, most of the Yangshao culture burials are situated in communal cemeteries beyond the confines of settlement trenches, while a minority are dispersed within residential areas. Adult burials primarily consist of rectangular vertical-pit tombs and typically represent primary interments. Deceased individuals are consistently positioned in a supine position with limbs extended flat, and there is a prevailing uniformity in the orientation of the deceased's head. Many of these tombs contain burial objects, with pottery being the most widespread object of daily use. Additionally, decorative items, tools for production, animal bones, and other artefacts are also present. In contrast, infants and children are commonly interred in urns.

Yangshao burials are divided into three phases. Early Yangshao burials are discerned in sites such as Hengzhen, Yuanjunmiao, Shijia, Jiangzhai, Banpo, and others. During this phase, interment in rectangular earthen pits with a single body predominates, while secondary and joint burials are also prevalent. Remarkably, over 90% of the deceased in Yuanjunmiao and Hengzhen sites are interred using these methods³¹. In most cases, the heads of the deceased are facing west or northwest, reflecting the common beliefs that existed among the various settlements at that time³². Not many funerary objects were found in the early burials, and most of them are ceramic vessels. The scale of these funerary objects varies with different genders and ages³³. For example, in Yuanjunmiao site, Banpo site and Jiangzhai site, some of the women's burials are very lavish, which is considered to be a reflection of the matriarchal society³⁴. However, a small number of lavish male burials, joint burials of a father and a son, or adults of the opposite sex are also found, which may represent the beginning of a patriarchal system³⁵.

Concerning the layout of cemeteries, the early Yangshao culture settlements exhibit a consistent design featuring public cemeteries, predominantly situated beyond residential areas. At times, trenches are employed as demarcation lines between cemeteries and residential zones³⁶. Yan's research suggests that the distribution of burials in the early Yangshao culture mirrors a three-tiered social organization. In this framework, an entire cemetery represents the highest echelon of social organization,

³³ Q. M. Gong, W. Gong, Lun yangshao wenhua jumin de maizang zhidu, in Zhongguo shiqian kaoguxue yanjiu–zhuhe Shixingbang xiansheng kaogu banshiji ji bazhi huadan wenji, 33, 2004.

³¹ W. M. Yan, Yangshao Cultural Studies (reprinted), Cultural Relics Press, Beijing, 2009.

³² Ibidem.

³⁴ Z. P. Zhang, Guanyu genju banpo leixing de maizang zhidu tantao yangshao wenhua shehui zhidu wenti de shangque.kaoguxuebao, in Kaogu (Archaeology), 7, 1962, p. 377-381.

³⁵ Q. M. Gong, Cong kaogu ziliao kan yangshao wenhua de shehui zuzhi ji shehui fazhan jieduan, in Zhongyuan Wenwu (Cultural Relics of Central China), 5, 2001, p. 29-37.

³⁶ Q. M. Gong, W. Gong, op. cit., 2004.

referred to as the cypher, which can be subdivided into distinct zones, each associated with different clans. Within these zones, smaller groups comprised of several burials emerge, constituting the most diminutive unit – the family³⁷.

Typical burials of the middle Yangshao culture period are found in Baligang site, Xipo site, Nanjiaokou site, Dianjuntai site, Wangwan site etc. In this period, rectangular vertical-pit tombs are still the most popular type. Primary burial practices still predominate, while secondary burial practices become rare³⁸. The deceased is mostly arranged in a supine position with limbs straight and flat. And the head direction of the deceased is not uniform. Most of the burials have no funerary objects³⁹. In particular, the phenomenon of applying cinnabar to the skulls of the deceased is unusually common at the Wangwan site, which may have a religious significance⁴⁰.

Except for the Hongshanmiao site, the distribution and zoning of the other middle phase burials are not very clear. The cemetery in Hongshanmiao site is unique, with 136 urns buried in one large pit, all of which are secondary burials. And the human bones buried in the urns are identified as both male and female, young and old. These urns can be clearly divided into 13 rows, and within each row there exist two or three groups⁴¹. This arrangement of burials may indicate that a three-tiered social organization of family, clan, and cypher still exists in the middle Yangshao culture⁴².

There are fewer burials reported from late Yangshao phase. Typical ones consist of Xishangucheng site, Qingtai site, Zhouli site, Diaolongbei site, Miaozigou site etc. Most of the adult burials are still mainly rectangular vertical-pit tombs, with a single body arranged in a supine position with limbs straight and flat⁴³. Secondary burials are almost extinct except in Diaolongbei site. Urn burials for infants and children are still popular, and the ash pit burials have increased compared to the previous period⁴⁴. In the cemetery of the Zhouli site, single bodied burials can be divided into small, medium, and large based on scales, indicating the existence of different grades in the burial system and classes in the society⁴⁵. In addition, several joint burials of a father and a son, parents

³⁷ W. M. Yan, op. cit.

³⁸ Q. M. Gong, W. Gong, op. cit., 2004.

¹⁹ Ibidem.

⁴⁰ School of Archaeology and Museology, Peking University, *Luoyang Wangwan*, Peking University Press, Beijing, 2017.

⁴¹ G. K. Yuan, Excavation of the Hongshanmiao Site at Ruzhou in Henan, in Wenwu (Cultural Relics), 4, 1995, 4-11+97-98.

⁴² Q. M. Gong, W. Gong, op.cit., 2004.

⁴³ Ibidem.

⁴⁴ Q. M. Gong, op. cit., 2001.

⁴⁵ The Cultural Relics bureau of Henan Province *et al., Archaeological Reports on the Yellow River Xiaolangdi Reservoir (II)*, Zhongzhou Guji Press, Zhengzhou, 2006.

and children, and adults of the opposite sex are found in Xishan Ancient City site, Qingtai site and Miaozigou site, which may be a reflection of monogamy⁴⁶.

In terms of funerary objects, only a few burials have a small amount of pottery or other objects. Instead of pottery, most of the burials at Diaolongbei site use pig mandibles or skulls as funerary objects. Up to 72 pairs of pig mandibles are buried in one burial⁴⁷.

As for the layouts of late Yangshao burials, the burials at Xishangucheng site, Diaolongbei site and Zhouli site are in public cemeteries, while burials of other settlements are mostly scattered near or inside houses⁴⁸. The arrangement of burials still follows a certain order and can be zoned.

6. Archaeobotanical Records

Archaeobotanical research on the Yangshao culture date back to plant impression studies conducted in the 1920s. In the 21st century, the flotation method has become a prominent tool and there have been more than 30 Yangshao sites with published flotation reports. Researchers predominantly direct their attention toward examining the subsistence strategies of the Yangshao people.

Since the 1920s, several instances of plant impressions in pottery have been noted. J. G. Andersson, for instance, documented crop impressions on what were initially thought to be pottery sherds (later identified as baked clay) at the Yangshao tsun site, uncovering a spikelet of rice⁴⁹. Subsequent research, however, contradicts this, reporting millet and sorghum from the same impressions⁵⁰.

From the 2000s, the records were transformed by flotation method. Well known Yangshao assemblages with crop findings include Yuhuazhai, Xinjie and Yangguanzhai, etc.⁵¹. The main crops consist of rice (*Oryza sativa*), foxtail millet (*Setaria italica*) and broomcorn millet (*Panicum miliaceum*)⁵². The percentages of rice and millet in crop findings vary significantly in Yangshao sites depending on the latitude of the site. For example, the Baligang site in south China, rice makes up 38.8%, foxtail millet 28.1%, and

⁴⁶ Q. M. Gong, op. cit., 2001.

⁴⁷ Institute of Archaeology of Chinese Academy of Social Sciences, *Zaoyang Diaolongbei*, Science Press, Beijing, 2006.

⁴⁸ Q. M. Gong, W. Gong, op. cit., 2004.

⁴⁹ C. W. Bishop, op. cit., p. 395.

⁵⁰ Z. L. Xie, X. C. Chen, Shiqian Nongye Kaoguxue Yanjiu Shupin—Jinian 'Nongye Kaogu' Chuangkan Shizhounian, in Nongye Kaogu (Agricultural Archaeology), 3, 1991, p. 18-33.

⁵¹ e. g., Z. J. Zhao, Zhongguo Gudai Nongye de Xingcheng Guocheng—Fuxuan Chutu Zhiwu Yicun Zhengju, in Disiji Yanjiu (Quaternary Research), 1, 2014, p. 73-84; Z. H. Deng, Y. Gao, Henan Baligang Chutu Zhiwu Yicun Fenxi, in Nanfang Wenwu, 1, 2012, p. 156-163; L. Liu, X. Chen, The Archaeology of China: from the Late Paleolithic to the Early Bronze Age, Cambridge University Press, Cambridge, 2012.

⁵² Ibidem.

broomcorn millet 33.1%⁵³. By contrast, in the Gouwan site of the same province (Henan), both the percentage of broomcorn millet and foxtail millet are notably higher than that of rice⁵⁴.

The patterns of cultivated crops exhibit notable chronological variations. During the early Yangshao period, sites like Gouwan⁵⁵ and Yuhuazhai⁵⁶ exhibit a greater prevalence of broomcorn millet compared to foxtail millet. However, as we move into the middle and late Yangshao phases, the absolute quantity of foxtail millet increases, and its percentage in the crop assemblage becomes substantially higher than that of broomcorn millet. This shift is particularly evident at sites such as Yuhuazhai site⁵⁷, Wanggou site⁵⁸ and numerous others. Additionally, there is also a notable increase in the presence of rice during the late Yangshao period⁵⁹.

The shift from a prevalence of broomcorn millet to foxtail millet in the Yangshao culture, as indicated by macro botanical remains, encounters a lack of support from phytolith analysis. Contrarily, phytolith analysis reveals a persistent occurrence of broomcorn millet across the Yangshao culture. This disjunction between macro botanical remains and phytolith analysis within the Yangshao culture represents an unexplored research area.

Furthermore, Yangshao period marks the initiation of millet domestication and agriculture in northern China. In the early Yangshao phase, as illustrated by findings at the Yuhuazhai site, a substantial number of discoveries include *Chenopodium*, acorns, water chestnuts, and perilla. These are believed to have been collected as supplementary food sources alongside cultivated crops. However, when it comes to late Yangshao, the presence of wild resources markedly diminishes, indicating a shift towards the predominance of cultivated crops⁶⁰.

7. Other relevant aspects

At the end, we consider it necessary to mention some of the institutions that house the most important collections of artefacts belonging to the Yangshao culture in

⁵⁶ Z. J. Zhao, Yangshao Wenhua Shiqi de Fazhan he Nongye Shehui de Jianli—Yuhuazhai Yizhi Fuxuan Jieguo de Fenxi, in Jianghan Kaogu (Jianghan Archaeology), 6, 2017, p. 98-108.

⁵⁸ F. Yang et al., Henan Zhengzhou Wanggou Yizhi Tanhua Zhiwu Yicun Fenxi, in Agricultural History of China, 2, 2020, p. 3-12.

⁵³ Z. H. Deng, Y. Gao, op. cit.

⁵⁴ Y. X. Wang et al., Henan Xichuan Gouwan Yizhi 2007 Niandu Zhiwu Fuxuan Jieguo yu Fenxi, in Sichuan Wenwu (Sichuan Cultural Relics), 2, 2011, p. 80-92.

⁵⁵ Thidem

⁵⁷ Ibidem

⁵⁹ H. Zhong, Z. J. Zhao, Yangshao Wenhua Wanqi Zhongyuan Diqu Nongye Shengchan Moshi Chutan, in Agricultural History of China, 2, 2023, p. 52-61.

⁶⁰ Z. J. Zhao, op. cit., 2017.

China, illustrating this aspect in Fig. 7. Alongside these, we present some of the most distinctive artefacts of this civilization that can be found in museums in China (Fig. 8).

Last but not least, we must mention some of the significant researchers of this spectacular civilization and their works (Fig. 9). However, we emphasize that this selection was strictly limited by the objectives envisaged for this work, not intending to in any way limit the remarkable contributions of many other prestigious archaeologists from China.

Conclusions

As research on prehistoric cultural exchange between China and the West is now in full swing, there is an unprecedented interest in understanding the spread and development of prehistoric civilizations. Considering the importance of painted pottery in the cultural exchange between East and West, we present the history of the Yangshao culture in China, which has splendid pottery, to scholars around the world, in order to enhance scholars' understanding of each other's archaeological research and to contribute to the study of prehistoric cross-regional cultural exchange.

The first part of this paper⁶¹ starts with the introduction into the history of the chronological study of the Yangshao culture. We provided an overall spatial-temporal framework for the Yangshao culture with a classification of six regions and three periods; afterwards, we focus on the study of the Yangshao painted pottery, including the typology of the Yangshao pottery, the history of the pottery production, and the exchange of the pottery between different archaeological cultures in China. Additionally, we present the distribution of Yangshao culture settlements and provide a preliminary overview of the overall situation of Yangshao culture settlements by listing the scale, functional divisions, layout, fortifications, houses, burials and economic facilities of some typical settlement sites. Lastly, the attention is lead up to the general situation of agriculture during the Yangshao culture from the aspect of unearthed plant seed remains.

The study of local archaeological cultures by local scholars is now relatively well established, however, there is still some space for progress in the development of collaborative research between international scholarly communities. We therefore present a relatively comprehensive account of various aspects of the Yangshao culture in China, with a view to providing some reference for comparative studies between different civilizations across Eurasia.

⁶¹ T. An, M.-C. Văleanu, H. Ren, Y. Fu, L. Zhu, The Yangshao Culture in ChinA. A Short Review of Over 100 Years of Archaeological Research (I), in CercIst, XLI, 2022, p. 53-85.

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CULTURA YANGSHAO DIN CHINA.

UN SCURT I STORIC A PESTE 100 DE ANI DE CERCETARE ARHEOLOGICĂ (II)

(Rezumat)

Studiul propune prezentarea Culturii Yangshao și a principalelor rezultate obținute în cei 100 de ani de cercetare arheologică. Subiectul este unul de un interes particular, dat fiind mult discutatele similarități dintre artefactele acestei culturi preistorice a Chinei cu cele ale culturii Cucuteni-Tripolie din Europa.

Studiul se dorește a fi și un exemplu pentru a promova schimbul de cunoștințe științifice dintre China și Europa, avându-se în vedere tot mai numeroasele colaborări științifice pe această temă din ultimii ani, aspect care alimentează interesul în creștere pentru înțelegerea evoluției și difuziunii civilizațiilor antice. Articolul în ansamblu său (partea I și II) s-a concentrat asupra prezentării sintetice a Culturii Yangshao din China, cunoscută pentru ceramica sa pictată, uneori remarcabil de similară cu cea a Culturii Cucuteni.

Articolul oferă o prezentare a culturii Yangshao, acoperind aspectele relevante precum istoria descoperirilor (1), descrierea așezărilor (2), periodizare și cronologie (3), tehnologia ceramicii pictate (4), mormintele (5), descoperirile arheobotanice (6), dar și alte aspecte reprezentative.

Prin prezenta lucrare autorii și-au propus să inspire eforturi de cercetare în colaborare între comunitățile academice internaționale și să promoveze studii comparative ale civilizațiilor din Eurasia.

LISTA ILUSTRAŢIILOR:

- Fig. 1. Cuptor cu o singură cameră de ardere din faza timpurie a culturii Yangshao din situl Banpo, orașul Xi'an, provincia Shaanxi (după D. X. Ji, op. cit.).
- Fig. 2. Cuptor cu tiraj ascendent din faza timpurie a culturii Yangshao din situl Banpo, orașul Xi'an, provincia Shaanxi (după D. X. Ji, *op. cit.*).
- Fig. 3. Cuptor cu tiraj orizontal din faza timpurie a culturii Yangshao din situl Jiangzhai, orașul Lintong, provincia Shaanxi. 1 = ușa cuptorului; 2 = camera de combustie; 3 = camera de ardere a ceramicii; 4, 5 = căile de circulație ale căldurii (după D. X. Ji, op. cit.).

- Fig. 4. Cuptor cu tiraj orizontal din faza timpurie a culturii Yangshao din situl Beishouling, orașul Baoji, provincia Shaanxi. 1 = camera de combustie; 2 = căile de circulație ale căldurii; 3 = camera de ardere a ceramicii (după D. X. Ji, *op. cit.*).
- Fig. 5. Cuptor din faza mijlocie a culturii Yangshao din situl Fulinbao, orașul Baoji, provincia Shaanxi. Se observă urme din grătarul dintre camerele cuptorului. 1 = intrarea în camera de combustie; 2 = camera de combustie; 3 = camera de ardere a ceramicii; 4 = căile de circulație ale căldurii; 5 = unde iese fumul (după D. X. Ji, *op. cit.*).
- Fig. 6. Cuptor din faza târzie a culturii Yangshao din situl Fulinbao, orașul Baoji, provincia Shaanxi. 1 = intrarea în camera de combustie; 2 = camera de combustie; 3 = arzător; 4 = camera de ardere a ceramicii (după D. X. Ji, *op. cit.*).
- Fig. 7. Câteva dintre cele mai importante instituții din China care dețin artefacte ale culturii Yangshao: 1. Institutul de Arheologie al Academiei Chineze de Științe; 2. Muzeul Național al Chinei; 3. Muzeul din Henan; 4. Muzeul Culturii Yangshao; 5. Muzeul Miaodigou din Sanmenxia; 6. Muzeul din Zhengzhou; 7. Muzeul de Istorie din Shaanxi; 8. Muzeul Banpo din Xi'an; 9. Muzeul Provincial Gansu; 10. Muzeul Mongoliei Interioare.
- Fig. 8. Câteva dintre cele mai reprezentative artefacte ale ceramicii pictate ale culturii Yangshao: 1. castron pictat cu motive ce includ o față umană și un pește; 2. vas cu gât îngust și bază ascuțită; 3. vas in formă de dovleac cu un motiv pictat de pasăre-pește; 4. bol pictat cu modele triunghiulare; 5. bol pictat cu simboluri incizate; 6. ulcior pictat cu motive diverse (cocor, pește, topor din piatră); 7. bol pictat cu modele sub formă de petală; 8. bol pictat cu model tip grilă; 9. castron cu margini curbate pictat cu modele triunghiulare; 10. vas pictat cu partea superioară în formă de cap de om; 11. vas pictat cu model sub formă de salamandră; 12. vas dublu, pictat (1, 2, 6, imagini de la Muzeul Național al Chinei, https://www.chnmuseum.cn/; 3, 4, imagini de la Muzeul Banpo din Xi'an, https://www.banpomuseum.com.cn/; 5, imagine de la Muzeul de Istorie din Shaanxi, https://www.sxhm.com/; 7, 12, imagini de la Muzeul din Henan, https://www.chnmus.net/; 8, Muzeul Miaodigou din Sanmenxia, Y. Zhang, Danqing Buyu-Sanmenxia Miaodigou Bowuguan de Caitao, in Identification and Appreciation to Cultural Relics, 2022(11), p. 1-5; 9, 10, 11, imagini de la Muzeul Provincial Gansu, http://www.gansumuseum.com/).
- Fig. 9. Câțiva dintre cei mai reprezentativi cercetători în domeniul culturii Yangshao și publicațiile lor despre această civilizație.

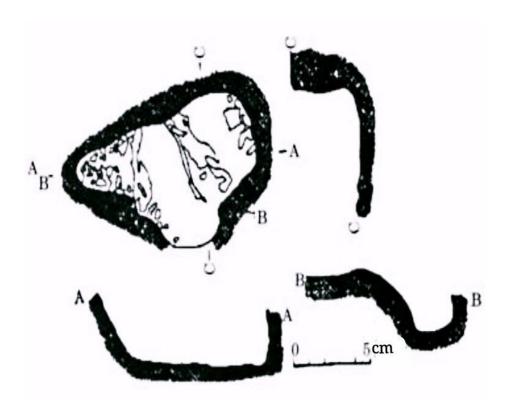


Fig. 1. A single-chambered kiln of early Yangshao phase from Banpo site, Xi'an City, Shaanxi Province (after D. X. Ji, *op. cit.*)

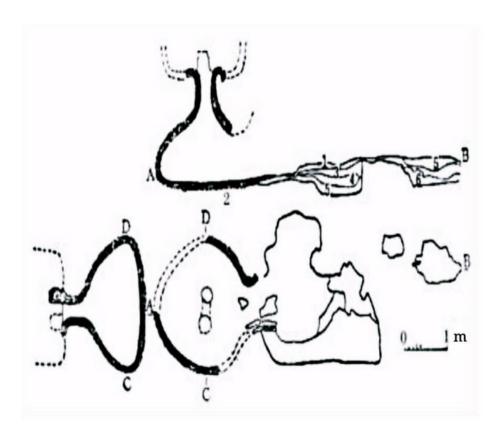


Fig. 2. A vertical up-draught kiln of early Yangshao phase from Banpo site, Xi'an City, Shaanxi Province (after D. X. Ji, *op. cit.*)

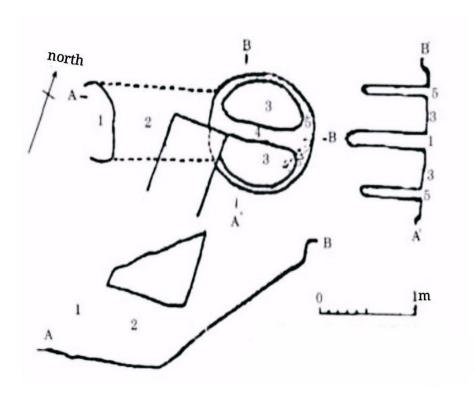


Fig. 3. A horizontal up-draught kiln of early Yangshao phase from Jiangzhai site, Lintong City, Shaanxi Province. 1 = kiln door; 2 = firing chamber; 3 = platform in the vessel chamber; 4 and 5 = flame path (after D. X. Ji, *op. cit.*)

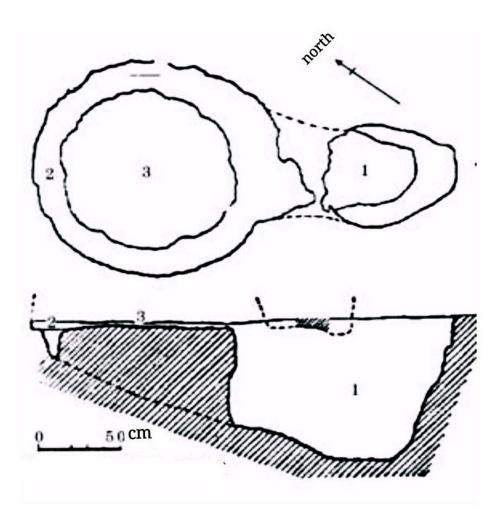


Fig. 4. A horizontal up-draught kiln of early Yangshao phase from Beishouling site, Baoji City, Shaanxi Province. 1 = firing chamber; 2 = flame path; 3 = chamber with vessels (after D. X. Ji, op. cit.)

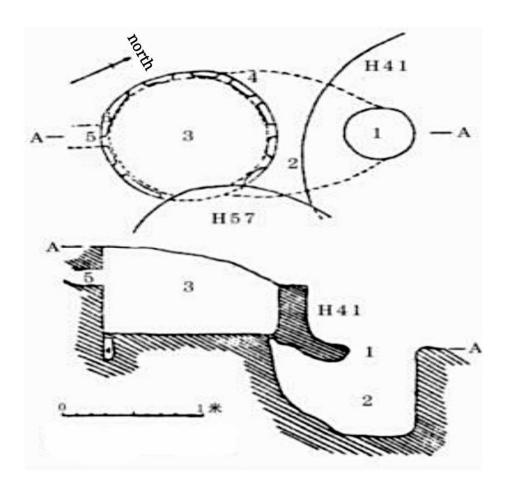


Fig. 5. A kiln of middle Yangshao phase from Fulinbao site, Baoji City, Shaanxi Province. There are traces of grates in the kiln chambers. 1 = the entrance of the firing chamber; 2 = firing chamber; 3 = the other chamber where pottery vessels are put; 4 = flame path; 5 = where smoke blows out (after D. X. Ji, op. cit.)

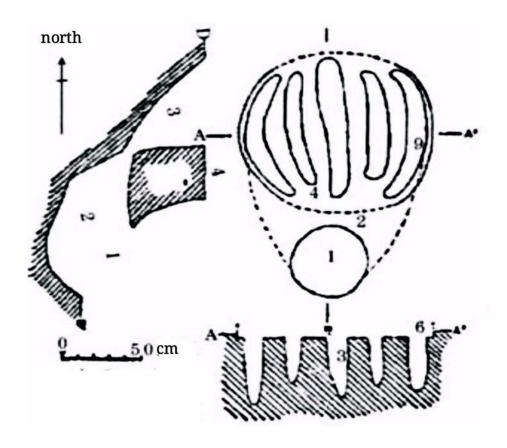


Fig. 6. A kiln of late Yangshao phase from Fulinbao site, Baoji City, Shaanxi Province. 1 = entrance of the firing chamber; 2 = firing chamber; 3 = burner; 4 = vessel chamber (after D. X. Ji, *op. cit.*)



Fig. 7. Some of the most important institutions in China housing Yangshao artefacts:
1. Institute of Archaeology of the Chinese Academy of Sciences; 2. National Museum of China; 3. Henan Museum; 4. Yangshao Culture Museum; 5. Sanmenxia Miaodigou Museum;
6. Zhengzhou Museum; 7. Shaanxi History Museum; 8. Xi'an Banpo Museum;
9. Gansu Provincial Museum; 10. Inner Mongolia Museum

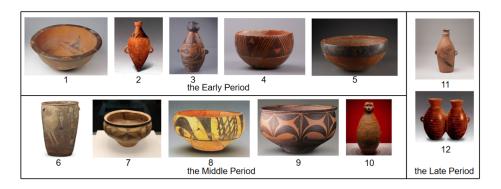


Fig. 8. Some of the painted pottery masterpieces from Yangshao culture: 1. painted pottery basin with human face and fish design; 2. bottle with small mouth and pointed base; 3. bird-fish patterned pottery gourd vase; 4. painted pottery bowl with triangular pattern; 5. painted pottery bowl with carved symbols; 6. pottery jar with stork, fish and stone axe design; 7. painted pottery bowl with petal design; 8. grid pattern pottery bowl; 9. pottery basin with curved edges and triangular pattern; 10. painted pottery bottle with human-head-shaped mouth; 11. painted pottery vase with salamander pattern; 12. painted pottery double-linking pot (1, 2, 6, Images from National Museum of China, https://www.chnmuseum.cn/; 3,4, Images from Xi'an Banpo Museum, https://www.banpomuseum.com.cn/; 5, Image from Shaanxi History Museum, https://www.sxhm.com/; 7, 12, Images from Henan Museum, https://www.chnmus.net/; 8, Sanmenxia Miaodigou Museum, Y. Zhang, Danqing Buyu-Sanmenxia Miaodigou Bowuguan de Caitao, in Identification and Appreciation to Cultural Relics, 2022(11), p. 1-5; 9, 10, 11, Image from Gansu Provincial Museum, http://www.gansumuseum.com/)

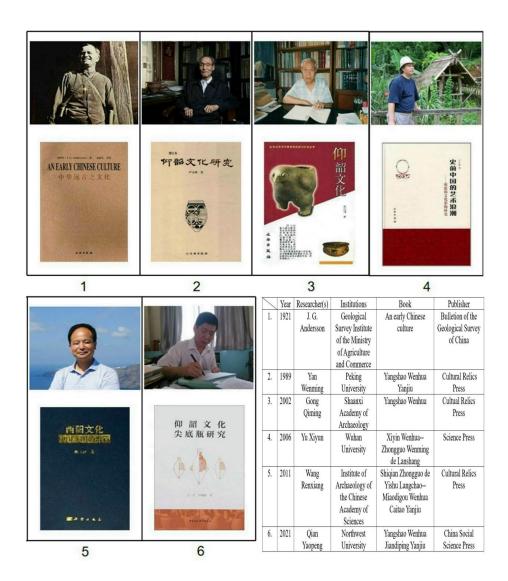


Fig. 9. Some of the most significant researchers in the field of Yangshao culture and their publications on this topic