

# *Settlement Archaeology Research Method and Jiang Zhai Example*

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**Abstract:** Jiang Zhai is an important milestone in the history of Chinese settlement archaeology. The excavation of Jiang Zhai Site is an important achievement of Chinese archaeology before it entered a mature stage of development. The duration of excavation, the large area of exposure, the abundance of relics obtained, and the phenomenon of clearing settlement relics are all beyond the excavation and harvest of any Neolithic site in the past. This paper focuses on the research and exploration of the plane structure of Jiang Zhai settlement site.

## **1. The development of settlement archaeology in China**

Modern archaeology has gone through more than a century and a half since Thompson's "Introduction to Nordic Antiquities", published in 1836 when he was in charge of the National Museum of Denmark, according to the period of tools and weapon texture. Early archaeologists stuck to the study of individual artifacts and ages, until the thirties of the last century, the American archaeologist Childe proposed to change the so-called cultural history research method that only studied cultural periodization, age, origin, development and interrelationship, and strive to study people and society. Therefore, when tracing the origin of settlement archaeology, many scholars often use Child's claim as the cause of the beginning of settlement archaeology.

Settlement archaeology is a research method of social archaeology, which also emphasizes the relationship between settlements and the ecological environment. American archaeologist Gordon Wiley defined settlement archaeology as: "the way humans settle themselves in their habitat." It refers to the nature and placement of dwellings and their arrangement, as well as other buildings associated with community life, which reflect the natural environment, the technical level of the builders, and the various social interactions and control systems that sustain their culture. Since settlement forms are largely directly created by widely recognized cultural needs, they provide a strategic starting point for the functional interpretation of archaeological cultures. Zhang Guangzhi said: "Settlement archaeology is to do the study of archaeological data within the framework of social relations. Mr. Zhang Zhongpei said: "Settlement archaeology is an archaeological study carried out by the introduction of sociology and human geography into the principles of archaeology and human geography in settlements, with the aim of exploring the relationship between people living in a settlement (or the structure of the settlement society), and the interrelationship between the settlement

society and the temporal and spatial variation of the settlement society, as well as the relationship between the settlement society and the natural environment." [1] Mr. Yan Wenming's definition based on the study of settlement archaeology is: "Settlement archaeology is a method of field archaeological operation and research based on settlement sites" [2]

In general, the definition of settlement archaeology given by many scholars from different angles is more accurate than the definition given by Gordon Wiley based on the purpose and personal practice of excavations in Peru's Viru River Valley. Most scholars generally cite Willy's 1953 book "Prehistoric Settlement Morphology in the Viru Valley of Peru" as the founding work of settlement archaeology. [3]

Soviet archaeology guided archaeological research with Marxism, and the study of the Tripolet culture in Ukraine in 1934-1940 was the beginning of the study of its settlement morphology. Chinese archaeology was influenced by Soviet archaeology in the early days of the founding of the People's Republic of China, and under the influence of the Soviet Union, Mr. Shi Xingbang of the Institute of Archaeology of the Chinese Academy of Social Sciences excavated Banpo in Xi'an from 1954 to 1957, which is the earliest settlement archaeological practice in China, and discovered the original settlement of a matrilineal clan commune in the early boom period of Yangshao. Excavations of sites such as Baoji Beishouling and Huaxian Yuanjun Temple were also carried out according to this model, but unfortunately similar research methods such as Xi'an Banpo were not inherited in the next two or three decades due to socio-political factors.

From August to September 1984, Professor Zhang Guangzhi of the Department of Anthropology of Harvard University gave an academic exchange at Peking University and published "Six Special Lectures on Archaeology", of which the fifth lecture "On Settlement Morphological Archaeology" systematically introduced the definition, theoretical background, research content and operation methods of settlement archaeology. [4] In trying to do settlement archaeology research on the archaeological materials accumulated in China, Mr. Yan Wenming was the first to be promoted. In 1981, he published the article "Village Layout in the Early Jiang Zhai Period" to analyze the Jiang Zhai settlement of the original matrilineal clan commune in the Yangshao period, and then wrote "Research on the Housing and Settlement Morphology of Yangshao" in 1987 to summarize the settlement in the Yangshao period. [5] In 1989, "Investigation of Neolithic Settlement Morphology in China" was a masterpiece of Neolithic settlement archaeology, and finally "Settlement Archaeology and Prehistoric Society Research" written in 1997 expanded the research field to the scope of the two river basins in prehistoric times. Most archaeologists agree with the research method of settlement archaeology and put it into practice, and some domestic scholars have also achieved good results with foreign teams.

In the practice of settlement archaeology in recent decades, Jiang Zhai settlement archaeology occupies a special position, the 1.7-hectare total site disclosure method is difficult to compare until now, the Jiang Zhai excavation report published in 1988 is the world's largest collection of settlement archaeological data, which has important promotion and enlightening significance for the research methods and research significance of Chinese settlement archaeology. This paper will take Jiang Zhai as an example for the time being, and explain the methods used and the problems to be paid attention to in settlement archaeology in practice based on the author's own perception and practice.

Second, the study of settlement morphology and the case of Jiang Zhai "Mozi Resignation" chapter cloud: "When the ancient people did not know the palace, they lived in the mausoleum and caves." The Site are hills and Site, and in ancient times, people did not have a fixed place, and used caves as chambers. Until the Yangshao period when the living room was built, there was a fixed house. What is a settlement? "Hanshu Gouxunzhi" contains: "Build a house a little, and then become a settlement". [6] It can be seen that primitive settlement sites refer to houses, Site, crypts and public buildings inhabited by prehistoric humans. The so-called settlement archaeology should generally

include three aspects. The first is the study of the morphology and internal structure of a single settlement, the second is the study of the distribution of settlements and the relationship between settlements, and the third is the study of the historical evolution of settlement forms. Among them, the study of houses, Site, crypts and public buildings of the original settlement site is the content of the study of the form and internal structure of individual settlements.

Jiang Zhai site is located in Lintong County, Shaanxi Province, from 1972 to 1979 by Xi'an Banpo Museum and Lintong Jiang Zhai Cultural Center cooperation in Lintong Jiang Zhai archaeological excavation, Mr. Su Bingqi, Mr. Shi Xingbang of the Institute of Archaeology of the Chinese Academy of Social Sciences and Peking University professors Yan Wenming, Li Yangsong, etc. have participated in the guidance work, before and after eleven excavations, excavation area of 17,084 square meters, after excavation revealed that Jiang Zhai is a settlement site in the matrilineal clan commune period from 6800-6300 years ago in the early and middle Yangshao period. The Neolithic settlement sites are spatially oriented, mostly selected in the terraces and hills by the river, one is convenient for obtaining water, and the other is to have a certain role in resisting the invasion of other races or beasts. Whether it is Qujialing in the south or Pei Ligang in the north, under the differences in climate, vegetation and hydrological conditions, they all conform to this law. Jiang Zhai is located on the Linhe (tributary of the Wei River) platform, with a height of 600 to 1200 meters, the terrain is low, and the south is Lishan Mountain. The periodic flooding of the alluvial plains and then replenishment by the loess brought by the currents is the most significant natural geographical feature of this area, and the people of the agricultural era survived under such fertile and fertile land.

### **1.1. Study of the morphology and internal structure of a single settlement**

One of the goals of the Viru Valley settlement study is to "summarize the reconstruction of developments related to the functions and sequences of these prehistoric settlements" during the excavation process. The excavation report of Jiang Zhai alone shows that the first phase of Jiang Zhai alone contains 120 houses, 365 Site, 261 stove pits, 297 cellars, 3 trenches, 3 kiln sites and 3 fences. The 120 houses form a large, near-circular settlement group, with a square in the center, evenly distributed around five large housing buildings, with no traces of cooking inside the building, possibly a public building. There are more than a dozen medium-sized houses, and there are many small houses scattered around the medium-sized houses. There are three cemeteries outside the settlement, and this act of building Site outside the residence is similar to Xi'an Banpo, which is somewhat advanced (some settlements bury the dead under houses or in front of doors). In addition, there are fences, kilns, and many cellars distributed in the site, it can be speculated that the population of Jiang Zhai is not small, the three external moats and the river form a defensive network, and the circular settlement arrangement and the rank size of the three-level houses reflect that the settlement has a certain fair and harmonious atmosphere inside.

The houses in Jiang Zhai are divided into square, round and irregular in shape, and divided into ground and semi-crypt in architectural form, so many houses are difficult to distinguish during the excavation process, where is the scope of the house? Where is the bed? Where is the cooktop? Because of the low productivity and lack of resources, the migration of settlements often takes everything away, it is difficult for us to infer a house site based on the pillar hole, and most of the houses in Jiang Zhai can be recognized is mainly due to the sudden fire and the lack of time to take away daily necessities, which is the same reason why the Fenglin city site identified by the Han Wei site group in the Qixing River Basin was suddenly abandoned and the settlement disappeared in the entire basin. However, the destruction or abandonment of most sites is not so sudden, and it is necessary to carefully clean up in the field archaeological site, record, map and photograph in detail, and try to restore and correctly screen the original appearance of the ruins. For the cleaning of the

house, pay attention to its stratigraphic relationship, the cultural layer of Jiang Zhai can be divided into five floors, but the vast majority of houses are built in the first phase. For the correct screening and cleaning of the house, we must first understand the structure of the house. Here is a quote from Mr. Yan Wenming: "When building a house, it is always necessary to break the ground, semi-crypt-style houses, and the excavated soil is often filled around the house; Houses built from flat land will be built with dry soil or braised earth as foundations; Larger buildings are often built of rammed earth to form a higher foundation, which is the bottom layer of cultural soil. [7] On the foundation, sometimes it is necessary to dig the wall foundation, dig the pillar hole, and even dig the cellar and well, etc., to form a broken relationship, but this breaking relationship only indicates the sequence of the construction process, and the time between them is very short. "To figure out the accumulation of collapsed houses, it's best to do it step by step." First figure out the roof structure, then the walls, doors and windows, and finally the interior facilities and utensils. When cleaning the accumulation of the roof, first remove the floating soil to see how the roof is made, whether there is decoration, whether there are skylight facilities, whether there are tiles, what is the direction of the tiles, and so on. [8] "The excavation of a house site should pay special attention to the age of its construction, its age of use and abandonment, and the relationship between the house and the internal facilities, sometimes their ages are juxtaposed, sometimes far apart. For example, the relic T1H7 at the No. 1 site of the Leping Group 7 site in Qingyang Wenjiachang, Chengdu, is divided into the age of use and the age of abandonment, and the cultural layer before and after reaches 7 layers, as shown in Figure 1.

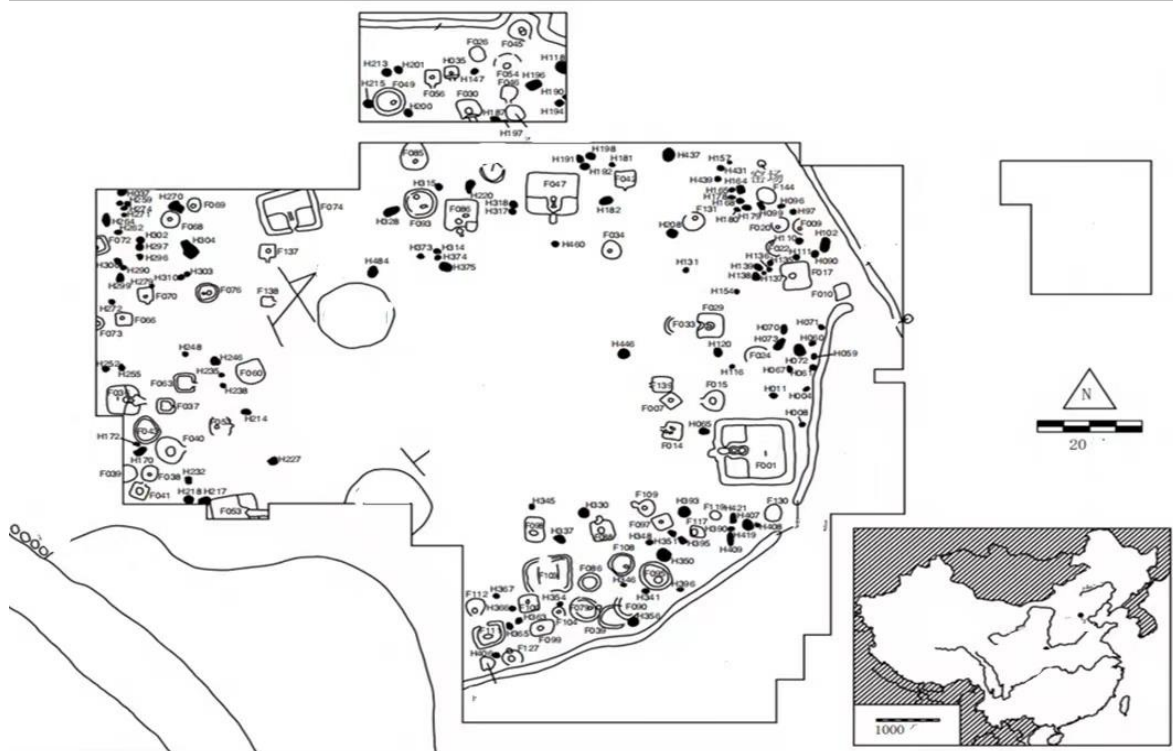


Figure 1: Floor plan of Jiang Zhai Banpo period (Digital revised version from Xi'an, 1988)

In addition, it should be noted that the judgment of the scope of the ruins, the Jiang Zhai site found a large number of pillar holes, ash pits, cellars and other remains, in the judgment of the scope of a ruin sometimes may not be able to accurately find the side of the ruins, this is very normal, many ash pit ruins are originally garbage pits, often at the edge of the settlement, easy to scatter miscellaneous soil around, the color is difficult to distinguish over time, then it is necessary to take photos and record, make a thin layer along the general area, and then clarify the range. The judgment of the pillar hole

and stove cannot be easily concluded, it should be aimed at finding the house, and if there is no specific house site, then the judgment of the stove and the pillar hole is likely to be unfounded. The internal structure of the settlement site should be judged from the perspective of the entire settlement site, which place belongs to the residential area, which place belongs to the funeral area, and which place belongs to the production area, all must be inferred from the overall perspective, and the conclusion is often more reliable. Revealing the layout of the contemporaneous units in the remains of such clusters, such as residential sites, city sites, and cemeteries, is the primary and necessary pursuit of settlement archaeology. Therefore, the judgment and cleaning of the remains is a meticulous work, and settlement archaeology is often small, and only by enhancing their own field skills can the excavation and research of the settlement be thorough.

## 1.2. Research on settlement distribution and the relationship between settlements

"Liezi Tangwen" has "living by water", and the site of Jiang Zhai is selected on the riverside platform. <sup>[9]</sup> "Shi Ming Shi Gong Room" contains: "House, choose also, then auspicious and camp", it can be seen that the ancient residence site needs to meet certain superior conditions to meet the residence, and the site selection of the site of Baoji North Shouling also meets this characteristic, it is located near the Wei River and Jinling River. <sup>[10]</sup> In the archaeological investigation of a single settlement site, attention should be paid to the geological environment of the local site, and topography, hydrology, etc. are important factors affecting the site selection of a settlement. Riverside or roadside villages and towns are often distributed in a strip, hillside villages will be arranged in several arcs according to contour lines, plain areas are mainly round, square, or a combination of square and circular, estuarine areas are more common shell mounds, bay areas are more common sand gang sites.

Before excavation, it is necessary to be familiar with the natural ecological environment of the excavated settlement, understand the paleogeology and landforms, collect archaeological excavation reports or briefings in the area, be familiar with the settlements of nearby excavated sites, and explore their correlation after excavation. From the division of a single relic to the study of the internal layout of the entire settlement, to the spatial state presented between settlements, this is a progressive process of research. The cultural layer of the Jiang Zhai site spans about 500 years, what was the ecological environment during this period? According to archaeological investigations, the average annual precipitation in Lintong City, where Jiang Zhai is located, is 550 mm, and the annual change rate is between 25%~30%; More than half of the year's rainfall occurs between July and September. Temperatures range from -1 °C to -15 °C in January, with an average of 27 °C in July; The frost-free period in the region averages 215 days per year, and the Neolithic Jiang Zhai is not much different from today's climate.

In 1974, the Shanghai Museum of Natural History collected 15 cross-sectional spore pollen samples from the north wall of Jiang Zhai T73, including 7 Yangshao ash pits, 4 Yangshao cultural layers and 3 disturbance layers. The analysis results showed that the Yangshao culture layer was dominated by herb pollen, accounting for 62-96%, woody pollen accounted for 12-29%, and spores accounted for only 0-7%. Herb pollen is dominated by *Artemisia* pollen, accounting for 38-56% of the spore pollen. Tillage layer pollen is also dominated by herb pollen, accounting for 55.3% of the total spore pollen, and woody pollen accounts for 19.8% each. Herb pollen is mainly *Artemisia*, *Poaceae*, legumes, no aquatic plant pollen, woody pollen has cypress, pine, willow, orange wood, and *ephedra*. The spores include ferns, phoenix fern, *lycophyllaceae* and hydrokelets. <sup>[11]</sup> The combination of spore pollen in the cultural layer of Jiang Zhai site can reflect that the vegetation of Jiang Zhai at that time was forest and grassland, and the site was distributed in grasslands dominated by *Artemisia*, *Asteraceae* and *Poaceae*, and the slightly higher mountains had pine and cypress conifers, and sparse

deciduous broad-leaved trees such as elm, birch and orange wood were distributed on the slopes. Algae reflect the riverside near the site. In addition, it can be learned that the climate at that time was semi-arid, similar to the current climate, but the climate was slightly wetter than the current one.

Note: Figure 2 I to XII represent cypresses, pines, larches, oaks, wood, artemisia, chrysanthemums, chestnuts, grasses, beans, cattails, and algae, respectively. Figure 3 I to XII represent ferns, cypresses, pines, larches, ephedra, oaks, artemisia, chestnuts, chrysanthemums, grasses, beans, and sedges.

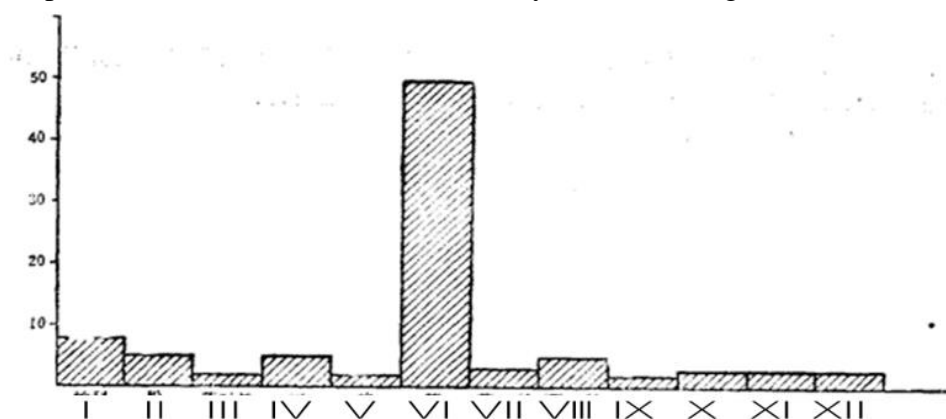


Figure 2: Pattern of spore pollen of the cultural layer of Jiang Zhai site

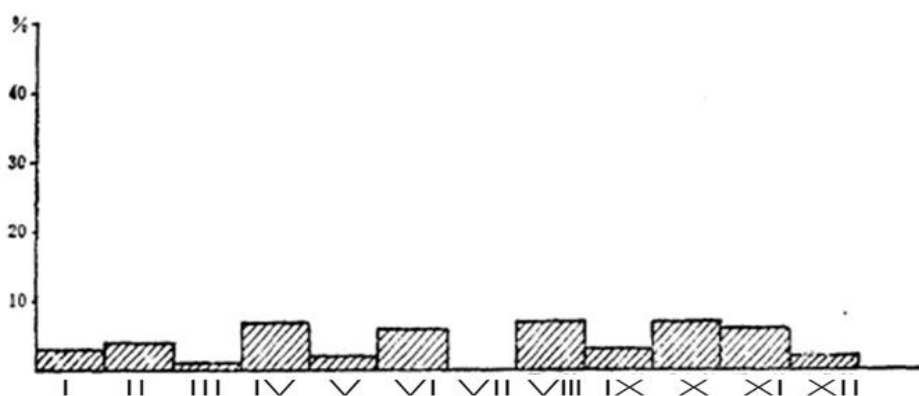


Figure 3: Pattern of spore pollen in the cultivation layer of Jiang Zhai site

The distribution of settlements does not exist alone, and there is often a certain relationship between settlements. To study the relationship between settlement sites, we must first determine the age of each settlement, and only in the same period of settlement can there be such or such influence or communication relations, or forming groups, or ruling and being ruled, conquering and conquering, and so on. If the ages are different, only a relationship of inheritance or substitution can occur, which is another relationship of a different nature. The cultural layer of Jiang Zhai covers five periods, and after analyzed the skulls of the deceased in the Site, it is found that their ethnicity is different in different periods. The human bone identification report of Jiang Zhai Phase I and Jiang Zhai Phase II shows that the residents of Jiang Zhai Phase I belong to the Far Eastern race of Asian Mongolian race, which is the same as the Banpo Formation and Baoji Formation of Banpo type. Most of the bone signs of residents in Jiang Zhai Phase II are close to those of Jiang Zhai Phase I, and are closest to the Miaodigou (Phase II) Formation, Huaxian Formation and Baoji Formation of the Banpo type, which are far from the Banpo Formation. Therefore, if you want to explore the relationship between Jiang Zhai and other surrounding settlements, you have to consider its periodization. Jiang Zhai has three cemetery burial areas, including adult burial, earthen pit burial and urn coffin burial, burial style is

divided into supine straight limb burial and prostrate burial, which exists a kind of body cutting burial ritual (cutting off the four phalanges of the deceased's right foot and putting it into a clay pot with burial), in judging the relationship between settlements and settlements, one basis that cannot be ignored is the burial ritual burial style of the tomb, which can often reflect the life beliefs of a settlement, and infer certain connections between settlements. The three most prominent features of Jiang Zhai Phase II Site are large and concentrated, collective burial, and secondary burial, of which the largest tomb buried 82 people, it is certain that the buried people are not necessarily all people from Jiang Zhai settlement, it may be that relatives or clan settlements that have some blood relationship with Jiang Zhai are buried here after death, which may also be one of the reasons for the popularity of secondary burials, moving the people who originally belonged to this settlement back to the ancestral land after death. The settlements and Jiang Zhai settlements where they lived during their lifetimes had the nature of kinship settlements. When exploring the relationship between settlements and settlements, a common method is to compare their cultures, mainly through pottery tablets, ornaments, funeral rites, house architectural styles, skull analysis and DNA testing, etc., such results can finally be inferred that there are relatives or belonging to the same family, which can further rise to the study of cultural genealogy, but in the interconnected or geographically close to each other, it is quite difficult to guess which settlement belongs to which settlement and which settlement is the original and which is the leaf. <sup>[12]</sup>

### 1.3. Research on the historical evolution of settlement morphology

The study of the historical evolution of settlement morphology occurs after archaeological excavations, and the influence of a settlement comes from its spatial influence and time span, as shown in Table 1.

Table 1: Settlement periodization map of Jiang Zhai site

Settlement staging	Time	Mention	The type of culture it belongs to
I	Early anterior section of the half-slope	Pot-type mouth bottle, fish-pattern clay pot, pot-type mouth (garlic type) thin neck pot	Half-slope type
II	Early and late half-slope	Drum belly bowl, drum belly jar, ear jar, pointed bottom bottle, thin neck pot, urn pointed bottom bottle, clay cup, painted style, pottery stove	Historian type
III	Mid-half-slope	Drum belly bowl, drum belly jar, ear jar, pointed bottom bottle, thin neck pot, urn pointed bottom bottle, clay cup, painted style, pottery stove	Quanhu village, temple bottom gouge type
IV	Late Banpo	Bowls, pots, jars, bowls, flared girdle pointed bottom bottles	Xiwang Village type
V	Yongsan era transition period	Whisks, wedges, urns	Kexiang Zhuang Phase II Culture

To give an inappropriate example, the time and space of the Yangshao era culture spanned a lot, spanning two thousand years before and after, and many local types were derived, the Banpo type in the west and the Miaodigou type in the east and west looked at each other and broke each other, the Yangshao culture may be hasty in the naming of the name, but today it is necessary to do a more detailed study of its periodization or local type. In the archaeological research of settlements, the staging of site settlements is a very critical point, and the settlement of Jiang Zhai sites can be divided into five periods, of which the first four periods belong to the half-slope period, and the fifth period is the transitional stage of the Longshan era. The most important remains of Jiang Zhai are the first three periods, which belong to the first and middle stages of Yangshao culture in terms of time, especially the remains of the first and second phases, which have a certain degree of coherence, but have undergone great changes in living habits. Although the more than 100 houses in the first phase

of Jiang Zhai can be divided into three phases in the morning, middle and evening in relative age, they are still earlier than the second phase of Jiang Zhai, and the burial style of the second phase reflects the difference from the first phase, which seems to prove that the residents of the first and second phases of Jiang Zhai are indeed not the same ethnic group.

The remains of the later Jiang Zhai period began to decrease. The number of houses, Site, cellars and other relics is far less than that of Jiang Zhai Phase I and II. As shown in Table 2:

Table 2: Map of the number of relics of each period of Jiang Zhai settlement

	house	Site	Stove pit	cellar	Trenches	Kiln site	Circle bar
I	120	365	261	297	3	3	3
II		192	22	40			
III							
IV	7		31	103			
V	12	4	17	58			

There is another:

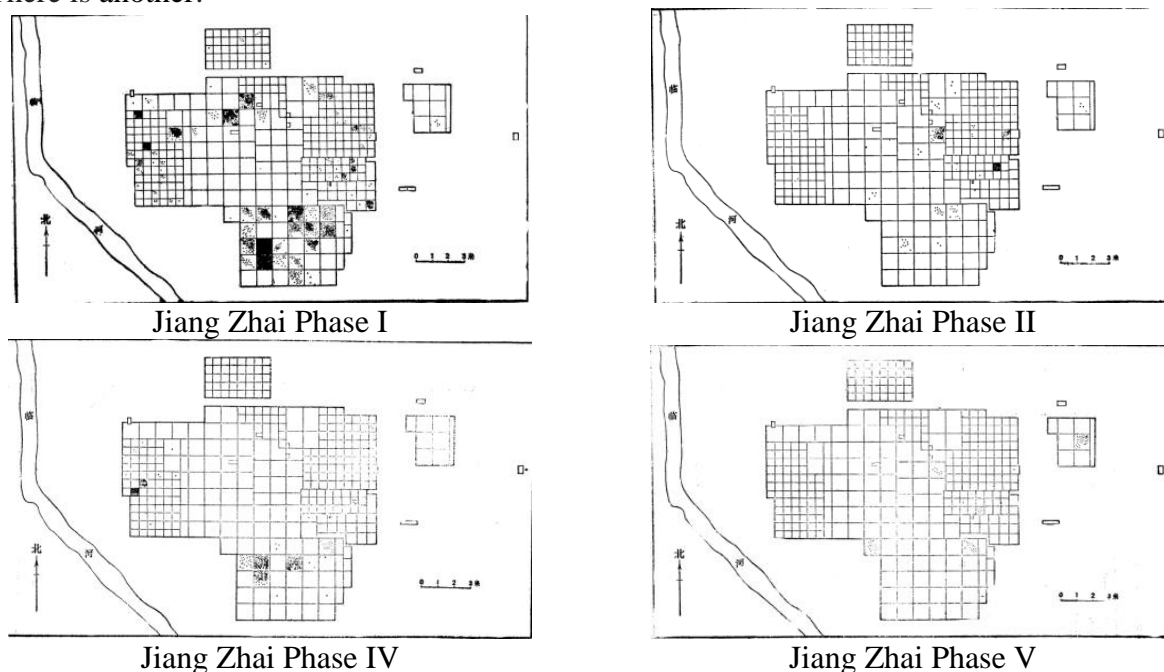


Figure 4: Distribution of animal bones in each stage of Jiang Zhai

Judging from the number of ruins, the remains of the later Jiang Zhai period are much less than those in the early period. The number of animal bones is an important basis for reflecting the prosperity of Jiang Zhai settlement in various periods, and it can be seen from the above Figure 4 that the scale of Jiang Zhai settlement from phase I to phase V generally shows a linear downward trend. Regarding the changes in the settlement of Jiang Zhai, many scholars have speculated, some people believe that the residents of Jiang Zhai at different times were invaded by ethnic groups according to different races, and some people believe that the ethnic groups moved due to severe periodic flooding of the Loess Plateau. Archaeology pays attention to material evidence, and there is a material to say, so most scholars are more willing to discuss its academic value around the settlement layout of the first phase of Jiang Zhai when studying its academic value. <sup>[13]</sup> To study the historical changes of settlement forms, it is necessary to systematically carry out archaeological investigations in the region, reveal clearly the settlements of typical sites in each period, collect information on settlement environment and landscape, and understand the distribution of settlements, settlement density and scale, and settlement structure, so as to reveal the general law of settlement changes.



Third, the multidisciplinary participation and perception of the archaeology of Jiang Zhai settlement

Looking at the development history of settlement archaeology, the development of settlement archaeology is inseparable from the development of many natural sciences. The theoretical knowledge of stratigraphy and typology can often solve the problem of relative age, and the judgment of absolute age depends on the support of natural science and technology. Colin Renfrew once included a column in his book "Absolute dating", which introduced the scientific and technical means required for absolute dating in archaeology. Since the excavation of Jiang Zhai in the seventies of the last century, due to the large scale of excavation and the complete collection of data, it has aroused discussion among many scholars, including many researchers from many other natural disciplines. Journalism requires journalism to have "five", which require reflection of when, where, what, who, and how. Settlement archaeology is essentially a discipline that studies ancient human material society, and it is also necessary to answer the above five questions, which requires the extensive participation of multiple disciplines. [14]

When analyzing the settlement layout of Jiang Zhai Phase I, in order to calculate the rationality of Jiang Zhai settlement layout, many scholars analyzed the settlement layout of Jiang Zhai with the help of computer technology. For example, Christian Peterson uses a computer cluster analysis method to analyze the clustering of social units coexisting in Jiang Zhai. As shown in the Figure 5 and Figure 6:

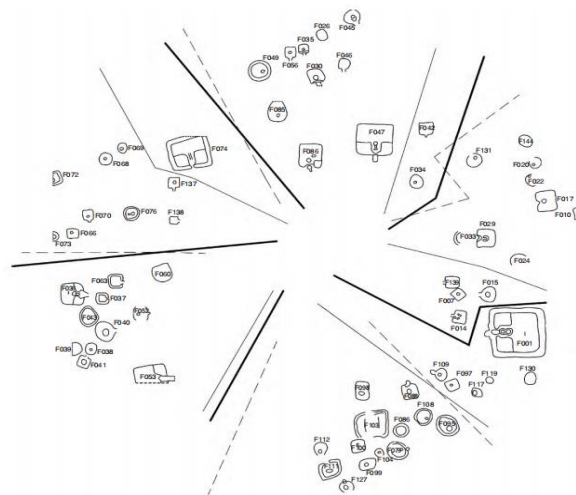


Figure 5: Computer cluster analysis—analysis of clustering of social units coexisting in settlements

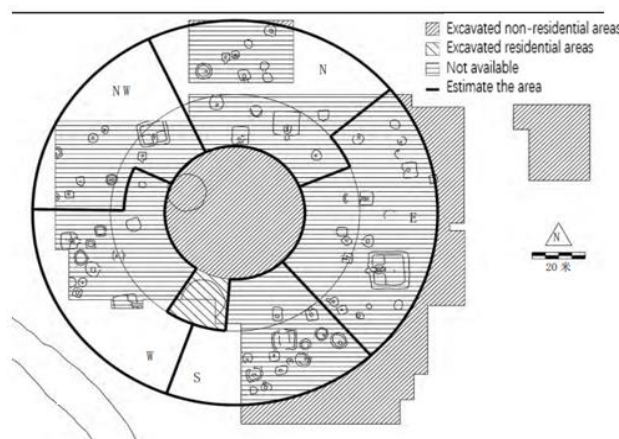


Figure 6: Five synchronic groups in Jiang Zhai Phase I

The use of cluster analysis for settlements with a certain building scale can more accurately calculate the general rules of settlement layout, and the population size of the settlement can be roughly estimated according to the density and scale of the number of houses and the number of rooms in the room, as shown in Table 3:

Table 3: Site structure of the first phase of the Jiang Zhai site

	Area(m <sup>2</sup> )	Number	Percentage rate (%)	Room number
large	60	5	7.5	F141, F142, F93
medium	15-30	16	40	F23, F29, F110, F107, F83, F91, F60, F123, F120, F52, F60, F48, F51, F50, F45
Small	15	17	42.5	F14, F15, F27, F28, F105, F37, F118, F81, F126, F125, F121, F43, F75, F63, F76, F93, F35
unknown		4	10	F124, F11, F90, F128
total		40	100	

Based on 120 synchronic houses, each area lives 90-100 people, if 5 large houses are not residential areas, each area lives 80-90 people, Jiang Zhai village population between 400-500 people, about 264 people per hectare, which is a way to use statistical methods to extrapolate the early population of Jiang Zhai.

The use of multidisciplinary participation in analysis and research is a prominent feature of the later work of settlement archaeology, as mentioned in the previous section, the analysis of human bones can infer whether the ethnic groups in different periods of Jiang Zhai are consistent, which applies the knowledge of molecular biology, and the same analysis of spore pollen to determine the climatic and environmental characteristics of Jiang Zhai settlements and common vegetation and food is also a biological category<sup>[15]</sup>; The use of statistical knowledge can analyze the number of internal remains of settlements and the historical changes of settlement points. The knowledge of geology can be used to analyze the characteristics of settlement distribution and the reasons for the historical changes of settlement forms, which is the unique characteristics of settlement archaeology, and the close combination of archaeology with natural science and technology can better improve the research level of settlement archaeology.<sup>[16]</sup>

The study of individual settlement cases is the basis of settlement archaeology, and under the premise of improving its own field level, it completes the practical norms for settlement morphology research before, during and after excavation, and emphasizes multidisciplinary participation on the basis of practice. On this basis, one can understand what Gordon Wiley said: "The way humans place themselves in their habitat."<sup>[17]</sup> It refers to the nature and placement of dwellings and their arrangement, as well as other buildings associated with community life, which reflect the natural environment, the technical level of the builders, and the various social interactions and control systems that sustain their culture. Since settlement forms are largely directly created by widely recognized cultural needs, they provide a strategic starting point for the functional interpretation of archaeological cultures."<sup>[18]</sup>

## 2. Conclusions

Jiang Zhai Site is a Neolithic site with an area excavated so far. Its excavation provided valuable material materials for the study of social formation, production technology, marriage system, culture and art, burial customs and ideology at that time. The study of Jiang Zhai site enables people to understand the production mode, life style, social organization form, art level and other information of the original settlement in the Neolithic Age.

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