

The Psychological Foundation of Chinese Culture and Its Origins: A Review of “Chinese Archaeology: From the Late Paleolithic to the Early Bronze Age”

Authors: Ren Xiaopeng, Hongchuan Zhang, Ren Xiaopeng

Date: 2023-05-29T00:00:00+00:00

Abstract

Chinese Archaeology: From the Late Paleolithic to the Early Bronze Age systematically surveys discoveries in the field of Chinese archaeology, organizing the forms of early Chinese human society, subsistence patterns, and other aspects within a spatiotemporal framework, while also speculating on the distinctions and interconnections between archaeological cultures in different regions and their possible underlying drivers. Finally, it introduces the distinctiveness of Chinese civilization within a global context. Building upon this foundation, we propose, within a cultural evolutionary framework, that the foundational characteristics of Chinese cultural psychology encompass three features: correlative thinking, zunzun (honoring the honorable), and qinqin (cherishing kinship). Furthermore, drawing upon the archaeological discoveries presented in the book and the author’s subsequent research, we speculate that wu-shamanism elucidates the origins and maintenance of these foundational characteristics of Chinese cultural psychology.

Full Text

The Roots and Origin of Chineseness from the Perspective of Cultural Psychology: A Review of *The Archaeology of China: From the Late Paleolithic to the Early Bronze Age*

Xiaopeng Ren^{1, 2*}, Hongchuan Zhang³

¹Institute of Psychology, Chinese Academy of Sciences, Beijing 100101, China

²Department of Psychology, University of Chinese Academy of Sciences, Beijing 100049, China

³School of Sociology and Psychology, Central University of Finance and Economics, Beijing 100081, China

Abstract

The Archaeology of China: From the Late Paleolithic to the Early Bronze Age systematically introduces archaeological discoveries in China, organizing early Chinese human societies' forms and subsistence strategies within spatiotemporal frameworks. It also speculates on the distinctions and connections between archaeological cultures in different regions and their underlying causes, concluding with an introduction to the uniqueness of Chinese civilization worldwide. Building upon this foundation and employing a cultural evolution framework, we propose that the psychological substratum of Chinese culture comprises three characteristics: associative thinking, respect for hierarchy, and kinship favoritism. We further speculate, based on archaeological evidence from the book and the authors' subsequent research, that shamanism explains the origin and maintenance of this psychological substratum.

Keywords: Chinese cultural psychological substratum, shamanism, associative thinking, respect for hierarchy, kinship favoritism

As research on regional variations in Chinese cultural psychology and their ecological origins has grown, scholars have become increasingly curious about how contemporary Chinese cultural psychology—such as in-group favoritism and holistic thinking—originally emerged and evolved. Current hypotheses are numerous but largely based on inferences from measurements of modern populations' psychological characteristics. The fundamental reason is our inability to travel back to ancient times to understand how people perceived themselves and responded to their ecological environments. Although we cannot have “ancient people” report their psychology in modern ways, our ancestors left behind abundant historical materials, including official histories, unofficial records, legends, and myths. Based on the textual criticism of the Qing Dynasty's Qian-Jia School and subsequent national studies research, the approximate periods of these materials have been relatively well-established. This allows us, while making inferences based on modern psychology, to attempt to return to the “past” and speculate about Chinese cultural psychology from historical sources. This speculation's most important contribution is helping us understand when and where Chinese cultural psychological characteristics originated. A near-default view equates China's Spring and Autumn and Warring States periods with ancient Greece, suggesting that Chinese people already exhibited holistic thinking and other characteristics during that time (Nisbett, Peng, Choi, & Norenzayan, 2001). However, during this so-called Axial Age of civilizational breakthrough, Chinese cultural psychology did not suddenly emerge “from scratch.” This necessarily leads to the speculation that these cultural psychological characteristics appeared in even more ancient times. Further back, however, Chinese written and archival documents cannot provide sufficiently reliable evidence. With recent archaeological developments, numerous artifacts and evidence predating

writing and bronze inscriptions have been excavated and analyzed, making it possible to offer a potential interpretation of the earliest origins of Chinese cultural psychology—what we call the psychological substratum of Chinese culture.

1. Introduction to *The Archaeology of China: From the Late Paleolithic to the Early Bronze Age*

Liu Li and Chen Xingcan's *The Archaeology of China: From the Late Paleolithic to the Early Bronze Age* (hereafter referred to as *The Archaeology of China*) provides substantial evidence and analysis. The original English edition was published in 2012, with the Chinese edition following in 2017. This book is, in some sense, a continuation of Zhang Guangzhi's *The Archaeology of Ancient China* (Liu & Chen, 2017, p. 1). A crucial clarification is necessary regarding terminology: “culture” as used in archaeology differs significantly from “culture” in psychology. In archaeology, terms like Yangshao Culture, Hongshan Culture, or Liangzhu Culture typically describe material remains, with meanings approximating “complexities” and “horizons” in Western archaeological literature. An archaeological culture represents a community sharing certain common features found across multiple sites within a region, usually named after the location where the cultural complex was first discovered. The authors emphasize that “culture” in their book refers only to “the so-called spatiotemporal archaeological community in the conventional sense, without extending to the ethnic group using these material remains” (Liu & Chen, 2017, p. 3). In cross-cultural psychology, culture also refers to a community, but one with clear boundaries (including but not limited to nation, ethnicity, language) and greater emphasis on the community's psychological and behavioral manifestations—dimensions that are difficult to discern clearly from archaeological cultural communities.

The book's structure divides into four parts comprising eleven chapters. Part One (Chapter 1) covers the history of Chinese archaeology and has limited relevance to cultural psychology. Part Two (Chapters 2-4) addresses environment and ecology, foragers and collectors at the Pleistocene-Holocene transition, and plant and animal domestication. This section examines China's environment and ecology on a long timescale, including how environmental and ecological constraints shaped possible subsistence strategies for human communities and their coping mechanisms, which bear certain connections to cultural psychology—topics we will discuss in detail later.

Part Three (Chapters 5-10) includes: Chapter 5 on entering the Neolithic—early Neolithic settlement and food production; Chapter 6 on the emergence of social inequality in the middle Neolithic; Chapter 7 on the rise and fall of early complex societies in the late Neolithic; Chapter 8 on the formation of early states in the Central Plains—Erlitou and Erligang; Chapter 9 on Bronze Age cultures in the early second millennium BCE in the northern frontiers and surrounding regions; and Chapter 10 on the late Shang dynasty and its neighbors. In this section, the authors employ a combined spatiotemporal approach, organizing chapters chronologically from prehistory to the Shang-Zhou period,

while within each broad timeframe further sorting the characteristics of different archaeological cultures by region. They introduce archaeological findings from perspectives including food sources and subsistence strategies, artifact assemblages, regional ecological environments, and settlement complexity. As shown in Table 1, generally speaking, the more remote the period, the fewer archaeological discoveries, the longer the time span covered, and the fewer and less reliable the inferences that can be made. Conversely, more recent periods yield more discoveries, shorter time spans, and more numerous and reliable inferences.

Examining the archaeological cultures across different chapters reveals that major archaeological cultures existed in each region during various periods (Liu & Chen, 2017, pp. 135, 182, 226, 268, 290, 312), suggesting that ecological factors had greater influence on humans during the Neolithic period. While introducing current archaeological discoveries in China, the authors also speculate on underlying subsistence strategies, community relationships (egalitarian vs. hierarchical), and how individuals attained high-status positions within communities. The latter aspect can help us understand the possible origins of Chinese cultural psychology's substratum. One point deserves special attention: when summarizing each period's characteristics, the authors extract passages from ancient Chinese classics to capture that stage's developmental features in cultural complexity. For instance, they use "After Baoxi passed away, Shennong arose; he fashioned wood into plows and bent wood into handles, teaching the world the benefits of agricultural tools" to characterize the first period (7000-5000 BCE) as the beginning of settled agriculture, even though these classics date far later than the period they describe, without compromising their summarizing accuracy.

Part Four comprises Chapter 11, which examines Chinese civilization from a comparative perspective against several major civilizations, summarizing and explaining its uniqueness. The authors conclude that "China's path to civilization was a long, tortuous, and complex process. This civilization experienced challenges from dramatic environmental changes, the rise and fall of complex societies, social conflicts and political disputes, unexpected social transformations, and external influences. We may never know exactly how 'Chineseness' was formed, nor thoroughly understand all the details of ancient 'Chineseness'" (Liu & Chen, 2017, p. 419).

2. The Origins of Chinese Cultural Psychology's Substratum

The archaeological evidence and related theories presented in this book enable more reasonable speculation and explanation regarding the substratum and origins of Chinese cultural psychology. Several aspects emerge from reading this work.

2.1 Environmental Constraints on Cultural Psychology

All civilizations emerged, developed, and transformed within relatively fixed geographical spaces. A region's size, climate, and suitable subsistence strategies may all contribute to a civilization's unique origins. First, compared to other archaeological findings showing geographical separation between different civilizations, China's early civilizational boundaries were relatively difficult to cross, with significant geographical and climatic barriers to the west, south, and north, and the ocean to the east. This meant that China's early civilizations were born and interacted primarily within the Chinese civilizational sphere. This is not to deny interaction with other civilizational regions, but rather that the frequency and intensity of interaction were greater within the Chinese sphere. If we compare the Chinese civilizational sphere with three other major spheres, interaction among the other three was easier than their interaction with the Chinese sphere.

Second, ecologically, China's cultural ecology can be divided into two parts: regions suitable for settled agriculture and regions suitable for pastoralism, with the basic dividing line approximating the Hu Huanyong Line. This difference has also been identified in archaeological evidence, initially named the "Half-Moon Zone" by Tong Enzheng (1987). This suggests that contemporary regional differences in cultural psychology may have existed from early times. The ecological environment west of the Hu Huanyong Line made it easier for people to develop psychology emphasizing self-reliance, commodity exchange, and veneration of strength. Conversely, the environment east of the line facilitated psychology emphasizing community relationships, dependence on weather and land, and community priority—aligning closely with the contemporary regional divisions of Chinese culture into the first region and the second, third, and fourth regions (Ren, Cang, & Ryder, 2021).

Third, we specifically compared the geographical and ecological constraints between the early civilization center of Mesopotamia and early Chinese civilization, as shown in Table 2. Even when limited to regions suitable for agricultural development, China's geographical conditions were much larger than Mesopotamia's, allowing different archaeological cultural regions within early Chinese civilization greater possibility for independent development. Second, the characteristics of rainfall and rivers in China's agricultural regions—such as the Yellow and Yangtze Rivers flowing eastward at roughly the same latitude—resulted in weaker complementarity between regions and hindered commercial development. Moreover, Chinese civilization's people had relatively high dependence on the natural environment, particularly celestial phenomena. These geographical conditions constrained the origins of Chinese civilization.

Another important constraint was dramatic climate change. Two climatic turning points were particularly significant, possibly triggering or promoting ecological environmental changes, with different regional communities adopting different coping strategies. The successful strategies of surviving communities

may have become the origins of early Chinese cultural psychology's substratum. The first turning point occurred approximately 5,200 years ago, corresponding to the rise and fall of some early cultural regions. In a sense, this allowed diverse experimentation in coping strategies among communities in different cultural regions facing environmental changes. The strategies of the ultimately successful archaeological cultural region likely had the greatest influence on our contemporary cultural psychology. Over long timescales, some strategies from vanished cultural regions may have been absorbed and integrated into the successful region's communities, simultaneously influencing our current cultural psychological substratum.

The second turning point, approximately 4,200 years ago, marks the Meghalayan Age of the Holocene epoch. This period witnessed the decline of both Mesopotamian and Indus Valley civilizations, while within the Chinese civilizational sphere, some archaeological cultures declined while others continued to flourish. This timeframe also approximates the period when mythological history emerged in ancient Chinese civilization, possibly representing a critical period for the formation of ancient Chinese cultural psychology.

2.2 The Shamanistic Origins of Chinese Cultural Psychology

Zhang Guangzhi, referencing Western civilization, proposed a shamanistic origin for Chinese civilization, temporarily linking it to North American Indian shamanism. He argued that this represented a civilization distinct from the Western path centered on commercial trade and productivity improvement, instead emphasizing politics and culture as the core of civilizational evolution (Zhang, 1987, 2013). Li Zehou also proposed, from a philosophical perspective, that Chinese cultural psychology has a shamanistic-ritual tradition (Li, 2015). Here we introduce a cultural evolution perspective to interpret the shamanistic origins of Chinese cultural psychology. This perspective is difficult to support with quantitative empirical data, but archaeological evidence makes such speculation reasonably plausible.

For clarity, we first introduce the substratum of Chinese cultural psychology, then propose its possible pathways of origin and maintenance. As shown in Figure 1 [Figure 1: see original paper], the substratum of Chinese cultural psychology includes three components. First, associative thinking refers to the tendency to believe that many things or events are connected, and that influencing other things or events can affect target outcomes. These connections may or may not have empirical support. Second, respect for hierarchy means accepting that people of different social statuses have different powers, with high-status individuals possessing greater authority, including in matters not directly related to status, granting them greater distribution and decision-making power. Third, kinship favoritism means accepting that relationships among community members have varying degrees of closeness, and that people should treat their kin better. Simply put, associative thinking corresponds to holistic thinking, respect for hierarchy corresponds to power distance, and kinship favoritism

corresponds to in-group favoritism. However, we prefer the terms associative thinking, respect for hierarchy, and kinship favoritism because these features may originate from Chinese cultural concepts and can more accurately express Chinese psychological characteristics. Moreover, these features may have been simpler in early times than their contemporary meanings in cultural psychology research.

Cultural evolution theory posits that *Homo sapiens* evolution differs from other animals and plants, resulting not from pure natural selection but from the combined effects of natural selection and cultural evolution. Culture may have initially been a product of natural selection, possibly even a byproduct. Once culture emerged, however, it could have independent effects. Unlike natural selection, which has no direction and simply adapts to environments, cultural evolution has cumulative effects and directionality. For example, when *Homo sapiens* began painting on cave walls or rock surfaces, they could preserve and communicate knowledge more effectively than through oral tradition alone, such as techniques for hunting large carnivores (Henrich, 2015).

Generally, cultural evolution provides a theoretical framework for explaining the psychological and dynamic mechanisms in human communities' development from simple to complex forms. From archaeological and anthropological perspectives, early humans evolved through stages from simple bands to tribes, tribal unions, and states, with the state stage marking entry into so-called civilization. Although this simple classification has been criticized, it remains an effective framework for analyzing and interpreting human civilizational development. The controversy primarily concerns the archaeological criteria for distinguishing stages and whether four stages are necessary, not the developmental process from simple to complex communities. As Henrich argues, once human communities formed, inequality emerged among members, with some occupying higher social ranks. Strategies for pursuing high rank fall into two categories: prestige (reputation), such as superior hunting ability that regularly brought more meat or generosity in sharing resources; and dominance, such as using violence or intimidation to make others fear you (Henrich & Gil-White, 2001; Henrich, 2015). In initial band organizations, high status was accidentally obtained and could not be transmitted across generations. For instance, a father might achieve high status through generosity and hunting skill, but this did not guarantee his children would be equally generous or skilled. After some time, new high-status individuals would emerge. However, with the advent of sedentary agriculture, human communities created more surplus resources, which intensified internal inequality. Strategies for permanently maintaining high status or transmitting it across generations within communities may have triggered or created new cultures. If such cultures could solve communities' survival problems—both inter-group and intra-group—or demonstrate sustained effectiveness in solving survival problems over long periods, these specific strategies might become that human community's unique culture.

When community scale expanded from families to bands of dozens of people

and began settling, producing surplus resources that required storage, protection, and redistribution, common problems emerged: Who has priority in consumption? Who decides resource distribution? How do communities resolve difficulties in production, storage, and protection? Different communities may have adopted different strategies, techniques, and practices. Some communities might have prioritized those with greater contributions, while others might have used seniority (such as age). Under specific constraints, certain strategies (such as seniority-based priority) may have been initially preferred, becoming conventions that people continued to prioritize even when circumstances changed. These strategies would be reinforced and, over time, influence people's psychology.

If the above process of cultural psychological formation is universal, we must address how early Chinese society developed the memes of our current cultural psychology. Consider a typical Yangshao culture site: Jiangzhai, located north of Lintong County in Shaanxi Province, in the middle Yellow River region, which relied on river water and rainfall for crop growth. The Jiangzhai community had already exceeded the scale of purely kinship-based communities. Its primary tasks were ensuring stable crop yields, which depended on weather, and protecting the community from other groups' attacks, which required methods to maintain community identity. To solve these problems, communities developed mechanisms or strategies for selecting and maintaining leaders. Once leaders achieved high status, they would adopt methods favorable to their core families for transmitting leadership or distributing surplus resources. These problem-solving strategies may have promoted the emergence and maintenance of Chinese cultural psychology's substratum.

After tribes transitioned from hunter-gatherer subsistence to collector and sedentary agriculture, maintaining stable crop output became most important, replacing the role of skilled hunters. Who might this person be? According to Henrich's prestige-dominance mechanism, in settled communities, this role might have been the sorcerer (wu). Anthropological research on shamans and sorcerers shows that in small-scale societies, shamans can be divided into different grades and types, including wizards, mages, and priests. Early wu's primary functions included handling matters related to crop growth, such as praying for rainfall. This matches the situation faced by Jiangshan's people: in the middle Yellow River region, rainfall was the key factor affecting crops like millet and sorghum. When rain was scarce, wu might perform complex ritualized actions—exact methods now unknowable—to pray to deities for rain or to control deities through ritualized behavior. From a modern perspective, wu's ritualized actions had no scientific basis and likely did not work. But for people at the time, they generally believed wu and their ritualized actions were effective. Even when rain did not come, they found it acceptable; but when it did work (what we would consider coincidence or luck), their trust in wu increased, believing the ritualized actions truly enabled communication with or influence over celestial deities.

During rainmaking rituals, wu exhibited two types of behaviors or knowledge. One involved observation of nature, where astronomical knowledge might help rainmaking success. For example, when clouds appeared, rainmaking was more likely to succeed than on cloudless days, and wu would choose more opportune moments based on this knowledge. This knowledge represented empirical summary and accumulation. Wu could not explain it with modern scientific knowledge but transmitted it orally to others. In preliterate times, this knowledge was tied to personal experience—the older the person, the more rainmaking ceremonies they had experienced, and the more likely they were to know how to use this knowledge. This eventually led community members to develop customs respecting elderly wu or shamans. Wu or shamans might also use special behaviors, such as entering trance states through certain means, speaking incomprehensible words to achieve interaction with deities. For wu, this was a necessary step to enter trance; for community observers, it proved wu was interacting with deities. Rainmaking required necessary steps such as preparing sacrifices for deities, days of preparation like bathing and fasting, or consuming substances that induced trance states, such as alcoholic beverages. These ritualized behaviors, along with accumulated experience in interpreting them, may have gradually developed into the content of later rituals (li). On one hand, wu used these ritualized behaviors to improve rainmaking success rates, gaining prestige in the community and facilitating their emergence as leaders. On the other hand, ritualized behaviors strengthened group identity and enhanced cohesion, as community members participated collectively under wu's leadership in preparing sacrifices and auxiliary work. In observing weather and summarizing climatic patterns, and in identifying signs helpful for predicting rainmaking success, people without modern scientific knowledge tended to summarize experience through external connections between different things, analyzing patterns or believing that anthropomorphic deities controlled these matters. The former tendency easily developed into cognitive preferences for associative or analogical thinking, while the latter easily developed into animistic beliefs and cultural habits of achieving community goals through sacrificing to important deities. Overall, under sedentary agriculture-based collector subsistence and leadership emergence mechanisms, two cultural psychological characteristics were reinforced: respect for hierarchy (honoring experienced elders) and associative thinking.

Once leaders emerged, they naturally occupied advantageous positions in surplus resource possession and distribution, obtaining more surplus resources. How would leaders maintain their status? One method was continuously providing services the community needed, such as regular and irregular sacrifices, thereby 不断强化 their high status's legitimacy. They could also provide things ordinary members could not access, demonstrating their status's legitimacy. For example, leaders might represent the community in exchanging items with other communities—items not available locally, of which only one or a few existed, insufficient for every community member to possess. Owning these items helped maintain leaders' prestige. Initially, leadership could not be hered-

itary, so when leaders could no longer fulfill their duties, new competitors would emerge through competition. Leaders had motivation to have their kin (such as sons or brothers) succeed them. How could they make their kin more likely to become new leaders? By giving them access to their knowledge. Although all community members could observe and imitate leaders' knowledge, kin might have more opportunities to acquire it during transmission, placing them in more advantageous positions among competitors. Leaders could also use other methods, such as long-distance travel to distant places to obtain new knowledge and resources, demonstrating their prestige to the community. This increased the likelihood of their kin becoming future leaders. Once their kin became leaders, it reinforced their family's prestige, making it the most prestigious family in the community, with people accepting the notion that their family deserved high status. This objectively induced beliefs in kinship favoritism—prioritizing those close to the leader in resource distribution (such as items or event hosting). Although these strategies could not guarantee that new leaders would be the previous leader's kin, they did not hinder the development of kinship favoritism beliefs, because once new leaders were established, they would adopt the same strategies to influence the next leader's emergence. Overall, through this reasoning, we can summarize the origins of Chinese cultural psychology's substratum in the following figure.

Figure 1 illustrates the characteristics and origins of Chinese cultural psychology's substratum. The above represents speculation based on cultural evolution theory. Although reasonable, it requires supporting evidence, which we provide from several aspects.

First, the psychological mechanisms of shaman or sorcerer emergence (Singh, 2017). Anthropological research shows that shamans are a universal occupation or phenomenon in documented or existing small-scale societies and are likely the earliest profession in human evolution. Shamans emerged when early human societies faced important but uncontrollable matters, often attributing them to supernatural forces. Shamanistic ritualized actions aimed to influence these supernatural forces to act in ways beneficial to humans. Since shaman activities were public and observable, competition among shamans would preserve useful elements of ritualized behavior while eliminating completely useless elements. Gradually, without new technological breakthroughs or more effective behavioral alternatives, relatively stable habits would form for that community. Some parts of ritualized behavior were effective and might contain scientific principles unknown to shamans. This stable knowledge was easily explained through associative thinking. For example, consuming alcoholic beverages during sacrifices might easily induce trance states, but shamans would attribute this to the beverage's preciousness (initially a luxury, as we will discuss) rather than alcohol's effects. When this universal shamanistic psychological mechanism operated in the middle Yellow River region's rain-dependent agricultural environment, it likely promoted the cultural psychological characteristics mentioned earlier.

Second, acquisition of special items. Archaeological discoveries from the Yang-

shao culture period include items not found locally within considerable ranges, meaning they were obtained through exchange from distant locations (Zhu, 2022). For example, jade artifacts from the Xinglongwa Culture (6200-5200 BCE) were found at the Cishan Culture site (6500-5000 BCE). These artifacts were not daily necessities, so their most likely uses were demonstrating owners' superior status, possessing what ordinary members lacked, or serving as sacrifices or items used in leaders' ritualized behaviors. According to Hayden's feasting theory, one reason for crop domestication was that certain crops were not primary food sources but raw materials for special beverages that, after processing, might contain alcohol. These beverages were often shared by hosts during feasts as precious items (Hayden, 2014, p. 10). For early humans, activities involving all community members, such as sacrifices, were most common.

Third, long-distance travel. Based on similarities between jade artifacts from the Hongshan Culture (4500-3000 BCE) and the Lingjiatan Culture (3600-3300 BCE), and the two cultures' temporal contemporaneity (partially overlapping), Li Xinwei proposed long-distance exchange between early regional cultures (Li, 2015). For upper-class individuals in settlement societies—similar to the wu or leaders discussed above—long-distance travel and bringing back items or knowledge unavailable locally were means of gaining prestige. Those who traveled long distances had more prestige than those who did not. Additionally, much knowledge required face-to-face instruction, so long-distance travelers could acquire more knowledge helpful for improving important activities, through which they could gain prestige.

Fourth, evidence for associative thinking. As mentioned, wu or shamans might use associative thinking to form knowledge about phenomena when observing nature. Support comes from an archaeological discovery: Tomb M45 (4000-3500 BCE) at the Xishuipo site in Lingbao, Henan. The excavated remains of a Yangshao religious specialist may have been the community's shaman (Zhang, 1988). Surrounding the remains are three large mosaic patterns made of shells that can be identified as dragon and tiger images, considered by scholars as an early form of the twenty-eight lunar mansions in astronomical knowledge (Feng, 1990). Imagining celestial constellations as animal shapes like dragons and tigers can serve as evidence that people used associative thinking when summarizing knowledge.

3. Maintenance and Continuity of Chinese Cultural Psychology's Substratum

If Chinese cultural psychology's substratum has these three characteristics—associative thinking, respect for hierarchy, and kinship favoritism—and the earliest archaeological evidence for these features appears during the Yangshao culture period, then how could these characteristics be maintained and continued over the nearly 3,000 years until the reign of Emperor Wu of Han (141-87 BCE)? Archaeological and anthropological evidence suggests such maintenance and continuity is possible.

The book's authors provide excellent examples in subsequent research combining archaeological and anthropological evidence. Chinese scholars used etymological evidence from linguistics to reconstruct evolutionary relationships within the Sino-Tibetan language family, finding that Chinese and Tibeto-Burman languages separated around 5,900 years ago—a separation speculated to relate to the diffusion of millet-based agriculturalists from the Yangshao culture (Zhang et al., 2019). Studies using ancient DNA from archaeological remains also support the hypothesis that ancient humans on the Tibetan Plateau originated from Neolithic communities in the Yellow River basin (Zhao et al., 2009). Specifically, populations in the northeastern Tibetan Plateau, such as those at the Zongri site in the Gonghe Basin, received genetic influence from ancient northern East Asian populations from the Yellow River basin at least 4,700 years ago (Wang et al., 2023).

Liu and colleagues analyzed residues in pointed-bottom vessels from archaeological sites (Dadiwan, Boxi, and Haxiu), finding these vessels were primarily used for producing and consuming alcoholic beverages. Based on similarities and differences in artifact types and residues, along with temporal connections between sites, the authors speculate that Boxi and Haxiu populations resulted from Dadiwan culture migrations. Combining this with anthropological research on the Jiarong Tibetan people's "zajiu" (mixed wine) customs, the authors speculate on these finds' social functions, from which we can find evidence for the maintenance of associative thinking, respect for hierarchy, and kinship favoritism.

Jiarong Tibetan zajiu customs have several features. First, the location is typically a central village square with a corridor behind it, facilitating residents' observation of pre-zajiu rituals. Second, zajiu usually centers on specific activities such as weddings, funerals, or important festival sacrifices. Third, one person presides over the activity, first offering sacrifices to deities and ancestors, then everyone dances together (guozhuang dance), forming one or several large circles with self-brewed wine placed in the center. Fourth, the zajiu order begins with the presider, then follows age and gender sequences as everyone drinks together through straws (made from reeds). These activities' social function is maintaining village residents' identity, now primarily emotional bonding but originally likely serving more important practical functions such as blessing invocation or pre-war mobilization. Here we see respect for hierarchy: the most important person drinks first, then elders, then youth, men before women—reinforcing respect for hierarchy in Jiarong Tibetan social activities. Participants are basically villagers (plus invited guests), reinforcing kinship favoritism. Based on this, the authors reviewed historical documents and archaeological evidence, using zajiu and guozhuang dance characteristics to trace continuity in local residents' ritual activities across different dynasties, connecting Boxi and Haxiu sites (6000 BCE), Yingpanshan (5300-4600 BCE), Shidaqiu site (200 BCE-200 CE), and records in *Huayang Guozhi* (348-354 CE). The authors also suggest these activities may have used bodily social memory to achieve group social memory, whose primary purpose was strengthening group identity (Liu, Chen, Wang, Zhao, & Chen, 2022). Respect for hierarchy and kinship favoritism were repeatedly re-

enforced and maintained in achieving this group identity goal, while associative thinking was often employed to cognize phenomena in the absence of modern scientific methodology.

As more Chinese archaeological sites are excavated and analyzed, we gain greater understanding of early humans' living environments in China and the strategies they adopted to adapt. Combining this with the cultural evolution theoretical framework allows new interpretations of the origins and maintenance of Chinese cultural psychology's substratum across much longer timescales. These interpretations are tentative and may be superseded by more reasonable ones in the future, but we believe they are relatively reasonable based on current archaeological evidence.

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Corresponding author: Xiaopeng Ren, renxp@psych.ac.cn

Author Contributions: Xiaopeng Ren and Hongchuan Zhang jointly discussed and formed the main arguments of this paper; Xiaopeng Ren completed the initial draft; Xiaopeng Ren and Hongchuan Zhang jointly completed the final revision.

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.