

## Preservation of the Literacy of Musical Instruments from the Shang Dynasty of the Central Plains in China

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### ABSTRACT

This study investigates the preservation of the literacy of musical instruments from the Shang Dynasty, emphasizing their cultural, ritual, and political significance in the Central Plains of ancient China. Excavated instruments such as xuns, qings, yongs, and bronze bells offer profound insights into the dynasty's advanced craftsmanship, hierarchical social structure, and the integration of music into religious and political practices. Archaeological sites, including Yinxi, Liulige, Subutun, and Qianzhaodacun, highlight the geographic diversity and cultural exchange inherent in Shang musical traditions. These instruments embody cultural literacy through their ritualistic use, political literacy in their association with social stratification, and technological literacy in their sophisticated design and metallurgical techniques. Their preservation ensures that the knowledge systems and societal values embedded within these instruments remain accessible for future research. The preservation of these artifacts is essential to safeguarding the literacy they carry about Shang society's values, beliefs, and innovations. By addressing challenges in conservation and ensuring their accessibility for future study, these instruments continue to enrich our understanding of ancient Chinese civilization and its enduring influence.

**Key words:** Shang Dynasty, Literacy Of Musical Instruments, Preservation, Cultural Literacy, Central Plains

### INTRODUCTION

The Shang Dynasty (c. 17<sup>th</sup> century BCE–11<sup>th</sup> century BCE) holds a vital position in Chinese history, representing a period of remarkable cultural, social, and technological advancements. Among its many contributions, the literacy of musical instruments—encompassing their creation, usage, and symbolic meanings—provides a unique lens through which to understand the time's complex social and cultural fabric. This research focuses on the preservation of the literacy of musical instruments excavated from the Central Plains of China, the core region of Shang civilization, to explore their historical, cultural, and technological significance and ensure their legacy endures (Xing, 2023; Zhu, 2020).

The concept of "literacy" in the context of musical instruments extends beyond mere functionality to include the knowledge systems and cultural meanings embedded within them. The musical instruments of the Shang Dynasty were not only tools for performance but also artifacts of communication, transmitting the values, beliefs, and practices of the time. Excavated instruments such as bronze bells (zhu), chime stones (qing), and drums reflect the dynasty's advanced craftsmanship and role in court rituals, spiritual ceremonies, and political governance. Understanding this literacy is crucial for decoding the Shang Dynasty's worldview and

influence on later Chinese civilizations (Hou & Seekhunlio, 2023; Tong, 1983; Du & Liang, 2024).

The Shang Dynasty was shrouded in myth for centuries, known primarily through legends and scant historical accounts. This began to change in the 20<sup>th</sup> century with the discovery of oracle bones and artifacts from sites such as Yinxi in Anyang, Henan Province. These discoveries established the Shang Dynasty as a historical reality and revealed a wealth of musical instruments that highlighted the dynasty's sophisticated music culture. The Central Plains region, encompassing present-day Henan Province and adjacent areas, is particularly significant as it was the political and cultural heartland of the Shang Dynasty and the primary source of these archaeological findings (Yan et al., 2021; Lu et al., 2019).

This research focuses on the preservation of the literacy of these musical instruments and their role as carriers of knowledge across generations. Furthermore, it explores how these instruments influenced subsequent music traditions and contributed to the development of Chinese musicology. By focusing on the preservation of the literacy of musical instruments from the Shang Dynasty, this study contributes to a deeper understanding of the cultural legacy of the Central Plains region.

### Research Question

- How can the literacy of Shang Dynasty musical instruments from the Central Plains in China be preserved?

## LITERATURE REVIEW

### Ecological and Cultural Context of Shang Dynasty Musical Instruments in the Central Plains

The Central Plains of China, spanning the middle and lower reaches of the Yellow River and extending to the Huaihe River basin and parts of the Yangtze River, formed the geographical and cultural nucleus of the Shang Dynasty (1600–1046 BCE). People distinguish this region, particularly Henan Province, as the cradle of early Chinese civilization, home to significant archaeological sites such as the Yinxu ruins. A nuanced understanding of this region's ecological, climatic, and cultural conditions is critical to exploring the literacy of musical instruments from the Shang Dynasty, their development, and their socio-cultural significance (Liu, 2023).

Research on the ecological environment of the Shang Dynasty reveals a warm and humid climate with high precipitation and abundant natural resources, including lakes, rivers, and diverse plant and animal life (Song, 2011). These conditions fostered agricultural productivity, which in turn supported the development of cultural practices, including music and the creation of musical instruments. While there is scholarly debate regarding the exact climate of the period, with views ranging from contemporary parity to warmer conditions, the dominant perspective suggests a more agriculturally favorable environment than today (Lin et al., 2022).

The interplay between the ecological environment and the production of musical instruments is significant. The availability of natural resources such as metals, wood, and animal skins would have directly influenced the types of instruments created. This connection underscores the role of environmental factors in shaping Shang musical traditions and their broader cultural expressions (Wang et al., 2020).

### Cultural and Historical Foundations

The Central Plains region, particularly Henan Province, served as the political and cultural heart of the Shang Dynasty. Henan, referred to as the “cradle of Chinese civilization,” was the site of numerous capitals and a center for economic and cultural activities. Historically, more than 200 emperors and over 20 dynasties established their capitals in this region, leaving a legacy rich in cultural relics and artifacts (Li & Gao, 2021).

Adjacent provinces such as Shaanxi, Shanxi, Hebei, and Shandong also played pivotal roles in the Shang era. Shaanxi's fertile plains and diverse topography supported early agricultural societies, while Shanxi's loess plateau and historical significance as part of the state of Jin provided a context for cultural development. Hebei and Shandong, with their distinct geographical features and cultural contributions, further highlight the diversity within the Central

Plains. The interconnectedness of these regions shaped the spread and evolution of Shang culture, including its musical traditions (Hou et al., 2013).

### Musical Instruments in the Shang Dynasty

Musical instruments from the Shang Dynasty, particularly those excavated in the Central Plains, offer invaluable insights into the dynasty's social, religious, and artistic life. Instruments such as bronze bells (*zhu*), chime stones (*qing*), and drums were integral to court rituals, ancestor worship, and ceremonial events. Their design, craftsmanship, and usage reflect the Shang people's sophisticated technological and artistic capabilities and the centrality of music in their cultural and political systems (Song, 2015).

The excavation of these instruments from sites like Yinxu has provided a wealth of material for study, yet scholarly exploration of their “literacy”—encompassing their symbolic, technological, and cultural meanings—remains limited. Research in this area has primarily focused on their physical characteristics and historical contexts, with less emphasis on their role as carriers of knowledge and cultural identity (Chang et al., 2024).

### Cultural Context of Shang Dynasty Musical Instruments

The Central Plains region served as the cultural and political center of the Shang Dynasty, and its ecological and economic richness directly influenced the development of musical instruments. The political, economic, and ideological systems of the time deeply embedded musical instruments, making them more than isolated artifacts (Wang, 2014). The hierarchical social structure of the dynasty and the technological advancements of the Bronze Age shaped their design, construction, and use.

The 151 excavated musical instruments from the Central Plains, comprising various types such as *Yong*, bronze bells, *Xun*, *Qing*, and drums, illustrate the complexity and richness of Shang musical culture. These instruments were not only tools for performance but also embodied cultural symbolism. For instance, the intricate designs and inscriptions on bronze instruments highlight the aesthetic values and technical expertise of Shang society. At the same time, the use of natural materials in stone *qings* reflects a reverence for nature and the pursuit of musical harmony (Wang, 2014).

### Ritualistic and Ceremonial Significance

Music was indispensable in Shang rituals and ceremonies, serving as a medium to communicate with ancestors and deities. Musical performances during sacrificial ceremonies and royal rituals reinforced social cohesion and legitimized political authority (Zhang, 2014). Instruments like the bronze bell and *Qing* were central to these ceremonies, their sounds symbolizing the connection between the earthly and divine realms (Wenyi, 2023).

The ritualistic use of musical instruments not only emphasized their religious significance but also elevated their

status in Shang society. People regarded music as a sacred bridge to the spiritual world, using sound to convey prayers, respect, and reverence. This close association between music and religion reflected the Shang people's belief in the divine power of music and its role in maintaining cosmic harmony (Song, 1994).

### Research Theory

This study on the preservation of the literacy of musical instruments from the Shang Dynasty of the Central Plains in China applies ethnomusicology research theory. Ethnomusicology provides a multidisciplinary framework for analyzing music as an art form and a cultural phenomenon. The study examines Shang musical instruments as carriers of cultural literacy, exploring their historical context, symbolic meanings, functional roles in rituals and court life, and their contribution to social cohesion. Ethnomusicological theories also inform strategies for preserving and transmitting the knowledge systems associated with these instruments, ensuring their legacy as vital aspects of China's cultural heritage (Wang, 2022; Cottrell, 2010).

## METHODOLOGY

This study on the preservation of the literacy of musical instruments from the Shang Dynasty of the Central Plains in China employs a multidisciplinary approach, combining methods from archaeology, ethnomusicology, and cultural heritage preservation. The goal is to comprehensively analyze Shang musical instruments' cultural, ritual, and political significance and explore effective ways to ensure their preservation.

### Archaeological Analysis

The archaeological method is fundamental in documenting and analyzing the musical instruments excavated from various Shang Dynasty sites. This includes a detailed examination of excavation records, stratigraphic contexts, and material composition (Eichmann, 2018).

### Ethnomusicological Approach

The ethnomusicological approach is employed to study the cultural and ritual literacy embedded in the Shang musical instruments. By examining the historical function of these instruments within rituals, political activities, and everyday life, the study seeks to understand their roles in Shang society (Morgenstern, 2018). This includes analyzing the relationship between the instruments' construction, symbolism, and usage. The approach helps contextualize how these instruments contributed to the transmission of cultural knowledge and reinforced social hierarchies.

### Comparative Analysis

A comparative analysis is conducted to explore regional variations and cultural exchanges within the Shang Dynasty's

sphere of influence. The study identifies differences and similarities in craftsmanship, use, and cultural significance by comparing instruments from core regions (like Yinxi) and peripheral sites (such as those in Shandong and Shanxi).

### Documentary Research

Documentary research is also undertaken, reviewing historical texts, oracle bone inscriptions, and other records that mention the use of musical instruments during the Shang Dynasty. These historical sources provide context for the instruments' rituals, sacrifices, and governance roles. By correlating these textual references with archaeological findings, the study enhances our understanding of these artifacts' cultural and ritual literacy.

### Interviews and Expert Consultations

To gain further insights, interviews and consultations are conducted with experts in archaeology, ethnomusicology, and cultural heritage conservation. These experts provide perspectives on the historical significance, preservation challenges, and contemporary interpretation of Shang musical instruments. These consultations help refine the preservation strategies and add depth to the analysis of the instruments' literacy.

### Data Collection and Analysis

Data for this study are gathered through field reports, excavation records, historical documents, and expert interviews. The collected data are analyzed to reconstruct the context in which the instruments were used and to identify their literacy's social, cultural, and technological aspects. The study aims to ensure that these instruments, as vital carriers of cultural knowledge, are preserved and their literacy effectively transmitted to future generations.

## RESULTS

### Preserving the Cultural Literacy of Shang Dynasty Musical Instruments

The analysis of musical instruments excavated from the Central Plains of the Shang Dynasty reveals their multifaceted roles. It underscores the importance of their preservation and the study of their literacy. Most of these instruments were discovered in tombs and merchant sites, with a smaller number found in ritual pits, kiln caches, and other archaeological contexts. This distribution highlights their strong association with the ritual activities of the Shang people while also demonstrating their involvement in divination, feasting, and political events.

The instruments excavated at Yinxi, in particular, are highly representative and offer critical insights into Shang society. Often found alongside ritual objects, these instruments were regarded with similar importance, emphasizing their roles as tools for music-making and as objects embodying significant cultural literacy. The intricate connections

between music, religion, and power in Shang society and the deep embedment of music in the fabric of life make their preservation essential.

The Shang Dynasty demonstrated music's unique and integral functions in social life. Music was a form of artistic expression and a medium for preserving cultural knowledge and communicating societal values. As carriers of literacy, these excavated instruments provide invaluable information that goes beyond the scope of historical texts, offering a vivid picture of the cultural and social dynamics of the Shang Dynasty in the Central Plains.

### The Role of Musical Instruments in Preserving Shang Dynasty Ritual Literacy

Musical instruments are material carriers of human musical activities, serving specific social groups and reflecting the realities of a given society. In ancient China, a musical instrument was a cultural relic capable of producing music and a tool with significant ritual and symbolic functions. During the Shang Dynasty, musical instruments were indispensable in major court activities such as food offerings, divination, sacrifices, funerals, military conquests, politics, and banquets. These events often involved presenting wine to the gods and ancestors, accompanied by music, to communicate with the divine. In this context, musical instruments were vital for performing sacrificial rituals, highlighting their role in preserving the cultural literacy of Shang society.

A strict hierarchy governed ancient China, categorizing sacrifices into three main types: praying for blessings, eliminating disasters, and repaying thanks. Music was a central element in all these rituals, encompassing song, dance, and instrumental performance. Musical instruments were tools for creating sound and carriers of sacrificial meaning, with many rituals named after the instruments used or the music played. This illustrates how instruments served to preserve and transmit the literacy of ritual practices across generations.

The oracle bones of the Shang Dynasty provide extensive evidence of the integration of music into sacrificial ceremonies. They record a wealth of information about musical instruments and music-dance performances as integral components of rituals. These records demonstrate the Shang people's emphasis on the literacy of ritual practices, with music as a medium for codifying and transmitting cultural knowledge.

Studying the sacrificial role of Shang Dynasty musical instruments reveals their use for practical purposes and as vessels for preserving cultural and ritual literacy. These instruments conveyed the spiritual and social values of the Shang people, ensuring the continuity of their traditions and beliefs. Their preservation is therefore critical to understanding the deep interconnection between music, ritual and society in ancient China.

### The Political Role of Music and Musical Instruments in Shang Dynasty Governance

The Shang Dynasty demonstrated an awareness of the role of music in governance, utilizing the organization and

management of music to aid in the arrangement and implementation of political affairs. Oracle bone inscriptions document the names of 18 musical instruments, including winds, strings, percussion, and rocking instruments. Among these, heirloom and excavated instruments such as bronze drums, leather drums, stone qing, jade qing, nao (bells struck by hand), yong (large bells planted on pedestals or suspended), bo, duo, ceramic bells, and xun (ocarinas) have been identified. While strings are absent, likely due to preservation challenges, the diversity of instruments highlights their significance in political and social contexts (Figure 1).

Monarchs, middle-ranking dignitaries, and general nobility buried musical instruments in their tombs across towns, cities, and regions inhabited by royalty and the nobility, as revealed by excavations. Shang society's social hierarchy often regulated the types and configurations of musical instruments found in these tombs. For example, drums were exclusive to Shang kings and local monarchs, while teqing and sets of yong bells were associated with the royal family and high-ranking nobility. Middle-ranking nobles used group bells, while ceramic xun were more commonly associated with commoners. This stratification underscores the link between music, political authority, and societal structure.

The political literacy of Shang musical instruments is evident in their use as symbols of power and governance. One's social status directly influenced musical instruments' scale, variety, and exclusivity, mirroring the Shang Dynasty's well-established ritual and music system. Instruments served as tools for performance and preserved and transmitted Shang society's cultural and political hierarchies (Figure 2).

Preserving the material evidence of these instruments is essential for understanding their literacy—the knowledge systems, regulations, and societal values embedded within their use. By examining these artifacts, we gain insights into the complex interplay of music and politics in the Shang Dynasty, revealing how music was integral to maintaining social order and reflecting political authority. The preservation of these instruments ensures that the literacy of their political functions continues to inform our understanding of ancient governance and social stratification.



**Figure 1.** Shang dynasty drums at the henan museum  
Source: Wenran Wang



**Excavation and Preservation of Shang Dynasty Musical Instruments**

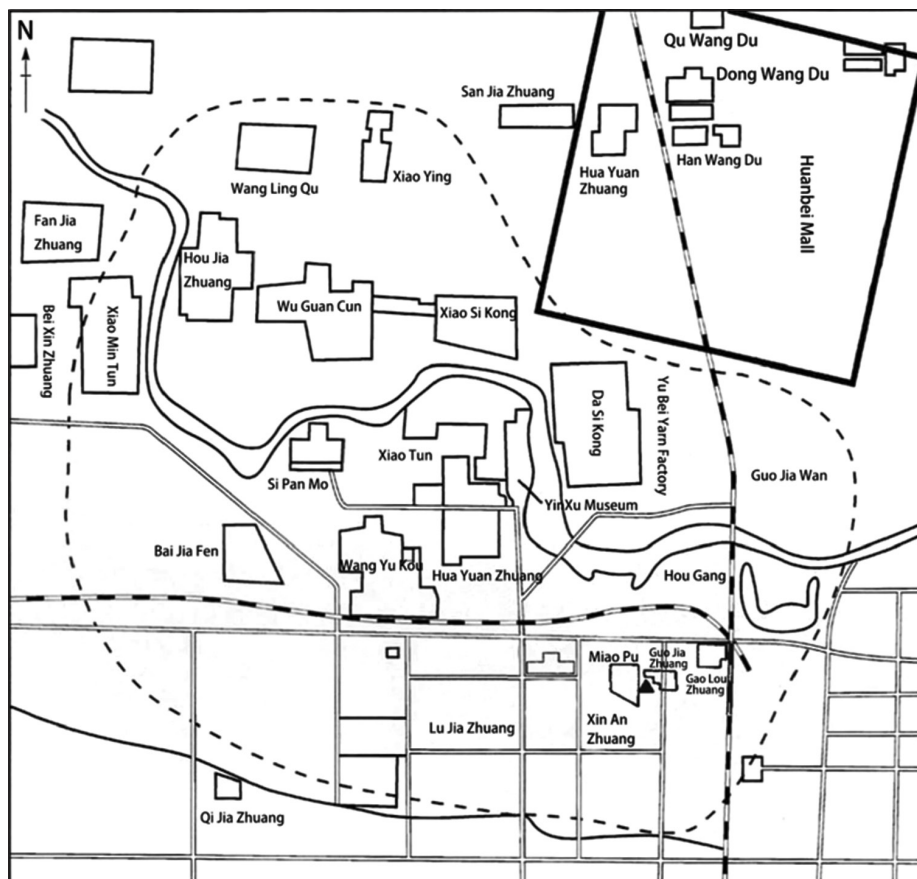
The archaeological excavation and study of musical instruments in the Central Plains of the Shang Dynasty highlight their critical role in understanding the preservation and literacy of Shang music culture. These excavations have revealed a wide geographical distribution, encompassing the core political centers, such as Yinxu in Anyang and Zhengzhou Shangcheng, and peripheral regions, including Shandong, Shanxi, Shaanxi, and Hebei. This wide distribution underscores the diversity and complexity of Shang musical culture and its role in cultural exchange (Figure 3).



**Figure 2.** Shang dynasty musical instruments performance  
Source: Wenran Wang

**Key excavation sites**

1. Liulige Site (Xinxiang, Henan): This cemetery, used from the Shang Dynasty through the Han Dynasty, yielded significant findings, including ceramic xuns and other musical artifacts. These discoveries provide evidence of Shang Dynasty burial practices and the integration of music into ritual and social structures. The preservation of these instruments allows researchers to decode the literacy of Shang pottery and its musical applications.
2. Subutun Site (Qingzhou, Shandong): Excavations uncovered things, sets of braided yongs, and bronze bells, demonstrating the importance of music in Shang ritual life. These artifacts reflect advancements in bronze casting and the ritualistic role of musical instruments, emphasizing their value in preserving and transmitting the literacy of ritual practices.
3. Qianzhaodacun Site (Tengzhou, Shandong): This site revealed nearly 100 tombs and numerous ceremonial artifacts, including special chimes and longings. These finds highlight the high craftsmanship of Shang bronze instruments and their association with major religious ceremonies. Their preservation sheds light on the literacy of Shang music in reinforcing societal hierarchies.
4. Caojiaguan Site (Shilou County, Shanxi): This site yielded unique musical artifacts, including bronze instruments with chainrings showcasing innovative designs and multi-functionality. These instruments contribute



**Figure 3.** Plan of the shang dynasty cultural site of yinxu, anyang, henan province  
Source: Wenran Wang

to our understanding of Shang musical literacy and its integration with cultural symbolism.

### **Preservation and literacy**

The excavated instruments are crucial evidence of the Shang Dynasty's advanced musical culture, reflecting the literacy embedded in their construction, symbolism, and use. The preservation of these artifacts enables a deeper understanding of their role in rituals, politics, and cultural exchanges. For instance:

- **Cultural Literacy:** Instruments like the xun, qing, and yong reveal the Shang Dynasty's ritualistic practices, aesthetic preferences, and technological capabilities.
- **Ritual Literacy:** The presence of musical instruments in tombs and ceremonial contexts highlights their role in conveying religious and societal values.
- **Technological Literacy:** The intricate designs and craftsmanship of bronze instruments demonstrate the advanced metallurgical skills of the Shang people, contributing to the dissemination of knowledge and techniques.

### **Broader significance**

The diversity of musical instruments excavated in the Central Plains and peripheral regions illustrates the hierarchical nature of the Shang ritual and music system. The similarity in craftsmanship between instruments from core and peripheral regions reflects the Central Plains' cultural influence and role in facilitating cultural exchanges.

Preserving these instruments is vital for safeguarding the literacy they represent, including their cultural, ritual, and technological significance. By analyzing their geographical distribution and contextual usage, researchers can reconstruct the Shang Dynasty's social structure and cultural practices, ensuring that the legacy of this ancient civilization continues to inform our understanding of early Chinese history.

## **DISCUSSION AND CONCLUSION**

The "Preservation of the Literacy of Musical Instruments from the Shang Dynasty of the Central Plains in China" emphasizes the significance of these artifacts as carriers of cultural, ritual, and technological knowledge. The preservation of these artifacts guarantees the transmission of the literacy inherent in their forms, functions, and contexts to future generations, thereby fostering a more profound comprehension of Shang society (Guocheng et al., 2023).

The Shang Dynasty closely tied musical instruments to social stratification, serving as symbols of power and status. The types and configurations of instruments, such as drums reserved for kings and local monarchs or ceramic xuns associated with lower-ranking individuals, reflect the hierarchical structure of Shang society. Preserving these instruments allows us to study their cultural literacy—how they reinforced societal order and legitimized authority, providing insights into the interplay between music and social dynamics

(Zhou & Chuangprakhon, 2023). In addition to their role in social hierarchy, Shang musical instruments were integral to religious ceremonies and rituals. Shang musical instruments such as qings, yongs, and bronze bells served as bridges between the human and divine during sacrifices, ancestor worship, and other sacred rites. The preservation of these artifacts is essential to understanding their ritual literacy—how their sounds and symbolism communicated sacred meanings and sustained spiritual practices. These instruments provide a window into the deeply spiritual and ritualistic aspects of Shang culture (Wu & Boonsrianun, 2023; Ye et al., 2023).

The geographical distribution of Shang musical instruments, extending from the Central Plains to peripheral regions such as Shandong and Shanxi, highlights the cultural reach of Shang traditions. While instruments from core sites like Yinxu reflect the pinnacle of Shang music culture, those from outlying areas demonstrate cultural exchange and adaptation. Preserving these instruments enables the study of their literacy in terms of regional variations and the dissemination of musical and cultural practices, offering insights into the interconnectedness of ancient societies (Shun & Boonsrianun, 2023; Chen et al., 2023). The preservation of Shang musical instruments and their literacy has broader implications for understanding ancient civilizations. These instruments embody the intricate relationship between music, technology, and society in the Shang era, offering valuable insights into how cultural and technological practices were interwoven. By integrating ethnomusicology, archaeology, and digital technologies, we can ensure these instruments remain relevant to academic research and public education (Shi & Nicolas, 2023).

In conclusion, preserving the musical instruments of the Shang Dynasty and the literacy they embody is crucial for comprehending ancient China's cultural, spiritual, and technological accomplishments. These instruments are not only artifacts but vessels of information that embody the intricacies of Shang civilization, encompassing its social systems, religious rituals, and technical advancements. Their preservation guarantees the ongoing understanding of the Shang Dynasty's sophisticated workmanship, cultural impact, and contribution to the formation of early Chinese civilization. The geographical spread of these instruments underscores the cultural exchanges and regional adaptations of Shang music traditions, while their elaborate designs reflect the technological and creative sophistication of the period. Ultimately, preserving these artifacts pays tribute to the history of the Shang Dynasty and enables its historical and cultural achievements to perpetually inspire and educate future generations.

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