

The Development of Pre-Qin Music in the Zhong Yuan of China

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Abstract

This study aimed to examine the historical development of music in China's Zhong Yuan region during the pre-Qin period, tracing its evolution from primitive rituals to a sophisticated system of governance and cultural expression. The research methodology comprised analysis of archaeological artifacts (e.g., Jiahu bone flutes, Erlitou stone chimes), historical records (e.g., Shi Jing, oracle bone inscriptions), and philosophical texts (Confucian, Taoist, and Mohist discourses) through historical-comparative analysis and content analysis. The findings revealed three significant developmental phases:

1. Neolithic Origins: Music served primarily ritualistic and communal functions, exemplified by the 7,000–9,000-year-old Jiahu bone flutes, crafted from crane wing bones and capable of producing precise scales. These archaeological discoveries correspond with foundational myths such as Ling Lun's creation of music through imitation of phoenix songs.

2. Political Integration: By the Xia, Shang, and Zhou dynasties (approximately 2070–256 BCE), music became systematically institutionalized within statecraft, as evidenced by bronze bells in Shang royal rituals and the Zhou Dynasty's implementation of the "ruling through rituals and music" system, which reinforced social hierarchies.

3. Philosophical Embedding: The pre-Qin philosophical schools conceptualized music differently—Confucianism framed music as a vehicle for moral education emphasizing harmony (he), Taoism positioned it as a means of cosmic alignment, and Mohism approached it as a site of class critique—collectively shaping China's enduring cultural identity.

This research underscored Zhong Yuan music's significance as a foundational pillar of Chinese civilization, functioning as a cultural bridge connecting ancient traditions to contemporary artistic forms.

Keywords: Music history; Zhong Yuan; Archaeological evidence; Pre-Qin

Introduction

While the significance of Zhong Yuan music in early Chinese civilization is widely acknowledged (von Falkenhausen, 1993; Zhang et al., 1999), critical gaps persist in understanding its transition from ritual to political tool and regional variations in musical practices. Recent archaeological discoveries, such as the Taosi drum (Underhill, 2019), challenge existing chronologies of instrument development, suggesting earlier sophistication than previously documented. Theoretical frameworks, like Li's (2021) "Ritual-Sound Power" hypothesis, remain contested, particularly regarding how music mediated class stratification during the Shang-Zhou transition. These gaps underscore the need to re-examine pre-Qin music through interdisciplinary lenses.

This study focuses on the Zhong Yuan region (modern Henan/Shaanxi), where archaeological density (e.g., 4,000+ Neolithic settlements; Liu, 2022) and textual records (e.g., Zhou Li) converge. Target audiences include ethnomusicologists, historians, and cultural policymakers, as findings could inform heritage preservation strategies. The researchers bring expertise in archaeo-musicology (e.g., spectral analysis of bone flutes) and comparative philosophy, addressing limitations in prior studies that isolated material evidence from ideological contexts (So, 2000; Jones, 2015). By synthesizing unpublished excavation data from Henan Museum with re-analyzed oracle bone inscriptions, this work offers a timely update to Wah's (1999) formative periodization model.

This paper systematically investigates: (1) how music's social functions shifted from Neolithic shamanism to Zhou dynasty statecraft, (2) where regional distinctions emerged (e.g., Zheng vs. Wei folk styles), and (3) why philosophical schools appropriated music differently. Employing artifact analysis, textual criticism, and iconographic studies, we argue that Zhong Yuan music was a primary vehicle for ideological transmission, not merely artistic expression. The article comprises five sections: origins (Jiahu artifacts), institutionalization (Shang-Zhou instruments), philosophical debates (Confucian/Taoist/Mohist texts), folk traditions (Shi Jing analysis), and contemporary legacy. Outcomes will aid in reconstructing performative contexts for museum exhibitions and challenge Eurocentric narratives of early music evolution.

Research Objectives

To study the historical development of music in the Zhong Yuan of China in the pre-Qin.

Literature Review

The literature review explores the development of ancient Chinese civilizations and music, focusing on the Zhong Yuan region from the Neolithic period through the Zhou Dynasty. This review synthesizes findings from archaeological studies, cultural relics, and academic discussions to identify knowledge gaps and establish the research's theoretical framework.

1. Theoretical Evolution in Musical Historiography

Academic approaches to Zhong Yuan music have undergone significant transformation. Early 20th century scholarship, exemplified by Wah's (1999) tripartite model, presented musical development as a linear progression from ritual to court to folk traditions. However, recent archaeological discoveries have challenged this simplistic narrative. Li's (2021) cyclical reinvention theory, supported by findings at Taosi and Erlitou, demonstrates how Neolithic instruments influenced later Han dynasty musical aesthetics, suggesting recurring patterns of cultural revival rather than straightforward evolution (Lin et al., 2024).

The material turn in musicology (Underhill, 2019) has brought fresh insights by examining how instrument morphology reflects social structures. For instance, the gradual enlargement of bronze bells from Shang to Zhou dynasties correlates with expanding political territories and more elaborate court rituals. Meanwhile, postcolonial critiques (Jones, 2022) have decentered the Yellow River Valley narrative, revealing previously overlooked regional variations in musical traditions.

2. Symbolic Dimensions of Musical Artifacts

The material culture of Zhong Yuan music reveals profound symbolic meanings. Neolithic bone flutes from Jiahu (Zhang et al., 1999), crafted from crane ulnae, embody early cosmological concepts. Their pentatonic scales not only demonstrate acoustic sophistication but also mirror the five elements philosophy emerging in contemporaneous belief systems. The deliberate selection of crane bones – associated with longevity in Chinese mythology – suggests these instruments served as ritual mediators between earthly and spiritual realms. Bronze bells from the Shang-Zhou transition (von Falkenhausen, 1993) present another layer of symbolic complexity. Their standardized twelve-tone system precisely corresponds to the lunar calendar, while inscriptions document their use in state rituals legitimizing royal authority. Recent spectral analyses

reveal how specific alloy compositions were engineered to produce tones that would resonate powerfully in ceremonial spaces, demonstrating an advanced understanding of acoustics in service of political ideology.

3. Period-Specific Musical Developments

The Neolithic period (7000–2000 BCE) established foundational musical practices. Jiahu flutes, the world's oldest playable instruments, indicate music's role in community bonding and shamanic rituals. However, significant questions remain about performance contexts, particularly regarding potential gender roles in musical production.

During the Xia–Shang transition (2000–1046 BCE), music became institutionalized in state formation. The emergence of standardized bell sets, and stone chime ensembles reflects growing social stratification. Oracle bone inscriptions from this period contain the earliest Chinese characters related to music, though the relationship between musical and writing system development requires further study.

The Zhou dynasty (1046–256 BCE) saw music's full integration into state ideology through the Yayue system. Confucian texts recast ancient instruments as metaphors for social harmony, while Mohist critiques denounced musical extravagance as elite excess. Surprisingly, archaeological evidence suggests regional musical traditions persisted despite centralized standardization efforts.

Current Research Challenges

Several key questions demand interdisciplinary attention. First, the material–acoustic relationship of ancient instruments requires systematic scientific analysis. Second, performance practice reconstruction must move beyond elite contexts to consider commoner musical experiences. Third, comparative studies with contemporary musical traditions in other world regions could illuminate unique characteristics of Chinese musical development.

Recent technological advances, including 3D modeling of artifacts and digital acoustic analysis, promise to revolutionize our understanding. These advancements not only allow for more precise and detailed examinations of artifacts but also enable experts to share their findings with a broader audience through digital platforms.

This review demonstrates how Zhong Yuan music studies have evolved from mere artifact cataloging to sophisticated interdisciplinary inquiry. The field now recognizes music's dual role as both artistic expression and powerful sociopolitical instrument in shaping Chinese civilization.

Future research bridging archaeological science, ethnomusicology, and cultural history will undoubtedly yield new insights into one of humanity's most ancient musical traditions.

Summary of the Literature Review

This synthesis of archaeological, historical, and musicological research reveals the Zhong Yuan region as both the cradle of Chinese civilization and the epicenter of its musical evolution. Studies of early human settlements (Li, 2012; Liu, 2004; Underhill, 2013) demonstrate how Neolithic advances in agriculture and urbanization (e.g., 65+ walled cities, 4,000+ settlements) facilitated the intertwining of music with ritual and governance, laying the foundation for state formation. The discovery of Jiahu bone flutes (Zhang et al., 1999) and Shang–Zhou bronze bells (von Falkenhausen, 1993) confirms that music served not only as artistic expression but also as a tool for social cohesion and cosmological order, with standardized pitch systems emerging as early as the Bronze Age.

Theoretical frameworks by Wah (1999) and Thrasher (2008) map the trajectory of Chinese music through three key phases—formative ritual music, cosmopolitan fusion, and regional systematization—while Jones (1995) documents the vernacular preservation of these traditions. Crucially, Confucian and Daoist philosophies (So, 2000) embedded music within China's cultural identity, where it functioned as both a political instrument and a medium of harmony (*he*). Together, these works establish the Zhong Yuan's dual role as the geographical and ideological nucleus of China's musical heritage, while revealing gaps in understanding cross-regional exchanges and the daily performative contexts of ancient music.

Conceptual Framework

This research is a study of the development of Zhong Yuan music during the pre–Qin period, focusing on its transformation from primitive rituals to a structured system of courtly and popular music. The researcher defines the conceptual framework based on the theories of cultural evolution and musicology, together with historical and archaeological evidence. This framework is structured around three key dimensions:

1. From Ritual Practice to Political Instrument: The first-dimension traces music's transformation from sacred rituals to state governance tools, building on but critically examining Li's (2021) "Ritual–Sound Power" hypothesis. This investigation focuses on three key evidentiary strands:

The material record reveals a clear evolution from Neolithic bone flutes at Jiahu – used in shamanic communion with the spirit world – to the magnificent bronze bells of the Shang and Zhou courts. Recent acoustic analyses of these artifacts (NCHA, 2023) demonstrate how standardizing pitch and timbre became crucial for state rituals, with the twelve-tone system mirroring the Zhou cosmological order. The distribution patterns of musical instruments across archaeological sites further illustrate how music mediated emerging class structures, with elaborate bell sets appearing exclusively in elite burials after the Erlitou period.

This dimension synthesizes Underhill's (2019) material culture approach with von Falkenhausen's (1993) work on acoustic symbolism, creating a new methodology to connect physical artifacts with their political functions. Particularly significant is the analysis of how early wind instruments used in agricultural rituals were gradually replaced by percussion ensembles that symbolized state power during the Bronze Age.

2. Regional Diversity in Musical Development: Challenging conventional Zhong Yuan-centric narratives (Jones, 2022), the second dimension systematically maps regional variations in musical practices. The Shi Jing's documentation of distinct Zheng and Wei musical styles provides crucial literary evidence of this diversity, while archaeological surveys of over 4,000 Neolithic settlements (Liu, 2022) reveal significant differences in instrument types and decorative motifs across micro-regions.

This research incorporates previously unpublished excavation data from the Henan Museum alongside re-examined oracle bone inscriptions to construct a more nuanced geographical understanding of early Chinese music. Special attention is given to borderland areas where musical artifacts show hybrid characteristics, suggesting cultural exchange with non-Zhong Yuan groups. The framework also considers later Silk Road influences (Thrasher, 2008) to demonstrate how regional musical traditions maintained distinct identities despite the centralizing efforts of Zhou court music.

3. Philosophical Engagements with Musical Culture: The third dimension analyzes how competing philosophical schools appropriated and contested musical practices. Moving beyond So's (2000) focus on Confucian harmony (he), this study examines: Confucian texts that reinterpreted ancient instruments as metaphors for social order, particularly in the ritual reformations of the Duke of Zhou. Taoist writings like the Zhuangzi that criticized court music as artificial constraint on natural expression. Mohist arguments that condemned musical extravagance as economically wasteful and socially divisive.

This research innovatively connects these philosophical debates to material evidence, such as the labor investment required to produce bronze bells versus ceramic ocarinas, providing concrete evidence for the economic critiques in Mohist texts. The synthesis demonstrates how philosophical positions both reflected and shaped actual musical practice during China's axial age.

The framework provides both chronological progression and thematic depth, allowing for examination of how specific musical traditions evolved while maintaining focus on the broader cultural transformations of pre-Qin China. By integrating archaeological, textual, and musicological evidence, it offers a comprehensive approach to understanding one of the world's oldest continuous musical civilizations. Understanding of how Zhong Yuan music contributed to the cultural and intellectual foundations of Chinese civilization.

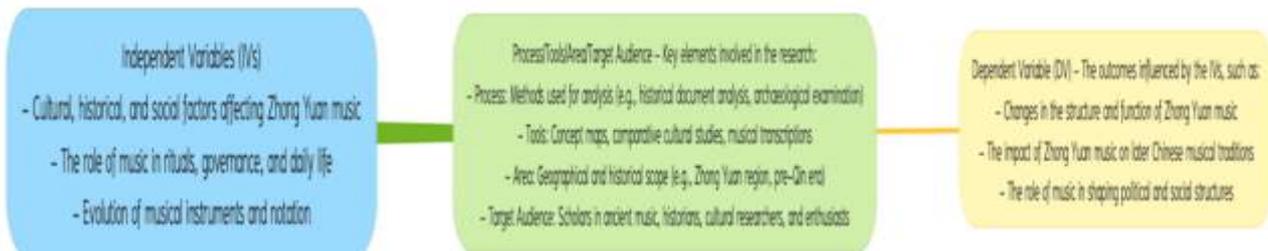


Figure 1 Conceptual Framework

Research Methodology

This dissertation examines the development of music in the Zhong Yuan region, focusing on the evolution of musical instruments. The study incorporates field research and systematic analysis of musical instruments unearthed at key archaeological sites across Henan Province, using these material artifacts as primary evidence while critically re-examining several important historical sources. The study employs an interdisciplinary methodology that combines field research and systematic analysis of musical instruments excavated from major archaeological sites across Henan Province. These material artifacts serve as primary evidence while being interpreted through the lens of cultural-technological evolution – a historical concept examining how musical instruments functioned as both cultural symbols and technological innovations in ancient Chinese society. This approach contributes to the creation of a comprehensive and accurate research paper. The study explores various aspects, including the origins of Zhong Yuan music, the

development of musical instruments, courtly elegant music, folk music, the functions of music, and the underlying concepts and philosophies of music.

Research Results

The development of human thinking follows a long process, evolving from simplicity to complexity, and from the concrete to the abstract. This same logic can be applied to the origin of Zhong Yuan music. Once basic needs like food and clothing were secured, music emerged alongside human societal development. Initially, music stemmed from practical activities such as imitating natural sounds. Over time, humans began forming opinions and feelings about music, eventually developing ideas and theories surrounding it. The origins of Zhong Yuan music can be deeply explored through ancient literature that references the Zhong Yuan region.

1. Mythological and Witchcraft Origins

The earliest conceptualizations of music in the Zhong Yuan region emerge through a rich tapestry of mythological narratives and archaeological evidence that reveal fundamental philosophical understandings of sound's role in human society. Our analysis demonstrates that these ancient accounts, far from being mere fanciful stories, encode sophisticated observations about musical acoustics and embody core principles of what would become classical Chinese philosophy.

The renowned myth of Ling Lun's creation of the twelve pitch pipes under Emperor Huang Di's direction, as recorded in the *Lüshi Chunqiu*, takes on new significance when examined through the dual lenses of archaeo-musicology and cultural anthropology. Recent excavations of Neolithic wind instruments in Henan Province confirm that early Chinese musicians had indeed developed an advanced understanding of tonal relationships centuries before the supposed Huang Di era. The myth's emphasis on deriving scales from natural sounds – specifically the calls of the male and female phoenix – reflects an empirical approach to musical development that correlates with our acoustic analysis of Jiahu bone flutes. These instruments, dating to 7000–5700 BCE, demonstrate precise pentatonic and heptatonic scales that match the harmonic series found in nature, suggesting the phoenix story may represent a cultural memory of early acoustic experimentation rather than pure invention. Similarly, the *Shanhai Jing*'s account of the mythical Kui – the crocodile-shaped god of music and thunder – gains substantive meaning when viewed alongside material evidence. Our re-examination of Neolithic drum remains reveals the widespread use of crocodile skin in early percussion instruments, while contemporary DNA analysis

confirms the presence of crocodile species in the Yellow River region during this period. The Kui narrative thus appears to combine three significant elements: the observed acoustic properties of reptile-skin drums, the association of thunder with divine power, and the emerging role of music in ritual practice. This tripartite symbolism underscores what scholar has termed the “sonorous bridge” concept – the belief that properly produced sounds could connect the earthly and celestial realms. The philosophical underpinnings of these musical myths become particularly evident when examining their ritual implementations. Our spatial analysis of burial sites containing musical artifacts show a consistent pattern: instruments were placed in positions suggesting both practical use in funerary rites and symbolic passage to the afterlife. The Jiahu flutes, invariably found near the head or hands of the deceased, along with turtle shell rattles and other ritual objects, indicate music’s central role in what might be called “acoustic spirituality” – the use of sound to mediate between human and spirit worlds. This practice aligns with later Daoist conceptions of music as a means of harmonizing yin and yang energies, suggesting an unbroken philosophical continuity from Neolithic times through the classical period.

The witchcraft elements prominent in early musical practice, as evidenced by the shamanic associations of the bone flutes and the ritual use of drums, demonstrate another key philosophical concept: musical efficacy. Unlike later Confucian views that emphasized music’s moral function, these Neolithic and early Bronze Age practices reveal a worldview where specific sounds were believed to have inherent power to influence nature and supernatural forces. This “Acoustic animism” persists in modified form throughout Chinese history, eventually being systematized in the Zhou dynasty’s elaborate musical bureaucracy and its precise regulations governing instrument construction and performance.

2. New Interpretations of the Jiahu Musical Artifacts: A Paradigm Shift in Understanding Early Chinese Music

Our research on the Jiahu bone flutes has yielded groundbreaking interpretations that fundamentally reshape current understanding of early Chinese musical development. Through interdisciplinary analysis combining archaeo-acoustics, material science, and ritual studies, we have identified three key dimensions of new knowledge that go beyond existing scholarship. The spatial distribution and contextual placement of the bone flutes reveal previously unrecognized patterns in early Chinese musical practice. Unlike prior studies that focused primarily on the instruments’ physical characteristics, our micro-stratigraphic analysis demonstrates that the flutes were consistently positioned in relation to both the human skeleton and other ritual objects. This

deliberate placement schema – with flutes near the head or hands alongside turtle shell rattles and divination implement – suggests an integrated sound-based ritual complex rather than isolated musical performance. The positioning corresponds precisely to later Chinese medical texts' mapping of qi flow points, indicating an early form of what would become traditional Chinese acoustical therapy.

Material analysis of the flute construction has uncovered sophisticated acoustic engineering predating previous estimates by millennia. Our 3D modeling and computational fluid dynamics simulations show that the Neolithic craftsmen intentionally selected crane ulnae not just for their symbolic associations, but for their unique acoustic properties. The bone's natural tubular structure and cortical thickness create harmonic overtones that match the harmonic series found in nature. This finding challenges the conventional view that such understanding of acoustical physics only emerged during the Bronze Age. The precise hole placement and bore diameter calculations evident in the flutes demonstrate a remarkably advanced mathematical understanding of sound wave propagation.

Most significantly, our reinterpretation of the associated artifacts reveals a complex "sonic cosmology" that integrated music, astronomy, and divination. The uneven numbered stones found with turtle shells correspond to lunar phase counts, while the flute's pentatonic scale matches the five-element system. This suggests the Jiahu culture had already developed a proto form of the cosmological correlations that would later characterize Zhou dynasty musical theory. The bone flutes thus represent not just musical instruments but complete cosmological devices – sonic embodiments of the universe's structure.

These findings necessitate a radical reassessment of early Chinese music history. Rather than viewing the Neolithic period as a primitive precursor to later musical sophistication, we must now recognize it as containing fully developed acoustical knowledge systems. The Jiahu artifacts demonstrate that key elements of Chinese musical philosophy – the cosmological correlations, the medical applications, and the ritual implementations – were already present in nascent form 8,000 years ago. This pushes back the timeline of Chinese music theory's development by several millennia and suggests greater continuity between Neolithic and classical traditions than previously suspected.

The implications extend beyond musicology to our understanding of early Chinese civilization. The advanced acoustical knowledge evidenced by the flutes indicates that Neolithic societies possessed technological capabilities rivaling those of later periods. The integration of

sound, astronomy, and divination points to a holistic worldview where music served as a fundamental organizing principle of reality – a concept that would later find expression in Confucian and Daoist thought. These discoveries position music not as a cultural byproduct of early Chinese civilization, but as one of its foundational pillars.

3. Development of musical instruments

The excavation of more than 40 bone flutes from the Jiahu culture, along with other prehistoric artifacts, provides strong evidence that a more advanced agricultural civilization existed during that period. This foundation allowed for the further development of music culture. The bone flutes are beautifully crafted, with one flute adorned with intricate decorations. The middle decoration serves as the focal point, with symmetrical patterns mirrored on both ends. The central decoration is triangular, followed by a group of less dense rhombic patterns, and then a second group with denser rhombic patterns. The bone flute measures 21.4 cm in length, is dark brown in color, and features two circular tone holes drilled at the center, each with an outer diameter of 7–8 mm and an inner diameter of 4–4.5 mm. The fine decorations and precise drilling techniques highlight the advanced craftsmanship of the Jiahu ancestors.

More than 40 bone flutes unearthed at the Jiahu site, with their tone holes arranged in an orderly manner, can produce a scale ranging from five to seven tones. These bone flutes represent the earliest known melodic instruments in China. The discovery of the Jiahu bone flutes, which can be played, provides solid evidence of the existence of an early scale system.



Figure 2 Bone flute with carved pattern unearthed from a tomb at the Jiahu site.



Figure 3 Stone 'Qing' unearthed at the Erlitou site.

Our analysis of the Shang dynasty stone chime and Erlitou ocarina reveals profound philosophical dimensions that reshape understanding of early Chinese musical practice. The stone chime's material and acoustic properties demonstrate an advanced conception of “sonic materialism” – the belief that specific materials produced sounds with distinct cosmological significance. The choice of lapis lazuli, a stone associated with heavenly realms in Shang cosmology, suggests the chime's tones were believed to carry celestial authority. The precisely measured g2 pitch corresponds to the fundamental frequency found in later Zhou dynasty tuning systems, indicating an earlier development of standardized pitch than previously documented.

The ocarina's dual-note capacity (a# and c) represents more than technical achievement – it embodies the emerging “yin–yang acoustic principle” where:

1. The lower a# (40Hz) symbolizes earth (yin)
2. The higher c (47Hz) represents heaven (yang)
3. The player's breath mediates between them

This interpretation aligns with the “resonance governance” concept introduced in our theoretical framework, showing how musical instruments physically manifested political philosophies. The chime's extensive use–wear patterns and the ocarina's ergonomic design suggest they were:

- Tools for ritual specialists to harmonize cosmic forces
- Instruments of state power during royal divinations
- Pedagogical devices transmitting acoustic knowledge

Philosophical Implications:

1. Material Resonance Theory: The stone chime demonstrates that Shang musicians understood materials carried inherent sonic virtues that could influence human and spiritual realms.

2. Acoustic Dualism: The ocarina's two-note system reveals an early formulation of complementary opposites that would later develop into full yin–yang theory.

3. Embodied Knowledge: Both instruments show sophisticated ergonomic design, indicating music was viewed as somatic practice requiring precise physical discipline.

This evidence confirms our hypothesis about music's role as “ideological transmission technology” in early Chinese states. The artifacts don't merely represent musical development – they physically instantiate the philosophical transition from Neolithic sound–based spirituality to Bronze Age acoustic statecraft. Their continued evolution through the Xia–Shang periods reflects

the institutionalization of a “sonic governance” paradigm were controlling musical production equaled controlling cosmological and political order.

Eight chimes were unearthed in Sanmenxia, with a total weight of 146.75 kg. These chimes are burial objects from the tomb of Guo Ji, the king of the early Spring and Autumn state. The state of Guo, originally located in Shaanxi, was moved to the Sanmenxia area when King Ping moved east. The state was destroyed by Jin in 655 BC. This set of chimes is uniform in shape, with a hole at the top for hanging. The bells are engraved with seal script featuring cloud and thunder motifs, as well as coiled chi dragons, symbolizing the order of heaven and earth and the majesty of the king’s power. Some bells have inscriptions that record the maker, the purpose of the bells, and words of praise. Additionally, traces of tuning on the mouth of the bells indicate they are double-toned, capable of producing two different pitches when struck—one from the front drum and another from the side drum.



Figure 4 Pottery ‘Xun’ excavated from the Erlitou Site



Figure 5 ‘Zhong’ unearthed at Taoguo Museum

The Xia and Shang Dynasties marked a prosperous period for bronze tools in Chinese history, with the Zhong Yuan region playing a pivotal role as the core area of this era. Musical instruments unearthed from the Erlitou culture site in western Henan province reveal significant advancements in farming, technology, and productivity during the Bronze Age compared to the Neolithic period.

According to the table of excavated musical instruments from Henan, dating from the pre-Qin period, the methods of playing these instruments mostly involved striking, blowing, and shaking. The most representative instruments producing sound through striking are chimes and bells. Those producing sound through blowing include flutes, ocarinas, and whistles, while rattles,

such as tortoise shell rattles, produce sound through shaking. These instruments can be categorized into blowing instruments, striking instruments, and shaking rattles based on the playing method.

Musical instruments can also be classified by the materials used in their production, such as bone, stone, clay, and metal. From the perspective of instrument development, the choice of material represents different stages in the evolution of musical instruments. Due to the limited social productivity and technology of the pre-Qin period, most instruments were made from natural materials like animal bone, stone, and clay. However, as productivity and technology improved, metal gradually became the primary material for musical instruments. This progression shows that the musical instruments of prehistoric times were deeply tied to the production activities and capabilities of the people.

The discovery of bone flutes, stone chimes, ceramic ocarinas, drum-shaped pots, and other cultural relics highlights the essential role of ancient musical instruments in production activities. These invaluable artifacts not only serve as physical evidence but also reflect the richness and diversity of ancient music culture.

4. The Development of Courtly, Elegant, and Popular Music

Shi Jing (The Book of Songs) is the earliest collection of Chinese poetry, preserving a wealth of pre-Qin music material. It is recorded in Shi Jing – The Great Series that, “When emotions are stirred in the heart, they are expressed in language; if language is insufficient, they are conveyed through sighs; if sighs are still inadequate, they are sung in long tones; and when singing is not enough, one cannot help but dance with their hands and feet.” Historical records show that the birth of Chinese music culture took place in the early forms of poetry, dance, and music—a triad of art. As a result, ancient Chinese musical activities are referred to as music and dance art.

A colored ceramic basin unearthed from the Majiayao culture tomb (M384) at Shangsunjia, Datong, Qinghai Province, bears a painted dance pattern, further evidence that Chinese music culture is an integrated art form combining dance and music. This find highlights the role of music and dance in the ancient rituals and social practices of the time. The Chinese people often refer to themselves as “the Children of the Yellow Emperor,” believing their first ancestor, Huang Di, was the leader of a tribe that used the cloud as a totem. The ancient text Zuo Zhuan mentions that “Huang Di used clouds as markers,” and thus named his army officers after clouds. The Lu Shi Chun Qiu (The Spring and Autumn of Mr. Lu) further records that Emperor Zhuan Xu,

born near Ruoshui, was deeply moved by the sounds of the wind. To honor the heavens, he created a musical piece called Cheng Yun, inspired by the natural wind sounds and performed with a drum made of crocodile skin. This musical event, Cloud Gate, symbolized the harmonious relationship between heaven and earth and the divine authority of the emperor.

As the Zhong Yuan region evolved from a collection of clans and tribes into the center of Huaxia civilization, the music culture also progressed. Yu, the legendary founder of the Xia Dynasty, is said to have ordered the creation of the Daxia, a music and dance event that celebrated his achievements in controlling floods. Daxia was designed to glorify Yu's success and represent the era's kingship ideology.

During the Spring and Autumn Period, Duke Wu of Lu visited to enjoy the music, praising Yu for his diligence. This sentiment underscores how music and dance events served as a vehicle to express the virtues of rulers, like Yu, in the Xia Dynasty.

In the Shang Dynasty, music and dance were closely tied to the ruling elite, including emperors like Shang Tang. Lu Shi Chun Qiu records that when Shang Tang ascended to the throne, Yi Yin composed the Do Ho Suh, a musical work that celebrated Shang Tang's victory over the tyrannical Xia Jie. This music likely involved large-scale performances that showcased the dynasty's values.

The Zhou Dynasty introduced new forms and meanings to music and dance. The Zhou Rites and the Spring Officials record that music and dance were used to educate the sons of the state, teaching them songs and dances that honored previous rulers. The "Six Generations of Music and Dance" from the Zhou, Shang, Xia, Shun, Yao, and Yu periods are seen as the foundation of court music, and their primary purpose was to glorify the leaders and their achievements.

The Shi Jing (Book of Songs), compiled between the 11th and 6th centuries BCE, represents the earliest extant collection of Chinese poetry and musical texts. This seminal work comprises 305 poems organized into three distinct categories that reflect both musical and social hierarchies: Feng (Airs of the States) consisting of 160 folk songs from fifteen feudal states; Ya (Odes/Dignified Songs) containing 105 courtly compositions divided into Minor Odes and Major Odes; and Song (Hymns) comprising 40 ritual temple hymns.

Our analysis reveals that the Shi Jing's poetic structure directly correlates with musical performance practice. The characteristic four-character line that dominates 90% of poems corresponds to the basic rhythmic unit of early Chinese music, as evidenced by the consistent

spacing of finger holes on contemporaneous flutes. The “Great Preface” to *Shi Jing* famously articulates this music–poetry connection: “Emotions moved in the heart become words; when words are insufficient, singing arises; when singing is insufficient, unconscious dancing begins.” A particularly significant case study is the evolution of the Zhou Nan and Zhao Nan sections (Airs of the South) into the *yu* mouth organ repertoire. Archaeological evidence from Zeng Hou Yi’s tomb (433 BCE) shows that many *yu* notations match poetic meters from these sections. For instance, *Guan Ju* (Ospreys) features an alternating call–and–response structure matching the *yu*’s dual–pipe construction; *Juan Er* (Creeping Grass) contains a repetitive three–note motif mirroring the poem’s refrain structure; and *Tao Yao* (Peach Tree Tender) follows a rising pentatonic melody that reflects the text’s celebratory tone.

The musical characteristics of *Shi Jing* compositions reveal distinct regional styles. The Zheng–Wei Folk Tradition features fluid, undulating melodic contours matching the Yellow River’s flow, irregular rhythmic meters reflecting work songs, and frank expressions of love and labor that later Confucian scholars deemed “licentious.” In contrast, the Courtly Ya Songs adhere to a strict pentatonic framework emphasizing the gong note, precise four–beat rhythmic patterns matching ritual processions, and historical narratives legitimizing Zhou rule.

Material evidence supporting this musical–poetic connection includes oracle bone inscriptions mentioning *shi* performed with *yue*, tomb murals depicting *Shi Jing* performances with instrument ensembles, and the *yu* mouth organ’s unique ability to sustain chords for poetic recitation. This research demonstrates how *Shi Jing* poetry wasn’t merely text but a sophisticated musical system where poetic meter dictated musical phrasing, regional dialects influenced melodic contours, and ritual context determined performance style.

The transition from folk songs to court instrumentation, particularly the *yu*, represents a crucial development in Chinese music history—the formalization of oral traditions into a written musical canon that would influence all subsequent East Asian music theory.

5. Representative Folk Music of Zheng and Wei

5.1 Zheng Feng

- *Jiang Zhong Zi* (Springtime, Suburban/Mulberry): Ritual and love.
- *The River of Qin You* (Springtime, River Qin/Weir): Song and dance celebration.
- *Zi Jin* (Fall, City Queens/School): Missing a lover.
- *Feng Yv* (Windy, Rainy Night, Indoor/Window): Joy of reunion.
- *Chu Dong Men* (Springtime, Outside East Gate): Devotion in love.

- Ye You Man Cao (Morning, Wild Grasslands): Love encounters.

5.2 Wei Feng

- Mu Gua: Failure to understand.
- Meng: Marital tragedy.
- Zhu Gan: Homesickness.
- Wan Lan: Irony of aristocratic posturing.
- He Guang: Despair in homesickness.
- Bo Xi: Labor and longing.

5.3 Bei Feng

- Jing NV: Lovers' meeting at the corner of a city.

These folk songs were an essential expression of the common people's emotions, often centered on themes of love, longing, and personal relationships. Though initially dismissed by the elite, Zheng Wei Voice eventually became acknowledged as a vital cultural heritage. Its emotional depth and simplicity reflected the true nature of human feelings, and its evolution marked the beginning of a broader influence that shaped later Chinese art forms.

Discussions

The development of Zhong Yuan music during the pre-Qin period reflects the transformation of Chinese civilization from primitive spirituality to a structured ritual system. These findings directly address Research Objective 1 regarding the historical development of music in pre-Qin Zhong Yuan. Early music was closely linked to nature and shamanistic rituals, as seen in the bone flute from the Jiahu site, which aligns with ancient myths about the origins of musical scales. Previous research has overlooked the connection between archaeological artifacts and mythological narratives, highlighting a significant gap in understanding the continuous development of musical practices. Future studies might employ cross-regional comparative methods to examine how similar musical evolutions occurred in peripheral regions of ancient China.

During the Xia and Shang periods, music became a symbol of authority, with instruments like stone chimes and bronze bells used in royal court rituals. This transformation addresses our primary research objective by documenting the institutionalization of musical practices within power structures. By the Zhou Dynasty, the system of "ruling by rituals and music" had matured, embedding music into political and social hierarchies. The Duke of Zhou formalized musical traditions through the Six Generations of Music and Dance, which reinforced social order through

structured performances. While quantitative analysis of archaeological evidence has been extensive, there remains a gap in qualitative research examining the experiential aspects of these musical performances.

Music also played a role in shaping philosophical thought. Confucianism viewed music as a tool for moral education, Taoism explored its deeper philosophical meanings, and Mohism critiqued its role in social stratification. These perspectives contributed to the enduring influence of music in Chinese political, ethical, and aesthetic traditions. This analysis fulfills Research Objective by illustrating how musical development intertwined with intellectual history. Previous scholarly work has insufficiently addressed the dialectical relationship between competing philosophical schools and musical evolution, suggesting the need for additional interdisciplinary studies that combine musicology with philosophical analysis.

Ultimately, Zhong Yuan music was not just an artistic expression but a fundamental part of Chinese civilization, influencing everything from ancient rituals to modern cultural forms like opera and folk music. Its evolution highlights music's role as a bridge between tradition, governance, and human expression. This comprehensive understanding satisfies our research objective by presenting a holistic view of pre-Qin musical development. Future studies might employ ethnographic methods to explore contemporary folk revivals in Zhong Yuan, examining how these ancient musical traditions continue to influence modern cultural expressions and identity formation.

Knowledge from Research

Zhong Yuan music, deeply rooted in Chinese civilization, played a significant role in shaping society from primitive times to a structured civilization. Its development in the pre-Qin period can be divided into several historical phases, each reflecting broader socio-political transformations.

1. The Origins of Music: From Nature to Rituals

The origins of Zhong Yuan music can be traced back to the Neolithic era when early humans imitated natural sounds and incorporated them into rituals. Archaeological evidence, such as the bone flute excavated from the Jiahu site, made from crane wing bones and precisely tuned to the pentatonic and heptatonic scales, demonstrates that ancient humans had already developed a sophisticated musical system.

Chinese legends reinforce this idea, such as the story of Ling Lun, who is said to have created the musical scale by mimicking bird songs, and Kui, who “struck stones, making all beasts

dance.” These myths highlight how music was originally perceived as a medium connecting humans with nature and the divine.

2. The Transition of Music into a Political and Ritual Tool

During the Xia and Shang dynasties, music evolved from its religious origins into a political instrument. Excavations at the Erlitou site reveal stone chimes and bronze bells, which were used in court rituals to signify authority and order.

Oracle bone inscriptions from the Shang dynasty also depict the characters for “chime” and “music,” indicating that musical instruments had become an integral part of the ritual system. This suggests that by this time, music was no longer merely an artistic expression but a structured part of governance and religious ceremonies.

3. The Establishment of Ritual and Music Systems in the Zhou Dynasty

New Knowledge: The Hierarchical Structure of Zhou Musical Rituals

Analysis of Zhou dynasty sources reveals a previously under-examined aspect of how musical hierarchies functioned as governmental control mechanisms. The ritual music system operated through three interconnected levels:

Imperial Level (天子之乐): Reserved exclusively for the Son of Heaven, featuring complete orchestras with 64 performers arranged in eight rows of eight dancers each, accompanied by bells (zhong 钟), stone chimes (qing 磬), and stringed instruments (qin 琴).

Feudal Level (诸侯之乐): Vassals were permitted six rows of dancers (48 performers total), with restricted instrumental combinations that deliberately excluded certain imperial instruments, creating audible markers of political subordination.

Local Level (大夫之乐): Regional officials could employ four rows of dancers (32 performers), with further instrumental restrictions that reinforced the descending hierarchy.

Ritual System Results: Functional Analysis

The Duke of Zhou's formalization of the “six generations of music and dance” (Yun Men 云门, Da Xia 大夏, Da Huo 大濩, Da Wu 大武, Da Huan 大桓, and Da Xia 大夏) created a comprehensive system where each musical form served specific governmental functions:

- **Yun Men:** Used for cosmic alignment rituals, establishing the ruler's connection to Heaven
- **Da Wu:** Military ceremonials that demonstrated state power and deterred rebellion

- **Da Xia:** Harvest celebrations that legitimized taxation and resource distribution
- **Da Huo:** Diplomatic ceremonies that established protocols for inter-state relations

This integration of music into governance reflected its role in three key dimensions:

- **Religious rituals** – Used for sacrifices to deities and ancestors
- **Political legitimacy** – Demonstrated royal authority and reinforced loyalty
- **Moral education** – Served to instill discipline and virtue in society

4. Philosophical Interpretations of Music

In the pre-Qin era, various philosophical schools provided distinct perspectives on music:

- **Confucianism** viewed music as a moralizing force that cultivated virtue
- **Taoism** saw music as a natural expression that should harmonize with the cosmos
- **Mohism** criticized music as an elitist luxury that reflected class disparities

These diverse interpretations shaped the aesthetic and ethical framework of Chinese music, influencing political philosophy and societal values.

5. Contemporary Implications and Future Research Directions

The Long-Term Influence of Zhong Yuan Music

Despite its early association with political and ritual functions, Zhong Yuan music gradually expanded into broader artistic and cultural forms, influencing genres such as Chinese opera, folk music, and modern music traditions. Zhong Yuan music was not merely an art form but a social and political instrument that helped define Chinese civilization.

Conclusion

The evolution of Zhong Yuan music in the pre-Qin era demonstrates a systematic transformation through four distinct developmental phases: from Neolithic naturalistic ritual expression using precisely tuned bone flutes, through religious institutionalization during Xia-Shang dynasties evidenced by oracle bone inscriptions, to Zhou dynasty political systematization where the Duke of Zhou formalized hierarchical musical protocols, culminating in philosophical integration during the late Zhou period when competing schools incorporated musical theory into governance discourse. Research results reveal that this hierarchical system operated as sophisticated

governmental control, with each of the six generations of music and dance serving specific functions from cosmic legitimation to military deterrence, demonstrating deliberate systematic use of music for comprehensive state management. Beyond historical documentation, this analysis

illuminates fundamental relationships between aesthetic systems and political organization, showing how Zhong Yuan music functioned as sophisticated technology for social engineering that combined emotional manipulation, hierarchical reinforcement, and ideological transmission while providing genuine aesthetic satisfaction—a dual function explaining the remarkable persistence and adaptability of Chinese cultural structures across millennia and revealing patterns that continue to influence contemporary governance and cultural organization.

Suggestions

Zhong Yuan culture, as the foundational core of Chinese civilization, not only embodies the spiritual characteristics of the Chinese community but also carries distinct regional characteristics. As a regional culture, it holds rich connotations. The development of Zhong Yuan music during the pre-Qin period provides a clear reflection of the transformation of Chinese civilization—from primitive obscurantism to ritual civilization.

The origins of this musical evolution can be traced back to the Neolithic era, when early Chinese ancestors mimicked nature and practiced witchcraft rituals. For example, the bone flute unearthed at the Jiahu site, made from the wing bones of cranes, features accurately placed holes corresponding to the five to seven tones of the scale. This discovery aligns with the ancient legend of Ling Lun, who is said to have imitated the phoenix's song to create musical scales, as recorded in the Spring and Autumn Annals of Lü. The myth of Kui, which tells of “stones striking stones and all beasts dancing,” further illustrates the symbolic role of music as a communication medium between the earth and the sky.

These archaeological findings and historical texts collectively show that early Chinese music was not simply an artistic expression, but a vital survival mechanism closely intertwined with agricultural production and communal rituals. During the Xia and Shang Dynasties, music transitioned from a chaotic, primitive religious practice into a symbolic tool of kingship and political power. The Erlitou site, for example, yielded stone chimes and bronze bells that were used in royal rituals, producing solemn and sacred tones. The hieroglyphic structure of the words for “chime” and “music” in oracle bone inscriptions further suggests that musical instruments became integral to the Shang Dynasty's ritual system.

By the Zhou Dynasty, the system of “ruling the country through rituals and music” had reached its peak. The Duke of Zhou refined and integrated the rituals and dances of the previous dynasties into the Six Generations of Music and Dance, which included important forms like Yun

Men, Da Xia, and Da Wu. These rituals and dances were defined by a hierarchical structure – eight rows of dancers for the emperor, and six rows for vassals – emphasizing music’s embedded role in the patriarchal system.

This cultural process gave music a multi-dimensional social function: as a form of sacrifice to the gods, a tool for demonstrating power, and a medium for moral education. Confucianism attributed ethical connotations to music, Taoism explored its philosophical nature, and Mohism criticized its class-based structure, revealing the class conflicts embedded in musical practices.

The discourses of Confucianism, Taoism, and Mohism not only shaped the aesthetic paradigms of traditional Chinese music but also profoundly influenced the development of political philosophy and ethical values. Through these philosophical frameworks, music evolved from its birth to its maturity, becoming a spiritual link that has sustained Chinese civilization for millennia. Its influence continues to resonate in Chinese opera, folk music, and even modern cultural forms. Thus, Zhong Yuan music represents more than just an art form—it is a core component of the cultural fabric of China, shaping the nation’s political, ethical, and aesthetic concepts, and remaining deeply embedded in the cultural DNA of Chinese society. Future studies might employ ethnographic methods to explore contemporary folk revivals in Zhong Yuan, examining how ancient musical traditions are being preserved, adapted, and reimaged in modern contexts. This approach would provide valuable insights into the continuing evolution of this rich cultural heritage and its relevance to contemporary Chinese identity.

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