

Enduring and Evolving—The Literature Review of Bronze Ware in the Context of Chu Culture

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Abstract

Chu bronze is an outstanding representative of Chu culture and art, and an important part of Chinese bronze research. This paper, mainly through the literature research method, carries out a theoretical research on the origin and development status of the existing literature related to Chu-style bronzes at home and abroad, and comprehensively summarizes its important contents in the six aspects of modeling, pattern, inscription, technology, function, and design transformation, so as to provide a theoretical basis for the expansion of the breadth and depth of Chu-style bronzes research.

Keywords

Chu Culture, Bronze Ware, Art Design, Literature Review

1. Research Background

In 2018, during a visit to the Hubei Provincial Museum with Indian Prime Minister Narendra Modi, President Xi Jinping remarked: “Jing-Chu culture is an important part of the long-standing Chinese civilization and holds a pivotal position in the developmental history of Chinese civilization.” Bronze ware, as an extremely important pillar of Chu art, has rich forms, exquisite patterns, and superb craftsmanship that endow it with high research value in aesthetics and cultural studies. In recent years, various sectors of society have shown increasing interest in Chu culture, and related academic research has grown steadily. Therefore, this paper collates and summarizes the current scholarship on Chu-style bronze ware in terms of form, pattern, craftsmanship, design, etc. In the historical trajectory of China, the earliest bronze casting can be traced back to the Neolithic period—for example, bronze mirrors from the Longshan and Qijia cultures (Guo, 2008). The production of Chu-style bronze ware began in the mid-Western Zhou period.

During the Shang and Zhou eras, the middle and lower reaches of the Yangtze River (the Chu region) had abundant mineral resources, as evidenced by ancient copper mine sites in southern Anhui and copper smelting sites such as the Yangxin Gangxia site in Hubei (Pei & Chen, 2015). These rich resources, coupled with growing national power and territorial expansion, provided the material basis for Chu's bronze casting development. Chu-style bronzes are unique bronzes cast in the Spring and Autumn and Warring States periods under Chu cultural influence. They display a distinctive artistic style, innovative techniques, and cultural connotations of the Chu people. Over time, Chu bronze art absorbed regional cultures of Chu's neighbors (such as the Ba, Pu, and Yue peoples), gradually forming its own style and reaching a peak in the late Spring and Autumn period.

With the deepening of research into Chu-style bronzes, as of 2022, a combined keyword search for "Chu-Abronzes ware" in CNKI and Wanfang databases yields 597 academic journal articles. Among these, archaeology-focused studies predominate (373 papers), but there are also studies in design, sociology, linguistics, literature and other fields. Within design-related research (20 journal papers), topics span motifs and symbols, form, cultural ideology, landscape design, digital design, etc., reflecting an interdisciplinary trend. Additionally, there are 179 theses/dissertations on Chu bronze ware, 32 of which are in design fields. Notably, the monographs *Study of Chu-Series Bronze Ware* and *History of Chu Art*, both part of the "Chu Studies Series," systematically examine the emergence, development, and evolution of Chu-style bronze ware from perspectives of archaeology, art, technology, culture, history, folklore, and belief. These works established a comprehensive framework for studying bronzes in the Chu cultural context, laying a foundation for later scholars and greatly promoting the dissemination of Chu culture. In summary, journal articles have been dominated by archaeological research, while design-oriented papers have largely focused on motifs and form; moreover, the number of design studies with interdisciplinary backgrounds is on the rise.

2. Research Classification

Scholars recognize that Chu culture, rooted in the Chu people's perception of nature and life, imbued Chu bronze forms with bold abstraction and rich meaning, reflecting expressions of Chu people's emotions and distinct regional characteristics. The ancestors of Chu created bronze vessel shapes that are daringly abstract and richly diverse. As Zhang Zhengming summarized in *History of Chu Culture: the forms of Chu-style bronzes* are "curved yet containing straight lines, possessing a robust vigor; their decorative themes are full of fantasy, often employing romantic techniques" (Liu, 2009a). This vividly showcases the unique artistic style of Chu culture.

In 1995, Professor Pi Daojian published *History of Chu Art*, selecting representative archaeological artifacts of Chu-style bronze ware and providing detailed analyses and descriptions accompanied by images. With passionate expression

and vivid, flowing prose, he recreated the graceful charm and spirit of Chu-style bronzes (Wang, 1996). His work illustrated how, through the passage of time, these bronzes evolved from continuing the stylistic traditions of Western Zhou bronze ware toward continuous innovation in form, composition, and decorative patterns, thereby developing a unique artistic style. It also reflected the historical evolution of Chu artistic style, embodying the Chu people's bold creativity and their break from traditional conventions in bronze craftsmanship.

2.1. Research on the Form of Chu-Style Bronze Ware

Chu culture originated from the Chu people's deep perception and distillation of nature and daily life. It reflects their emotional expression and spiritual aspirations, characterized by a distinct regional identity. The bronze ware created by the early Chu people features bold and abstract forms with rich and diverse connotations. As Zhang Zhengming summarized in *A History of Chu Culture*, Chu-style bronze ware "exhibits curved forms containing straight lines, embodying a vigorous and dynamic character; its decorative motifs are rich in imagination and frequently employ romantic techniques" (Liu, 1989). These features vividly demonstrate the unique artistic style of Chu culture.

The forms of Chu-style bronze ware were influenced by the Central Plains culture in their origin, but over a long development they evolved into a unique bronze system. For example, the Chu sheng-ding (a type of sacrificial tripod of Chu) exhibits distinctive features: 1) a cinched waist and contracted belly. In *Art Geography of Chu*, Xu Xiaogeng links this form to the cultural notion that "the King of Chu favored a slender waist" (Xu, 2005), interpreting it as the Chu aesthetic innovation breaking from the form traditions of Xia, Shang, and Zhou. 2) A flat base. The base, originally round, was made flat, creating a strong contrast with the curved profile of the belly and enhancing the rhythm and visual impact of the overall form. 3) Exaggerated flared handles (ears) on the tripod, in contrast to traditional upright handles. The Wangziwu Ding is a representative example of the Chu sheng-ding form. Unearthed in 1978 from a Chu tomb at Xiaosi, Xichuan County, Henan, this tripod's body tapers dramatically, creating a stark contrast between the upper and lower parts. Its handles are not vertically attached as in traditional dings, but instead incline downward from the rim. Due to these features, the Wangziwu Ding has an extremely exaggerated silhouette. The joints between its parts make frequent use of slanting and curved lines to create variation in form and visual effect. The midsection contracts inward, the outer profile is concave, and the lower part is restrained - all of which endow this bronze vessel with a fantastical and imaginative form, vividly exemplifying the formal characteristics of the Chu style.

In addition to ritual vessels like tripods, bronze weapons and chariot fittings constitute a major category of Chu bronze forms frequently discovered in archaeological contexts. These mainly include swords, ge daggers, spearheads, halberds (ji), axes (yue), daggers, and arrowheads, with ge and spearheads being most com-

mon. Most of these weapon forms are simple and unadorned, not much different from those of other pre-Qin states, emphasizing practical functionality over decoration. However, bronze weapons used for ceremonial guard of honor could have special forms. For example, a bronze sword excavated in 1993 from Tomb M1 at Yisuhé Agricultural School in Xiangtan County has a slender blade and plain surface. The sword has a round pommel and a cylindrical tang with two raised rings, a sharp edge, well-proportioned and elegant form with flowing lines. The handle features undulating contours that create a strong sense of rhythm (Xie, 2018). Generally, compared to vessels like the ding, the forms of bronze weapons and horse-and-chariot fittings are relatively simple and unornamented, prioritizing functionality with aesthetic form as a secondary consideration.

Under the influence of Chu culture, the bronze forms produced by neighboring states underwent dramatic changes. *The Zeng State Bronzes* (compiled by the Hubei Provincial Archaeology Institute) notes that as Chu expanded, the overall stylistic character of Zeng State bronzes evolved, shedding Zhou cultural attributes and exhibiting strong Chu cultural characteristics. Changes in Zeng bronzes, in turn, influenced the development of Chu-style bronzes. For instance, the representative flat-base, narrow-waisted sheng-ding of Chu can be traced back to early Spring and Autumn period bronzes from the Zeng state (Hubei Provincial Institute of Cultural Relics and Archaeology, 2007). This suggests that during Chu's development, Chu culture absorbed elements of the Central Plains and various neighboring cultures to enrich the forms of its artifacts, even as Chu culture powerfully impacted those within its cultural sphere.

In summary, over the course of development Chu-style bronze ware gradually formed a formal aesthetic distinct from that of the Central Plains. In the early stages it was influenced by the Central Plains, but as Chu culture grew, it increasingly exhibited bold, abstract, and variable characteristics that reflected the Chu people's unique understanding of nature and life. Representative objects such as the Chu sheng-ding and Chu-style he (a type of vessel) demonstrate the artistic creativity and cultural depth of Chu artisans. Meanwhile, bronze weapons and chariot fittings emphasize utility and simple beauty, being unadorned yet distinctive in design.

2.2. Research on the Decorative Patterns of Chu-Style Bronze Ware

Decorative patterns (wenyang) are a critical aspect of bronze ware research. The motifs on Chu bronzes are lively, flowing, graceful and romantic, imbued with intense romanticism. This is closely tied to the mindset, aesthetic pursuits, and lifestyle of the Chu people.

Han Min, in *Study on the Design Symbols of Forms and Patterns of Chu-Series Bronzes in Pre-Qin Period*, points out that unlike Shang-Zhou bronzes, which employed solemn and awe-inspiring animal motifs to accentuate the atmosphere of ritual, Chu-style bronzes largely abandoned those austere animal designs. Instead, Chu artisans made greater use of curvilinear designs to convey a

sense of movement and flow in the patterns, expressing a romantic aesthetic orientation (Han, 2017). Chu bronzes freely employ natural elements like dragons, phoenixes, and cloud scrolls, as well as imaginative elements, which are then deconstructed and recomposed in bold and exaggerated ways. This approach endows Chu bronzes with the spiritual core of Chu culture and a sense of ever-renewing life order.

In their article *On the Design Ethics Thought in Chu Bronze Patterns*, Zhang Ruizhi and Wang Xiaonan concisely summarize the artistic characteristics of Chu bronze patterns into three aspects—flowing vibrancy, abstract transformation, and intricate density—and explain the reasons behind them (Zha, 2019). Flowing vibrancy means that Chu bronzes overall pursue a dynamic balance; their patterns strike a measured balance between sparse and dense, and use compositional techniques like layered arrangements to enhance a sense of movement. Abstract transformation means that with diminishing influence from Shang-Zhou culture, designs no longer directly imitate real objects; instead, imagination is applied to abstract, transform, and reconstruct motifs, amplifying visual impact and mystery. Intricate density means that the many motifs on Chu bronzes appear in different arrangements with endlessly varied compositions.

The decorative patterns on Chu-style bronzes form an important part of Chu culture and hold unique research value. A large body of research now focuses on analyzing specific motif types. For example, Wang Zulong's article *Aesthetic Characteristics and Cultural Connotations of the Decorative Patterns on Chu Bronzes* centers on the “dragon pattern” found on Chu bronzes. Using the evolution of dragon motifs through changing historical contexts and social ideologies as a point of departure, he analyzes the patterns of change and their causes in order to explore the underlying cultural ideas of Chu embodied by these motifs (Wang, 2001). Yue Chen's article *On Several Common Patterns of Chu Bronzes* categorizes Chu bronze motifs by form into animal motifs and geometric motifs, and includes a study of classic patterns such as the cloud-and-thunder pattern (Yue, 2014).

In summary, the motifs of Chu-style bronze ware display striking regional characteristics and artistic appeal, making them a vital component of Chu culture with distinctive research value. Compared to Shang and Zhou bronzes, Chu bronze patterns are more romantic in spirit, characterized by the use of flowing lines and natural elements that reflect the Chu people's unique imaginative engagement with nature. Their pattern features include flowing vibrancy, abstract transformation, and intricate density, all of which demonstrate Chu aesthetic preferences and creative reworking of tradition. Academic studies have analyzed Chu bronze patterns from multiple angles, for instance, tracing the evolution of the dragon motif or classifying motifs into animal vs. geometric - providing important theoretical support for deeper exploration of Chu culture.

2.3. Research on the Inscriptions of Chu-Style Bronze Ware

Inscriptions on bronzes not only contain rich symbolic notations and infor-

mation, but are also part of the overall ornamentation of Chu-style bronze ware. Inscriptions can shed light on the institutions, social customs, and other aspects of the time, and thus hold great archaeological value.

Such inscriptions also appear on bronze weapons. For example, the book *Dream of a Great State: Wu, Yue, and Chu-Style Bronzes* (compiled by Suzhou Museum) mentions that on certain bronze swords, thin-walled concentric circles and lozenge-shaped hidden patterns, together with inscriptions, form decorative motifs of special significance (Xie, 2018). These decorations can be ferocious and solemn, or related to astronomy, symbolizing power and authority, and were mostly used on weapons of authority and ceremony. Li Mei, in *Early Chinese Musical Theory Practice as Reflected in the Inscriptions of Zenghou Yi Chime Bells*, studied the inscriptions on chime bells and concluded that ancient people not only had empirical knowledge of the musical tones produced by dividing a vibrating string into fifths, but had also developed a terminological system to express this knowledge (Li, 2017). This theoretical thinking on tuning was solidified in the bronze chime bells, filling a two-millennium gap in Chinese musical literature on pure-tone tuning. Tan Mei, in *On the Poetic-Musical Thought of the Spring and Autumn Chu State as Seen from Inscriptions on Bronze Musical Instruments from Xia Temple*, Xichuan, Henan, takes Chu bronze musical inscriptions as an entry point to study Chu's musical culture. Using information from the inscriptions and correlating it with texts like the Book of Songs, Tan investigates the spiritual thought of the Chu people and the development of poetry and music in the Spring and Autumn period, decoding the relationship between poetic texts and inscriptions (Tan, 2017). In addition, Wang Guantao's thesis *Compilation and Verification of Titles of Chu Rulers Seen in Bronze Inscriptions* systematically compiles and analyzes the names and titles of Chu rulers as found in bronze inscriptions, using paleographical research. Wang's work organizes these names comprehensively and uses inscriptional evidence to advance archaeological and classical studies (Wang, 2024).

These studies on inscriptions further enrich the research framework for Chu-style bronzes, allowing scholars to study Chu bronzes in a multi-faceted and holistic manner. Inscriptions on Chu-style bronze ware serve as important carriers for understanding Chu culture, with both archaeological and academic value. They reveal political relationships between Chu and neighboring states, aspects of ritual and musical culture, and thereby deepen our understanding of Chu culture. Inscriptions also expand the perspectives of bronze research and provide important references for archaeology, history, and classical literature studies.

2.4. Research on the Craftsmanship of Chu-Style Bronze Ware

The smelting and manufacture of ancient Chinese bronzes evolved over time: the single-piece mold casting technique of early periods was gradually replaced by new casting and decorating techniques such as block mold casting, segment casting, cast riveting, lost-wax casting, tin soldering, brazing, forging, riveting, inlay-

ing, damascening with gold and silver, and others (Wan, 2003).

As the Chu state grew in power and resources, its bronze craftsmanship advanced correspondingly. In terms of structural design and surface decoration, the technical achievements of Chu-style bronzes represent a pinnacle of ancient Chinese bronze casting. For example, the Zenghou Yi zun-pan (a large ritual basin with zun vessel) unearthed in 1978 from Leigudun Tomb 1, Suixian, Hubei, features intricate openwork coiled serpents along its rim that were cast using the lost-wax method. The vessel's creation involved a combination of numerous techniques—segment casting, investment casting (lost-wax), welding and riveting, round sculpting, openwork carving, etc. In total, 72 components were cast and then joined by over one hundred casting and welding points, integrating the pieces into a whole. This exemplifies the consummate craftsmanship of Chu-style bronzes.

In *Comparative Study of the Manufacturing Techniques of Wu-Yue and Jin-Chu Bronzes*, Wan Li provides detailed descriptions and case analyses of techniques like clay mold printing of patterns and openwork casting in Chu bronzes. Wan argues that the development from creating casting molds on single clay models in Shang-Zhou to using wax or tin models in Chu was a revolutionary breakthrough in casting history (Wan, 2003). This evolution reflects how the Chu, while maintaining their cultural distinctiveness, continually absorbed and innovatively integrated surrounding technical knowledge.

For a long time, there was scholarly debate about whether lost-wax casting technology existed in the Chinese Bronze Age. In 2006, Zhou Weirong et al. published an article titled “*There Was No Lost-Wax Casting Technology in the Chinese Bronze Age*” in *Jiangnan Archaeology* (Zhou, 2006), and in 2007 *Southern Cultural Relics* published another article, “*Reasserting that ‘Lost-Wax Casting Was Not the Choice of the Chinese Bronze Age’*”. These works, from the perspective of the history of technology, discussed the objective laws of technological development and argued that given the technological context of the Bronze Age, an “investment casting system” would not have developed; they further supported their claims with experimental evidence (Zhou, 2007). However, Li Zhiwei, in *Evidence Concerning the Casting Method of the Zenghou Yi Zun-pan* — On the Investment Casting Technique in the Chinese Bronze Age, took the Zenghou Yi zun-pan and the Xichuan Xiaosi bronze jin (ban) as case studies and conducted technical analysis and simulated casting experiments on piece-mold vs. lost-wax methods. Li ultimately concluded that a “dripping wax method” (a variant of lost-wax) was more in line with the technological context and craft conditions of the time (Li, 2008). Despite ongoing academic controversy over whether advanced casting techniques like lost-wax were used for Chu-style bronzes, considering the objective context of the time, the detailed observation of artifacts such as the openwork coiled serpents on the zun-pan, and experience from craft practice, it can be hypothesized that the Zenghou Yi zun-pan very likely employed lost-wax casting.

In summary, the casting craftsmanship of Chu-style bronze ware represents the

apex of ancient Chinese bronze manufacturing. Chu bronzes showcase a variety of techniques—such as segment casting, lost-wax casting, and cast-on soldered assemblies—epitomized by the Zenghou Yi zun-pan, and they demonstrate a high degree of technical innovation. Although the scholarly community still debates the use of lost-wax casting in Chu bronzes, technical analyses indicate that Chu artisans achieved an extremely high level of casting skill. To resolve this debate in future research, further interdisciplinary studies are needed that integrate archaeological evidence with materials science and restoration experiments.

2.5. Research on the Function of Chu-Style Bronze Ware

From a functional perspective, Chu-style bronzes can be classified into weapons, musical instruments, vessels, and play objects. The use of bronze ware was intimately connected with ritual and warfare. Bronze food vessels, wine vessels, and water vessels were employed as ritual items directly in people's social lives, symbolizing hierarchy, status and rank (Li, 2008).

Weapons: Chu-style bronze weapons were influenced by the cultures of Wu and Yue. Discovered bronze weapon types include ge (dagger-axe), spear (mao), halberd (ji), axe (yue), sword (jian), dagger, and arrowhead (zu), with ge and spear being the most common. In his article *An Analysis of Wu-Yue Cultural Elements in Bronze Weapons Unearthed from Eastern Zhou Chu Tombs in Jiangling*, Sun Yifeng takes the presence of certain Wu-Yue cultural features in bronze weapons from Eastern Zhou Chu tombs in Jiangling as a starting point. Correlating these findings with historical records, Sun explores the connections between Chu bronze weapons and Wu-Yue culture during the Eastern Zhou (Sun, 2020). He suggests that bronze weapons of Wu and Yue found in Chu tombs were mainly introduced through political marriages and other exchanges, and that there remained clear differences between Chu's own bronze weapons and those from Wu-Yue. Factors such as warfare, intermarriage, and the movement of artisans caused some Wu-Yue characteristics to appear in Chu bronze weaponry. This indirectly confirms that as the Chu state expanded, its bronze ware incorporated cultural features of various states, thereby developing a unique set of bronze characteristics.

Musical instruments: Among Chu-style bronzes, musical instruments—especially chime bells (bianzhong)—are a research focal point. Chime bells were also national symbols, and today they are exhibited and even used for musical performances both in China and abroad. The Zenghou Yi chime bells unearthed in April 1978 from Tomb 1 at Leigudun, Suixian, Hubei constitute the largest set of Warring States-period chime bells discovered to date in China. They demonstrate that the musical level of states within the Chu cultural sphere represented the pinnacle of Chinese musical development in the pre-Qin era, and they hold immense historical significance in the global context of ancient music. In her article *The “Rebirth” of Chime Bells: The Making and Use of Contemporary Chime Bells—From the Zenghou Yi Chime Bells to the China Conservatory of Music’s Yayue*

Ensemble 24-Piece Chime Bell Set, Zhang Li uses the Zenghou Yi bells as the research subject, undertaking their musical restoration and enabling them to be used in performance (Zhang, 2022). Such research has not only recreated for the world the charm and splendor of Chu bronze musical instruments, but also demonstrated their continuing cultural resonance.

Vessels: Chu-style bronze containers were primarily food and drink vessels, which originally appeared mainly in ritual contexts. As the Chu state grew in power and expanded its territory, the use of bronze vessels broadened from strictly ritual contexts to various types of everyday utilitarian vessels, including those for wine, food, and water. In her thesis *Study of Zeng State Bronze Vessels During the Two Zhou Periods*, Sun Kexin reviews the bronze containers unearthed through Zeng State archaeology. She analyzes the assemblages and characteristics of bronzes buried in different periods, and finds that in the early Western Zhou, Zeng's bronze vessels inherited the ritual system of the Shang-Zhou with typical Central Plains features. However, with the decline of the Zhou royal house in the late Western Zhou, the appearance of Zeng's bronze vessels began to exhibit traits of Chu bronzes. The types, forms, and assemblages of vessels were all influenced by the Chu style, leading her to explore periodic changes in vessel use systems and cultural elements (Sun, 2024).

In summary, Chu-style bronze ware in the categories of weapons, musical instruments, and vessels carried both practical and ritual significance, reflecting the diversity of Chu culture. The weapons show influence from Wu-Yue culture; musical instruments such as chime bells display the high musical achievements of Chu culture; and bronze containers expanded from solely ritual use to daily life, illustrating the evolution of ritual practice and culture. Altogether, these aspects demonstrate the interaction and integration of Chu culture with neighboring cultures.

2.6. Research on the Design Transformation of Chu-Style Bronze Ware

With their unique forms, motifs, and craftsmanship, Chu-style bronzes have become emblematic of Chu culture, and in recent years they have gradually attracted attention in modern design. Liu Ming, in *Application of Chu Cultural Elements in Product Design*, points out that incorporating traditional cultural elements will be a future trend in product design, and Chu-style bronzes have immense creative potential in this regard (Liu, 2009b). Zhang Lian, in *On the Formal Beauty and Aesthetic Value of Artistic Derivatives of Chu Culture*, proposes that modern design can draw on the patterns and forms of Chu-style bronzes to enhance the artistry of new works (Zhang, 2015a). Zhang Yuan, in *Modern Design Development from the Perspective of Decorative Patterns of Jing-Chu Bronzes*, notes that due to factors like the natural environment, social customs, and ethnic policies, the Chu people imbued their bronze patterns with a deep reverence and love for nature. This cultural connotation is precisely the kind of support needed in

modern design works (Zhang, 2017). From the research of many scholars, it is evident that the distinctive artistic elements of Chu-style bronze ware hold important referential value in contemporary design. Integrating traditional culture with modern design can endow works with richer cultural connotations and artistic value, demonstrating huge creative potential. Combining traditional cultural elements with modern design to create works with greater cultural depth and vitality can also curb the dominance of commercialism and return design to its original purpose.

Chu-style bronze ware's high artistic value in form, pattern, and craftsmanship has led to a growing number of creative works in art and design inspired by it in recent years. For example, as Liu Ming observed in *Application of Chu Cultural Elements in Product Design*, incorporating cultural elements is a prerequisite for modern design; future product design will be guided by culture, emphasizing cultural value and distinctiveness. In his study, Liu selected bronze ware as a representative of Chu culture to explore elements that can be applied in modern design. He integrated Chu cultural motifs into industrial products such as USB drives and headphones, imparting these products with a distinctive cultural character and enhancing their differentiation from others in the market (Liu, 2009a). In her article, Zhang Lian suggested that the design of modern textile buttons could take inspiration from the patterns and openwork craftsmanship of an excavated openwork phoenix-pattern bronze mirror, and that knot fastenings in fabric arts could draw inspiration from the linear forms of bronze objects. By incorporating these essences into various designs, one can showcase the artistic characteristics of Chu culture (Zhang, 2015a). Zhang Yuan noted that, owing to the unique natural environment, social customs, and ethnic policies, the Chu people harbored a deep awe for the mysterious natural world. They expressed this sentiment through art by infusing it into the ornamentation of their bronzes as a love for the land and mountains (Zhang, 2017). She argues that combining traditional cultural elements with modern design can create works with greater cultural heritage and vitality, reducing the influence of commercialism and returning to the original intention of design.

Chu-style bronze ware's unique artistic value in form, pattern, and technique has made it a source of inspiration for modern design, as incorporating Chu cultural elements into contemporary design can give products a distinctive cultural character and artistry. However, current research on design transformation of Chu-style bronzes remains relatively sparse. Wang Xiaonan pointed out in *Overview of Modern and Contemporary Research on Chu Bronzes* that fully integrating elements of Chu-style bronzes into modern design while avoiding mere formalism remains a challenge and a key focus for future research (Wang, 2016). As research into Chu culture deepens, Chu-style bronze ware will undoubtedly reveal immense creative potential in the realm of design. As the Laozi states: "The Tao gives birth to One, One gives birth to Two, Two gives birth to Three, and Three gives birth to all things."

3. Research Commentary

The dazzling and fantastic qualities of Chu culture endowed Chu-style bronze ware with boldly abstract forms and romantically elegant patterns, which became hallmarks distinguishing it from other regional bronzes. Consequently, scholarly research around these two aspects (form and pattern) is relatively abundant, and related efforts in design adaptation and artistic creation are increasingly diverse. However, research on bronze craftsmanship and vessel typology remains mostly limited to specialized case studies of individual archaeological finds, lacking a comprehensive and systematic perspective. Zhang Wenjie's monograph *Research on the Ritual Bronze Vessel System of the Chu State* has, to some extent, filled this gap. Using archaeological data and textual records, Zhang explored the usage system of Chu's ritual bronzes, revealing the uniqueness of Chu's ritual system and its developmental course (Zhang, 2015b). Professor Shao Xuehai, in his book *Passion and Romance: The Art of Chu State*, introduces Chu's bronze art, sculpture, painting, jade carving, as well as Chu's silk embroidery and lacquer painting. From this work, we can understand the contribution and status of Chu artistic culture in Chinese history (Shao, 2001), better grasp the core of Chu's artistic culture, and appreciate the ideas behind it. There have been few studies examining Chu-style bronze ware in terms of philosophy of making, aesthetic characteristics, and other spiritual dimensions, yet these aspects are precisely where Chu culture is richly embodied. Chu-style bronzes served as a window through which the Chu people expressed their life, culture, and spirit. Concepts such as "riding on things to roam the mind," "being what it is," and "responding to heaven and earth to fulfill one's nature" (ideas from ancient Chu thought) continue to influence later generations, indicating the lasting spiritual significance of Chu artistic concepts.

Since the 20th century, Western modernist art movements have altered how Western scholars perceive Chinese bronzes. With the publication of works like *Ten Thousand Things* and *Art in Ritual* (which discuss Chinese bronzes), bronze research has increasingly become a topic of international significance. However, Western researchers have "selectively" subsumed Chinese bronzes into Western art-historical frameworks and research paradigms, thereby constructing an art system imbued with Western cultural values - an approach open to debate. Thus, it is crucial to establish a research framework under an Eastern aesthetic system. As Lü Pingtian states in his book *Guarding the Ideal*: We must implement a cultural strategy to defend our cultural sovereignty and preserve our national cultural traditions, using cultural means to resist the powerful onslaught of cultural colonization. (Lv, 2015) Therefore, as a representative branch of Chinese bronzes, Chu-style bronze ware urgently requires in-depth study from perspectives of technical features, aesthetic approach, artistic value, etc., within an indigenous framework.

Chu-style bronze ware, as a symbol of Chu artistic culture, holds high artistic value in its forms, patterns, inscriptions, craftsmanship, functions, and design adaptations. These bronzes not only embody the Chu people's unique understand-

ing and expression of nature and life, but also reflect the interaction and fusion of Chu culture with surrounding cultures. With ongoing archaeological work and new discoveries, increasingly rich material evidence will become available. Further in-depth research into Chu-style bronze ware will continue to provide important inspiration and reference for modern art design and scholarly research, solidifying its role as a key entry point for understanding Chu culture and even the broader ancient Chinese civilization.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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