



From Social Background to Artistic Expression: The Design and Cultural Value of Decorative Patterns on Bronze Mirrors During the Song, Liao, and Jin Dynasties in China

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Abstract

From the 10th to the 13th century AD, China entered a historical period of coexistence of multiple regimes such as the Song, Liao, and Jin dynasties, showing rich diversity in culture and art. The design of bronze mirror decorative patterns during this period showed a high degree of cultural integration and artistic innovation, and its cultural value and design value were fully reflected, which was highly favored in the modern collection market. The purpose of this study is to analyze the market value, cultural value and design value of bronze mirror decorative patterns in China during the Song, Liao, and Jin dynasties from the social background to the artistic expression level. This study uses the research methods of literature research, expert interviews and questionnaire surveys to collect data on the value of bronze mirror decorative patterns during the Song, Liao, and Jin dynasties, and analyzes the collected data. The research results show that the bronze mirror decorations of the Song, Liao, and Jin dynasties reflect unique local culture, art, social customs, and religious beliefs, holding significant cultural, design, and market value, contributing to China's national cultural confidence. Suggestions and limitations of this research: In modern society, characterized by information and diversity, the bronze mirror decorations of these dynasties can align with contemporary trends and inspire designers with their formal beauty and cultural depth. Future research should strengthen interdisciplinary studies, explore the multiple meanings of patterns, enhance aesthetic analysis, and innovate design elements; future focus should be on the contemporary design application of Song, Liao, and Jin dynasty bronze mirror patterns.

Keywords: Cultural Heritage, Contemporary Artistic and Design Values, China Song, Liao and Jin Dynasties, Bronze Mirror Decorative Patterns

Introduction

Research Background

The Song, Liao and Jin dynasties were an era of multi-ethnic competition in Chinese history, including the Song, Liao and Jin dynasties. The three regimes during this period were established by the Han, Khitan and Jurchen peoples, respectively, reflecting the fact that China was never completely controlled by a single regime during this period. The Song Dynasty (960–1279) was ruled by the Han people, the Liao Dynasty (907–1125) was established by the Khitan people, and the Jin Dynasty (1115–1234) was ruled by the Jurchen people. Figure 1 shows the specific timeline of the Song, Liao and Jin dynasties. This historical period was an important stage in the transition of Chinese feudal society from the Middle Ages to the Late Antiquity. The decorative arts of this period played a role in inheriting the past and ushering in the future in terms of cultural integration and artistic inheritance, and had an important historical position.



Figure 1 The Specific Timeline of the Song, Liao and Jin Dynasties.

Source: The researchers drew their own, 2024.

The patterns of bronze mirrors in the Song, Liao, and Jin dynasties integrated the cultural characteristics of various ethnic groups, which is also a key issue that needs to be recognized in the context of this research. The popular trend of aesthetics in the Song Dynasty emphasized the pursuit of nature and advocated freedom, truth, nature and profound aesthetic taste. The Song Dynasty emphasized the quality and refinement of artistic works; the aesthetics of the Song Dynasty focused on the inner spiritual realm, advocated the connection between aesthetics and culture, philosophy, morality, personality and other aspects, and emphasized the artistic conception and appeal of artistic works.

A group of famous Khitan artists emerged in the Liao Dynasty, such as Yelu Bei, Hu Qian, Yelu Tizi, Xiao Lu, Gao Yi and others. Their creations have different appearances from the paintings of the Central Plains Han people, with prominent border characteristics. Most of the content expresses the grazing of water and grass, horseback hunting and the four seasons of the mountains, rivers and grasslands of the north. The form of art not only adapts to the aesthetic needs of the nation and reflects the aesthetic taste of the nation, but is also directly influenced by the paintings of the Tang, Five Dynasties and even Song Dynasty, reflecting the exchange and integration of cultural arts among different ethnic groups.

The decoration of bronze mirrors in the Jin Dynasty is simple. The bronze mirrors of the Jin Dynasty were concise in appearance, and precious metals were rarely used. Instead, they relied on fine workmanship, clever composition and simple images to achieve a good decorative effect, and the entire object looked simple and concise. However, some bronze mirrors also pursued a magnificent decorative effect.

Based on the above information, the researchers explored the cultural connotation of the decorative patterns of bronze mirrors in the Song, Liao and Jin Dynasties in China and the design value of traditional Chinese patterns, and analyzed the social attributes and artistic attributes of the decorative patterns of bronze mirrors in the Song, Liao and Jin Dynasties, which laid the foundation for this research.

Target Audience

The target population of this research includes local tourists, professors, experts, collectors, staff of Datong Liao, Jin and Yuan Cultural Art Museum, and tourists from other places in Datong City, Shanxi Province, which provides a broad social foundation for studying the value of decorative patterns on bronze mirrors during the Song, Liao and Jin dynasties.

Research Objectives

- To analyze the cultural value of decorative patterns on bronze mirrors during the Song, Liao and Jin dynasties.
- To collect market value data on bronze mirrors during the Song, Liao and Jin dynasties.



- To explore the theoretical basis for innovative design of decorative patterns on bronze mirrors during the Song, Liao and Jin dynasties.

Methods and Materials

This research adopts a research method that combines qualitative research with quantitative research, including literature analysis, expert consultation, and questionnaire survey. Quantitative research reveals the development trend of bronze mirror decorative patterns through data analysis of questionnaire surveys, while qualitative research can deeply explore the reasons and background behind the value of bronze mirror decorative patterns. The combination of the two can provide a more comprehensive understanding. Using mixed research methods, researchers look at the same problem from multiple perspectives, not just limited to data statistics or explanations of individual phenomena, thereby expanding the perspective of research problems and helping to put forward more innovative design suggestions. All research activities were conducted with the informed consent of the participants.

Literature Analysis Method

This research comprehensively analyzed the value of decorative patterns of Chinese bronze mirrors during the Song, Liao and Jin dynasties through the literature analysis method. First, the researchers widely collected literature and picture materials related to the decorative patterns of bronze mirrors during this period through various channels such as the Internet and libraries, and conducted in-depth analysis and summary of the theoretical viewpoints therein. These literature sources include both digital academic resources and books on the history of Chinese bronze mirrors and their decorative patterns.

The researchers sorted out the social background, geographical location and historical status of bronze mirror patterns during the Song, Liao and Jin dynasties in the literature, and analyzed the market value, cultural value and design value of bronze mirror decorative patterns during the Song, Liao and Jin dynasties. The application of the literature analysis method provides a solid theoretical foundation for this study. Through a comprehensive analysis of relevant domestic and foreign literature, the researchers can provide rich theoretical support and framework basis for subsequent research, which helps to ensure the academic nature of the art of bronze mirror decorative patterns.

Expert Consultation Method

Expert consultation is a qualitative research method that invites inheritors of bronze mirror craftsmanship and experts and professors in the field of design to conduct multiple rounds of consultation and feedback to obtain in-depth insights and guidance.

This research method is mainly divided into the following three steps:

1. Determine the Expert Group. First, professors with in-depth research in the field of design and representatives of inheritors of bronze mirror craftsmanship are selected as members of the expert group.

2. Question Design. The interview and consultation outline revolves around the market value, cultural value, design value and historical status of the decorative patterns of Song, Liao and Jin bronze mirrors. Question 1: What do you think is the correlation between the design style of bronze mirror decorative patterns in the Song, Liao and Jin dynasties and the social and cultural background at that time? Question 2: From the perspective of artistic value and cultural inheritance, how do you evaluate the symbolic meaning of the decorative patterns of bronze mirrors in the Song, Liao and Jin dynasties and their influence on later generations? Which decorative elements are most important in the transmission of cultural values?



3. Multiple Rounds of Consultation. The first round of consultation: Send an open-ended questionnaire to experts to collect their ideas and suggestions on the topic. The focus is on obtaining a wide range of different views and suggestions. Second round of consultation: Based on the results of the first round, common opinions and differences were sorted out and summarized, and then closed or semi-open questions were formed and sent to the experts again. The purpose of this round is to further focus and ensure that the experts have clearer feedback on key issues.

The purpose of the expert consultation method is to explore the experts' cognition of the connection between the social and cultural background of bronze mirrors and the style of bronze mirror patterns, and to understand the factors that affect bronze mirror design. Understanding the experts' views on these complex relationships can provide a richer research perspective. Guide experts to discuss the symbolic meaning of bronze mirror decorative patterns, and explore the status of cultural symbols in decoration in history and their inheritance value. This research method is designed to help researchers provide an in-depth analysis of bronze mirror design and cultural value.

Questionnaire Survey Method

The questionnaire survey carriers of this study are divided into paper questionnaires and electronic network questionnaires. This study designed a structured questionnaire to collect quantitative data from different audiences, including local people, professors, students and foreign tourists in Datong City, Shanxi Province, China. The researchers designed the following questionnaires:

Questionnaire 1: Questionnaire on the awareness of decorative patterns on bronze mirrors in the Song, Liao and Jin Dynasties

Questionnaire 2: Expert questionnaire on the cultural value and design value of decorative patterns on bronze mirrors in the Song, Liao and Jin Dynasties

In the empirical study, the researchers used a combination of on-site questionnaires and online questionnaires to analyze the collected data. The on-site survey was conducted at the Liao, Jin and Yuan National Integration Museum in Datong City, Shanxi Province, China, focusing on searching for samples of foreign tourists and local people in the area, and collecting 50 questionnaires. The online survey was conducted via an electronic questionnaire platform, collecting a total of 200 responses. All collected data were then analyzed and compiled.

Table 1 Questionnaire Data on the Recognition of Decorative Patterns on Bronze Mirrors During the Song, Liao and Jin Dynasties

Category	Options	Percentage (%)
Interviewer's Gender	Male	58%
	Female	42%
Interviewer Age	Under 18 Years Old	10%
	18-25 Years Old	39%
	26-35 Years Old	21%
	36-45 Years Old	19%
	Over 46 Years Old	11%
Understanding of Decorative Patterns on Bronze Mirrors	Familiar	63%
	Unfamiliar	37%
Attitude Towards Decorative Patterns on Bronze Mirrors	Positive	67%
	Neutral	29%
	Negative	4%

Note: The researchers drew their own, 2024



Questionnaire 3: The information collected from the expert questionnaire on the cultural value and design value of the decorative patterns on bronze mirrors during the Song, Liao and Jin dynasties is summarized in Figure 2. The pie chart shows the questionnaire results on the cultural value, design value, and market and collection value of the decorative patterns on bronze mirrors during the Song, Liao and Jin dynasties. Cultural value: 50% of people think it is very important, and 35% think it is important. Design value: 60% of people think it is innovative. Market and collection value: 50% of people think it has high market value.

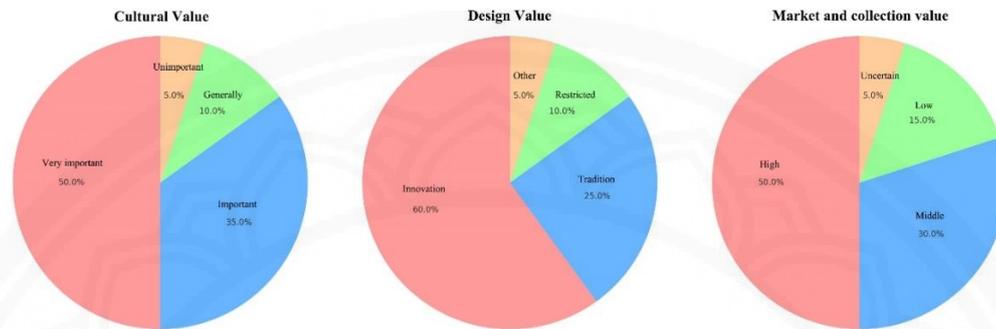


Figure 2 Questionnaire 2 Data Analysis Pie Chart.

Source: The researchers drew their own, 2024.

Research Tools and Materials

The Research Tools and Materials of the Literature Analysis Method Include: monographs on the bronze mirror art, pattern design, historical background, and social culture of the Song, Liao, and Jin periods. Academic papers and research results in related fields. Check the databases of relevant papers and information, including CNKI, JSTOR, Google Scholar. Catalog and exhibition materials of the collection of bronze mirrors from the Song, Liao and Jin dynasties in the museum. Tools and software used to analyze and classify bronze mirror patterns, such as Adobe Photoshop and Adobe Illustrator.

Research Tools and Materials for the Expert Consultation Method: Expert consultation questionnaire, designed with open and closed questions, used to collect experts' opinions on the decorative patterns of bronze mirrors in the Song, Liao and Jin periods. Interview recording equipment, recording equipment and text recording tools used to record interviews with experts. Data analysis tools for analyzing and collating qualitative data from expert consultation methods.

Research Tools and Materials for Questionnaire Survey Method: Questionnaire design tools, tools for designing, publishing and collecting questionnaires, including online questionnaire design software such as Questionnaire Star, Google Forms and paper questionnaires. The questionnaire includes single-choice questions, multiple-choice questions and open-ended questions, involving the social background, market value, cultural value, artistic value, etc. of bronze mirror decorative patterns. Sample database, the group of respondents participating in the survey, including design experts, bronze mirror enthusiasts, the general public, etc. Data statistics tools, statistical tools used to analyze quantitative data, such as Excel. Result visualization tools, chart tools used to present data analysis results, such as Tableau, Excel, etc. Other materials include related images and bronze mirror pattern databases, image resources used to compare and study bronze mirror decorative patterns, including museum collection databases, archaeological catalogs, illustrations in professional books.

These tools and materials provide systematic support for the entire research process from information collection, data analysis to conclusion formation, ensuring that the results of literature, expert opinions and questionnaire

surveys complement each other, thereby comprehensively exploring the design and cultural value of bronze mirror decorative patterns in the Song, Liao and Jin Dynasties.

Results

The Market Value of Bronze Mirrors in the Song, Liao and Jin Dynasties of China

The researchers conducted a comprehensive analysis of the databases of Christie’s, Poly Auction, China Guardian auction websites, Jinmao Auction, and “Jingxing Linfeng” Autumn Auction, and obtained market prices, auction records, and image information on bronze mirrors from the Song, Liao, and Jin dynasties. The results are summarized in Table 2.

Table 2 Market Prices of Bronze Mirrors During the Song, Liao and Jin Dynasties

No.	Dynasty	Name	Auction Price	Graphics
1	Song Dynasty	“The Tang Emperor Visits the Moon Palace” Diamond-shaped Mirror	Transaction Price: RMB 414,400 Approximately 2,041,748.80 Baht	
2	Liao Dynasty	Double Dragon Mirror	Transaction Price: RMB 5.675 Million Approximately 27,166,108.19 Baht	
3	Jin Dynasty	Pisces Mirror	Transaction Price: RMB 1.45 Million Approximately 6,941,120.15 Baht	
4	Liao Dynasty	Mirror with Double Phoenix Pattern	Transaction Price: RMB 4.025 Million Approximately 19,267,592.15 Baht	
5	Song Dynasty	“Xu You Chao Fu” Character Story Mirror	Auction Price: 400,000–600,000 RMB Approximately 1,914,791.77–2,872,187.65 Baht	
6	Song Dynasty	“The Chu People Present Fish” Character Story Mirror	Auction Price: 220,000–300,000 RMB About 1,053,135.47–1,436,093.82 Baht	
7	Song/ Jin Dynasty	The Righteousness is as Bright as a Mirror, Square	Transaction Price: \$32,760 Approximately 1,111,261.87 Baht	
8	Song Dynasty	“Yi Wei” Crossing the River Diamond-shaped Mirror	Transaction Price: \$11,340 Approximately 384,667.57 Baht	

Note: The pictures were collected by the author, 2024

The Reasons for the High and Low Market Prices of Bronze Mirrors

The researchers combined expert interviews and questionnaires to analyze and summarize the reasons for the high and low market prices of bronze mirrors in the Song, Liao and Jin dynasties. They found that the auction prices of bronze mirrors in the Song, Liao and Jin dynasties were mainly affected by the following factors:



1. Historical and Cultural Background: bronze mirrors from the Song, Liao and Jin dynasties each reflected the cultural and technological characteristics of the time. Bronze mirrors from the Song Dynasty are famous for their exquisite craftsmanship and rich pattern designs, including animals and plants, mythological stories, and Taoist and Buddhist decorations. These elements have affected their artistic value and collection value to a certain extent. Bronze mirrors from the Liao and Jin dynasties often have the cultural characteristics of northern ethnic minorities, reflecting different cultural blends and artistic styles (Xiawei, 2021).

2. Craftsmanship and Quality: The craftsmanship of bronze mirrors from the Song Dynasty is very fine, and the mirror finish and decorative clarity are high. These factors will increase their auction prices. Bronze mirrors from the Liao and Jin dynasties may have relatively rough craftsmanship and different decorative styles, which will affect their market value.

3. Preservation Condition: The preservation condition of a bronze mirror has an important impact on its auction price. Well-preserved bronze mirrors, especially those with smooth mirror surfaces, clear patterns, and no serious corrosion, will fetch higher prices at auctions. On the contrary, the value of a bronze mirror that is severely rusted or obviously damaged will be greatly reduced.

4. Rarity: Rarity has a significant impact on the auction price of bronze mirrors. Rare types of bronze mirrors or unique decorative designs often increase their market value. For example, the “Tang Wang Visits the Moon Palace Diamond Flower Mirror” from the Song Dynasty received a high price at auction due to its rarity (Figure 3). During the Liao and Jin dynasties, due to extremely strict bans on copper, all cast bronze mirrors had to be inspected and stamped by the government. This resulted in the edges of bronze mirrors from these periods often being engraved with government inspection marks and charges. Because of this, the number of bronze mirrors from the Liao and Jin dynasties is limited and rare, especially those with obvious national characteristics, which are highly favored because of their uniqueness and rarity (Jun et al., 2024).



Figure 3 “Tang Wang Visits the Moon Palace Diamond Flower Mirror” from the Song Dynasty.

Source: https://www.sohu.com/a/372170727_120091738

5. Archaeological Discoveries and Academic Research: New archaeological discoveries and related academic research can also affect the auction price of bronze mirrors. If a bronze mirror is proven to be of great historical significance or related to a specific historical event or person, its value will increase accordingly. New information may change people’s perception of certain bronze mirrors, which in turn affects market demand and prices.

6. Market Demand: Demand in the auction market is an important influencing factor. If a bronze mirror of a certain period is widely sought after in the market, its auction price will naturally go higher. Market demand is often driven by factors such as collectors’ interest, academic attention, and procurement plans of museums and institutions.

In summary, the auction prices of bronze mirrors from the Song, Liao, and Jin dynasties are affected by a variety of factors, including historical background, craftsmanship quality, preservation status, rarity, archaeological discoveries, and market demand. Each factor may affect the market value of bronze mirrors to varying degrees.

The Cultural Value of Bronze Mirror Decorative Patterns

Bronze mirrors from the Song, Liao and Jin dynasties are the artistic products of the great ideological liberation in the history of Chinese civilization. The bronze mirrors of this period changed the complicated and luxurious style of bronze mirrors of the Han and Tang Dynasties, and fully integrated the realistic and lifelike aesthetics of the Song Dynasty. The aesthetic attainments of China's Song Dynasty were 1,000 years ahead of the world. In this way, the cultural value of the Song and Liao gold and bronze mirrors is self-evident (Haixia, 2010).

Through document analysis, we found that the beauty of the Song Dynasty was full of humanistic flavor. Song-style aesthetics reached its peak during the period of Song Huizong, who was an artistic genius. He himself is very accomplished in calligraphy and painting, and he is also keen on collecting gold and stone. His *Xuanhe Bogu Tu* records 839 pieces of bronze ware from the Shang Dynasty to the Tang Dynasty collected by the Song Dynasty royal family in the Xuanhe Hall, pioneering the recording of bronze mirrors in ancient ware atlases (Figure 4). The same is true for the emperor, not to mention the literati and officials below. The rise of epigraphy, the development of meticulous painting, and the prosperity of the urban economy, coupled with the tendency of realism and secularization, directly or indirectly promoted the development of bronze mirrors in the Song, Liao, and Jin Dynasties (Xiangxing, 1992).



Figure 4 Xuanhe Bogutu.

Source: <http://www.gmzm.org/>

Art historian Craig Clare praised the beauty of Song Dynasty art: “In their works, nature and art have achieved a perfect balance”. The bronze mirrors of the Song, Liao and Jin dynasties inherited this perfect balance, but they are more unique.

The decoration of bronze mirrors is a reflection of a cultural phenomenon, which has forged our national spirit through life and concepts. Mythological stories are part of our culture, reflecting the imagination of the ancients about natural things, providing rich themes for future generations, and the yearning and pursuit of a better life by the ancient working people. The divine culture displayed by bronze mirrors combines people and mythical beasts, myths and history, and with the power of mythical beasts, it shows people's expectations for life and beautiful prayers for immortality (Cahill, 2005).

Culture is the core and soul of a country and a nation. Traditional decorative patterns inherit the genes of China's excellent traditional culture, are the cornerstone of Chinese culture and an important part of the aesthetics of the Chinese people, and have the role of promoting the prosperity of Chinese culture, demonstrating Chinese cultural confidence, and realizing the self-reliance of Chinese culture. The decoration of bronze mirrors condenses



the essence of culture and art, social folk customs and religious beliefs, has important cultural value, and is conducive to the realization of national cultural confidence and national rejuvenation.

The Design Value of Decorative Patterns on Bronze Mirrors

Through expert interviews, researchers have found that there are four types of bronze mirror decoration layouts in the Song, Liao and Jin dynasties: symmetrical, radial, rotating and concentric. Due to the size limitations of the bronze mirrors themselves and the unique pattern, the rich and varied decorative language is arranged in this small space in an orderly manner, complex but not chaotic, dense but orderly, and the entire bronze mirror decoration design is complete and unified (Xiaomin, 2009).

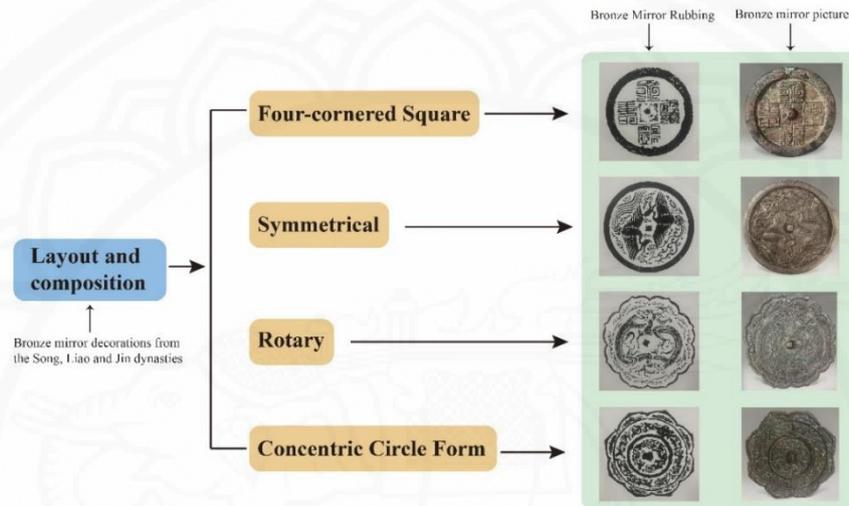


Figure 5 The Layout and Composition Design of the Patterns on the Bronze Mirrors of Song and Liao Dynasties.

Source: The researchers drew their own, 2024.

The bronze mirrors of the Song, Liao and Jin dynasties had rich themes, depicting many mythological stories, and auspicious beasts and immortal figures that were impossible to appear in real life. Correctly and reasonably adding interest to modern design can increase the affinity of design works, create a subtle emotional resonance between users and users, effectively adjust the atmosphere of life, and increase the added value of design works. As a creative tool, interest accounts for an increasing proportion with the improvement of human consciousness and civilization (Cammann, 1955).

People-oriented. The emergence of ancient Chinese bronze mirrors was mainly to facilitate people's lifestyle of face-to-face and sacrifice and burial, and had practical functions (Jinghan, 2023). In addition, the decorative patterns of bronze mirrors are also to meet people's thoughts, emotions and aesthetic needs. The artistic beauty of bronze mirrors comes from reality, reflecting the social life and needs of people in ancient China. The wide range of themes and the diversity of layouts reflect the characteristics of design for people. The bronze mirror decoration integrates the spiritual ideals, personal interests and inner feelings of people in the Song, Liao and Jin dynasties, which is people's self-expression and self-affirmation of society. Modern design must also return to people's real life, respect people's psychological feelings, be based on people's common, overall, and fundamental needs and interests, and express human emotions, so that it can be fundamentally based on modern society and accepted by the public.

As Arnold Hauser said, "The past is meaningless in its essence. Its meaning is only obtained from its connection with the present. Therefore, history must be constantly rewritten, and works of art must be constantly reinterpreted" (Cui, 2020). The exquisite and diverse bronze mirrors reflect the ancient superb craftsmanship and casting level,



and interpret the spiritual culture of China’s Song, Liao and Jin dynasties. However, today, people no longer use bronze mirrors to look at their faces. Only by finding contemporary design values that fit today’s society can it maintain long-term vitality and appeal. This has a certain inspirational significance for expanding the field of modern art decoration design, and also has a certain role in promoting the display of the charm of Chinese national culture to the outside world.

The Production Techniques and Ingredients of Bronze Mirrors in Different Periods

The production process of ancient Chinese bronze mirrors is a gradual development from simple to complex. Understanding the production process of bronze mirrors is very important for understanding the shape, decoration, and evolution characteristics of bronze mirrors in different dynasties. The production process of ancient Chinese bronze mirrors is very old, and can be traced back to the Shang and Zhou dynasties.

The alloy components of ancient Chinese bronze mirrors are mainly copper, tin, lead, zinc, etc. In the long historical period, the alloy composition of bronze mirrors is also different. The following table is a table of information on production techniques and ingredients of bronze mirrors in different periods compiled by researchers.

Table 3 Table of Information on Production Techniques and Ingredients of Bronze Mirrors in Different Periods

Historical Period	Shape	Mirror Body	Button	Ingredients	Techniques
Shang and Zhou Dynasties	Round	Nearly Flat or Slightly Convex, Thin	Arched, Semicircular, Rectangular	The copper, tin and lead content are high, but it is unstable and the tin content is high	The techniques are relatively simple, and most of them are plain mirrors. Bronze mirrors with animal patterns begin to appear
Warring States Period to Tang Dynasty	Round, Square	Nearly Flat or Slightly Convex, Thin, Often with Edges	Bow Button, Round Button, Square Button	Lead-containing high-tin bronze, the increase of tin makes the bronze mirror appear silvery and bright	The patterns are gorgeous and the craftsmanship is exquisite, gold and silver flat mirrors and mother-of-pearl mirrors
Song, Liao, and Jin Dynasties	Round, Square, Sunflower-shaped, Mirror with Handle, Rectangular, Heart-shaped, Shield-shaped, Bell-shaped	Flat or Slightly Convex, Thicker	Round, Square, Arch	The tin content is significantly reduced, and the proportion of lead, zinc and copper is significantly increased	During this period, craftsmen created special craft mirrors such as openwork mirrors, painted mirrors, mother-of-pearl mirrors, and flat mirrors using special techniques and materials
Yuan and Ming Dynasties	Round, Square, Diamond	Flat or Slightly Convex, Small in Shape	Round, Square, Arch,	The main copper mirrors are those with high zinc content, which are not very hard and have a yellowish mirror surface	The bronze mirror is made with rough craftsmanship, small in size, and with unclear patterns

Note: The researchers drew their own, 2025



Representative Decorative Patterns on Bronze Mirrors During the Song, Liao, and Jin Dynasties

Through field observation and literature research, researchers have classified and sorted out the patterns of bronze mirrors from the Song, Liao and Jin dynasties unearthed in Datong City, Shanxi Province, China. The following table summarizes the key bronze mirror patterns and differences of the three dynasties.

Table 4 Table of the Key Bronze Mirror Patterns and Differences of the Three Dynasties

Dynasty	Representative Bronze Mirror Names	Differences in Patterns
Song Dynasty	Diamond-shaped dragon mirror, single dragon mirror, double phoenix mirror, cloud dragon mirror, dragon and tiger mirror, auspicious beast grape mirror, flower and bird diamond-shaped mirror, figure viewing waterfall mirror, immortal turtle and crane longevity mirror, boy wearing flower mirror, swastika mirror, homely rich mirror, daylight mirror, poetry mirror, turtle and crane longevity mirror, arc pattern inscription mirror	Most bronze mirrors have animal patterns and inscriptions
Liao Dynasty	Mirror with Eight-curved Cloud Dragon Pattern and Mirror with Characters and Stories	The representative patterns of this period are less than those of the other two periods
Jin Dynasty	Double dragon mirror, four-nipple four-chi mirror, double fish pattern, flower pattern mirror, lotus pattern mirror, wild goose flying through flowers mirror, twined flower pattern mirror, double fish and mermaid pattern mirror, character story mirror with handle, Xu You and Chao Fu story mirror, Buffalo Moon Mirror, immortal crane longevity mirror	Most bronze mirrors have patterns of flowers, birds, and stories about people

Note: The researchers drew their own, 2025

Among them, animal patterns are mainly dragons, phoenixes, tigers, fish and other auspicious patterns, which show the pursuit of auspicious meanings during the Song, Liao and Jin dynasties. Flower and bird patterns are mainly lotus patterns, chrysanthemum patterns, twined flower patterns and other floral patterns, reflecting the aesthetic tendency of Central Plains culture. There are many flower and bird patterns and twined flower patterns in Jin Dynasty bronze mirrors, which are influenced by the cultural exchanges of the Silk Road. Character story patterns reflect people's social life scenes, folk culture and historical stories, and are of high value. Inscription patterns express people's beautiful yearning for family happiness and wealth during the Song, Liao and Jin dynasties, and auspicious inscriptions are common, such as "homely wealth".

During the field research at the Liao, Jin and Yuan National Integration Museum in Datong City, researchers conducted a detailed analysis and comparison of the decorative patterns of bronze mirrors from the Liao, Jin and Song dynasties. The researchers found that the decorative patterns of these bronze mirrors reflected a distinct northern ethnic style in the design of the patterns, with rough and majestic artistic characteristics. The composition of these decorative patterns emphasized rhythm and vitality, showing the nomadic culture's admiration for freedom and nature.

These bronze mirrors are not only artistic products under the social background of the time, but also have a unique charm in the expression of Chinese pattern art. They are also important material evidence for studying the culture and art of the Song, Liao and Jin dynasties.

Discussion

The Cultural and Design Value of Decorative Patterns on Bronze Mirrors During the Song, Liao and Jin Dynasties

Based on the analysis and discussion of expert consultation and interviews, experts generally believe that the decorative patterns of bronze mirrors in the Song, Liao and Jin dynasties not only carry rich cultural connotations, but also show a high artistic design value. In terms of cultural value, the patterns on bronze mirrors in the Song, Liao and Jin dynasties have strong characteristics of the times and cultural symbols. The bronze mirrors of the Song Dynasty mostly reflect the exquisiteness and literati temperament of the Central Plains culture. Its floral and plant patterns and religious symbols reflect the religious beliefs and literati sentiments of the society at that time. The Liao and Jin dynasties showed the influence of nomadic culture, and animal patterns and geometric abstract patterns showed the cultural style of the northern ethnic groups. In terms of design value, the composition of bronze mirror patterns pays attention to symmetry and refinement. The patterns of the Song Dynasty are mainly elegant and exquisite, while the Liao and Jin dynasties are more rough and powerful (Yue, 2024).

Compared with other research, this research further emphasizes the dual characteristics of cultural value and design value of decorative patterns on Song, Liao, and Jin bronze mirrors, and especially studies the comprehensive comparison of the three dynasties of Song, Liao, and Jin, while other research focuses more on the analysis of a single period.

Experts also emphasized that in the process of drawing on bronze mirror patterns, it is inevitable to face the problem of innovation. On the one hand, bronze mirror decoration provides us with rich themes and diverse forms of expression for reference, which does not mean that modern design should simply copy the original traditional decoration content to express national characteristics. Such “innovation” without novelty cannot attract the attention of contemporary people. On the other hand, the progress of modern technology and craftsmanship has a positive impact on innovation. Modern innovative bronze mirror patterns are combined with modern materials and craftsmanship to make innovative adjustments, which will give new life to traditional patterns. Modern design applications seek design inspiration from traditional Chinese bronze mirror patterns and extract design elements, making these works full of Chinese traditional flavor deeply loved by domestic and foreign consumers once they are launched. This phenomenon shows the international market value and design value of China’s traditional patterns. For example: The figure below shows that Chinese designers extracted elements from the curling grass pattern and grape pattern in the Chinese bronze mirror decorative pattern, combining traditional decorative patterns with modern jewelry craftsmanship to present artistic jewelry with modern aesthetics (Jing, 2020).



Figure 6 Modern Jewelry Design Examples with Bronze Mirror Patterns.

Source: Dissertations on CNKI, 2024.

When these ancient traditional cultures and patterns are combined with modern popular elements, modern jewelry appears in front of us with a new look. National culture and traditional culture are specific personalized



symbols formed by a country or nation in the course of historical development. This cultural symbol can appear in all areas of life and form a style with a local flavor.

The Influence of Different Social Backgrounds on the Design of Bronze Mirror Decoration Patterns

Researchers believe that social background played a crucial role in shaping the patterns of bronze mirrors in the Song, Liao and Jin dynasties.

Influence of Political and Social Systems: The centralized system and relatively stable social environment of the Song Dynasty made the patterns of bronze mirrors tend to be exquisite and complex, reflecting the aesthetic needs of the literati class and aristocrats. In contrast, the design of bronze mirrors in the Liao and Jin dynasties was more influenced by the nomadic society in the north, emphasizing patterns that symbolized strength and majesty (Weiliang, 2013).

Cultural Blending: Experts pointed out that the cultural blending of the Song, Liao and Jin periods significantly affected the design of bronze mirror patterns. For example, the bronze mirrors of the Liao and Jin dynasties were not only influenced by the Han culture of the Central Plains, but also reflected the cultural characteristics of the northern grassland peoples. The middle principle uses more detailed floral patterns.



Figure 7 Bronze Mirror with Floral Pattern, Liao Dynasty.

Source: Datong Museum, 2024.

Influence of Religion and Belief: Religious factors played an important role in the patterns of bronze mirrors in the Song, Liao and Jin dynasties, especially the Taoist and Buddhist symbols in the Song Dynasty. The mythological characters and animal patterns that appear in Liao and Jin bronze mirrors are often related to the primitive beliefs and totem worship of the northern peoples.



Figure 8 Song Dynasty Peach-shaped Mirror for Teaching Buddhism.

Source: Illustrated Dictionary of Bronze Mirrors from the Sui Dynasty to the Qing Dynasty, 2024.

The Historical Status of Decorative Patterns on Bronze Mirrors of Song, Liao, and Jin Dynasties

During the Song, Liao and Jin Dynasties in China, in the field of decorative patterns, the decorative patterns of the Song Dynasty were the mainstream and occupied an important historical position in the history of Chinese patterns. The decorative patterns of Liao and Jin in northern China also achieved relatively high achievements, which were a useful supplement to the mainstream decorative patterns, and their historical status should not be ignored. The historical status of the decorative patterns of bronze mirrors during the Song, Liao and Jin Dynasties



can be explained in two aspects. On the one hand, it is said that the decorative patterns of this period are a fusion of practical value and aesthetic value. The decorative patterns have evolved from classical to secular, and from the palace to the market, laying the foundation for the development of Chinese decorative patterns (Haixia, 2009).

Conclusion and Suggestions

The researchers used a combination of qualitative and quantitative methods, including literature analysis, questionnaire surveys and expert consultation. They analyzed the design and cultural value of bronze mirror decoration patterns during the Song, Liao and Jin dynasties from the perspectives of social background, cultural integration and artistic expression. We can clearly see that the bronze mirror decoration patterns during the Song, Liao, and Jin dynasties have profound cultural and design value, which profoundly reflects the social background of China at that time.

The researchers make the following suggestions for future research:

1. Strengthen interdisciplinary research and explore the multiple meanings of patterns. It is recommended to combine multidisciplinary research methods such as history, archaeology, art history, and sociology to conduct a more systematic and in-depth study of the cultural background, symbolic meaning, and social function of bronze mirror patterns in the Song, Liao, and Jin dynasties.

2. Strengthen the aesthetic analysis of patterns and explore the innovation of design elements. Because the subsequent task of this study is to study the innovative design practices of bronze mirror decorative patterns in the Song, Liao and Jin dynasties, researchers and experts recommend an in-depth analysis of the aesthetic characteristics of bronze mirror patterns in the Song, Liao and Jin dynasties, especially their composition methods, classification methods and innovative designs of decorative elements, to study how they reflect the aesthetic tendencies and artistic characteristics of the times.

3. Increase the research on contemporary design application cases of bronze mirror patterns from the Song, Liao and Jin dynasties. It is recommended to analyze the integration of traditional cultural elements in contemporary life by studying modern design cases of bronze mirror patterns. The form and spirit of ancient patterns can provide inspiration for contemporary design, play a role in inheritance and innovation in the cultural and creative industries, and promote the revival of traditional culture in modern society.

4. It is suggested that future research should conduct comparative analysis between Chinese bronze mirrors and bronze mirror art from other countries in the world, analyze the market trends of international art design, and broaden artistic horizons.

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The research methods and sampling procedures have been approved by the Human Research Ethics Committee of Silpakorn University. All research activities were conducted with the informed consent of the participants. This project has been approved by the Institutional Review Board (IRB) with certificate number: 0000910493.

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