




Archaeological Excavations of Ceramics and their Decorative Characteristics in the Tang and Song Dynasties Inspiring Modern Art Design

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ABSTRACT

In order to explore the archaeological excavation value of Tang and Song ceramics and the influence of their decorative characteristics on modern art design, this paper analyses the red pottery carved straw coffin in the Tang Dynasty and the peony and plum vase carved in the Song Dynasty. First, a handheld electron microscope (model AM-111, Guangdong) was used to measure the material, texture, and combined decorative effects of the ceramic. At the same time, a miniature pressure sensor (Allison-300, Guangdong) was used to test the pressure distribution of the pattern. Then, the decorative characteristics, implicit artistic connotation and artistic enlightenment of Tang and Song Dynasty ceramics are summarized. The results showed that the red pottery coffin contained a large amount of kaolin, FeO and other substances, and contained large particles of brownstone, indicating that the ceramics in the Tang and Song dynasties paid attention to the material selection of the embryo body and the workmanship was standardized. The texture of the blue-glazed peony plum vase is 1.55 mm~6.88 mm, and the enamel contains a small amount of CuSO₄, indicating that the ceramics of the Tang and Song dynasties were made of materials from the Western Regions to achieve blue dyeing of ceramics. The grass pattern of the specimen is short, curved and light, which not only has the delicate connotation of the Tang and Song dynasties, but also is consistent with the European sketch painting techniques. Moreover, the decorative pattern does not affect the gravity balance of ceramics, and its force is relatively balanced, indicating that European engineering content was introduced to the mainland in the Tang and Song dynasties, which had an impact on the balance of ceramic patterns. This shows that the material of Tang and Song ceramics was influenced by the Western Regions, the blue material was added, and the pattern was combined with sketching skills to match the length and short, and the balance between the embryo body and the pattern was realized, reflecting the cultural connotation and craftsmanship of the Tang and Song dynasties, and having an impact on modern art design.

Keywords: Tang and Song Dynasty Ceramics, Decorative Motifs Connotation, Archaeological Features, Patterns, Force, Sketches, Archaeological Value.

INTRODUCTION

In China, in the decoration of the Tang and Song dynasties (618~1279 AD), the plant decoration formed a unique style according to the history and culture of the time, among which the curly grass decoration was an excellent sample of the development level of decoration at that time. Curly grass decoration is a shining thing in ceramic decoration (Chang et al., 2021). Curly grass decoration began to appear on pottery from the Shang and Zhou dynasties (1600~1046 BC) and developed to maturity until the Tang and Song dynasties (618~1279 AD), which is still being inherited and innovated today. The curly grass decoration in Tang and Song dynasty ceramics is the flower of decorative art when plant decoration blooms in different historical and cultural backgrounds. To this day, the patterns of scrolls and grass are still inherited and innovated. After years of testing, the curly grass decoration is deeply loved by people (Cui, Zhu, Hu, & Chen, 2022), and it can be seen that the curly grass

decoration has a high market value and social value, and can meet the needs of market culture and social development. At present, the scroll pattern still continues and inherits the characteristics of the scroll pattern in the Tang and Song dynasties, which arouses the author's interest and thinking. Now the grass pattern is placed in a specific historical dynasty—the Tang and Song dynasties. Through the analysis and research of the composition, decorative parts and symbols of the Tang and Song dynasties, the stylistic characteristics of the Tang and Song dynasties were clarified. In order to dig deeper into the archaeological value of Tang and Song dynasty ceramics, the artistic connotation of curly grass decoration was studied (Guarde-Paz & Cheung Kwan-wai, 2022). This paper expounds on the connotation and characteristics of curly grass in Tang and Song dynasty ceramic decorations. Then, a microscope and a force tester are used to observe the texture and material of the decoration, as well as analyze the force. Finally, the characteristics and connotations of Tang and Song ceramics are summarized to provide enlightenment for modern decoration.

OVERVIEW OF CURLY GRASS DECORATION

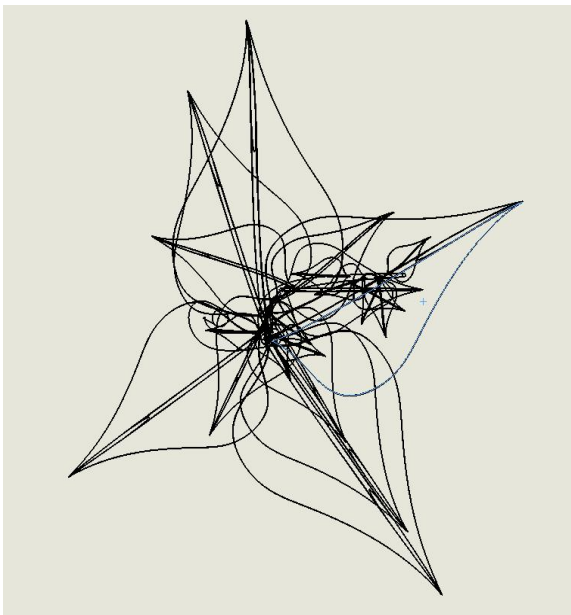
The Archaeological Value of Curly Grass Patterns in Chinese Ceramic Decoration

The curly grass pattern is mainly a perennial herb in South Africa, which was later introduced to Europe by Nordic navigators and appeared in European plant-themed ceramics. In the 14th~18th centuries in Central Europe, Asia and Southeast Asia, curly grass patterns also appeared successively. For example, the Austrian scholar "A Question of Style: Foundations of the History of Decorative Arts" found that Egypt was the first region to use the curly grass plant as a ceramic decoration (Huang, Freestone, Shi, & Qian, 2023). After the curly grass was introduced to China, it fused with local ivy and other grass patterns to form a curly pattern with the characteristics of Asian and African indicators. The grass pattern is a pattern formed in ancient Greece with the decorative concept of "tendrils", representing the meaning of happiness and health, and was later introduced to China by the Maritime Silk Road in the 15th~17th century. The curly grass pattern is considered the masterpiece of the Mycenaean of ancient Egypt, described in detail in the books of Austrian scholars, and later, under the influence of Western culture, to form a geographically representative regiment. Relatively speaking, the oriental curly grass pattern is fused with the arabesque grass introduced to China from Japan during the Tang dynasty, representing the characteristics of life and youth. From the perspective of the connotation of curly grass, the Western curly grass pattern symbolizes life and resurrection, while the meaning of the Chinese curly grass pattern depends on the combination of decorative patterns, with the crane representing health and the wishful luck representing prosperity (Lee, 2021). During the Tang and Song dynasties, the folk gave a simpler meaning to the curly grass, where the fusion of grapes and curly grass symbolized many future generations, and the fusion of peonies and curly grass symbolized prosperity and wealth (G. Li et al., 2023). Therefore, in the Tang and Song dynasties, curly grass had different meanings in different classes and regions, but it always represented a kind of yearning for the future. At present, curly grass has a variety of meanings in Tang and Song dynasty ceramic decorations, mainly because there are too few samples from archaeological excavations. Therefore, it is of great significance to dig deep into the artistic value of curly grass to analyze the meaning and characteristics of ceramic decorative patterns in the Tang and Song dynasties.

The Evolution of the Pattern of Curly Grass in the Tang and Song Dynasties

As a representative traditional decorative pattern, curly grass pattern has great research value. The authors 1901-2023 analyzed the current state of research on the pattern of curly grass during the year. Statistics on curly grass collected by China National Knowledge Infrastructure (CNKI) in China.

From 1901 to 2023, the relevant literature used "curly grass pattern" as the search term, and the total number of papers that met the research of "curly grass pattern" and "curly grass pattern" was 75. Below is the search analytics chart. In the analysis table, we can find that the research literature on curly grass patterns is all in Chinese. It can be seen that the grass type is only studied by domestic researchers, while the grass type is studied by international scholars. The author believes that the curly grass pattern belongs to the world model, including the Japanese arabesque pattern, the Arabian vine and the European tendrils, and the curly grass pattern refers more to the Chinese curly grass pattern, at the same time, we can make it clear that the current Chinese curly grass pattern, focusing on the field of application design and technical design, the research on the Chinese Tang dynasty and Song dynasty ceramic curly grass pattern is relatively rare. The richness of the decorative patterns of the Tang dynasty can be said to have reached unprecedented brilliance, and the curly grass pattern was also called "Tang Cao" in the Tang dynasty, forming a unique decorative style. Grass scroll decoration is a traditional ceramic decorative pattern. Because of the pattern skeleton of flowers and plants, it is named, as shown in [Figure 1](#).



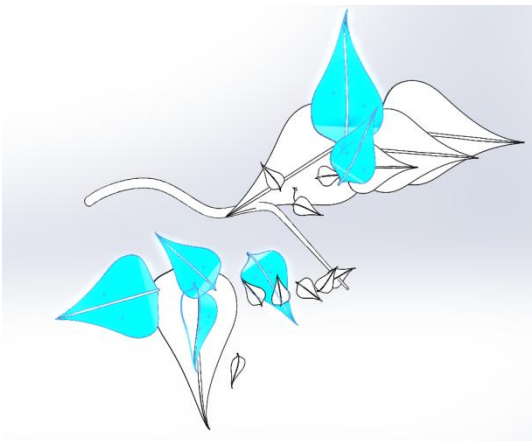
Three-dimensional Observation of Curly Grass



Curly Grass Side View

Figure 1. Grain Pattern Drawing of Dunhuang Scroll Grass in the Tang Dynasty

As can be seen from Figure 1, the curly grass pattern is still a pattern containing the image of a dragon, and the head has obvious leading characteristics, so it is also called "curly grass entwined branch dragon". The abundant variations of the head and the coils form a picture of uneven movement, uneven movement, echoing each other, and rich layers. The curly grass pattern was very popular in the Tang dynasty and was widely used during the Tang and Song dynasties (Z. Li, Doherty, & Hein, 2021). The specific decoration, it shows the beauty of form repetition, organization, rhythm and so on, forming the characteristics of beautiful shape, rigorous structure, smooth lines and gorgeous colors. The development and evolution of grass pattern has a long history in the world, but the development of grass pattern reached its peak in the Tang dynasty and Song dynasty in China, and grass pattern occupies an important position in grass pattern with its artistic beauty and unique artistic shape (Liang et al., 2023), the split development of the curly grass is shown in Figure 2.



Tang Dynasty Period



Song Dynasty Period

Figure 2. Three-dimensional Separation of Curly Grass

As can be seen from Figure 2, the curly grass as a whole is in a wave shape, distributed from large to small, showing a spiral shape. The curly grass of the Tang dynasty was basically the same as the European style, and it was refined in the later period, but the curly shape was the same, and the leaves were in the form of compound leaves, so as to enrich the theme. It can be seen that the depth of integration between the curly grass of the Tang dynasty and the Central Plains culture is shallow, and the deep integration in the later period will have the aesthetic display of ceramics and the endowment of artistic connotation.

The Formal Composition of the Curly Grass Decoration

The grass ornament is adorned on a continuous "S"-shaped wavy main stem and decorated with a variety of flowers, branches and leaves, or other decorative motifs to form patterned vines that are both independent and associated with the overall visual aesthetic. The main structure of the grass decoration is an "S" shaped wavy curve, attached to the most representative plants, flowers, or other decorative motifs. The whole often presents an "S" shaped main theme, and the "S" shape continues to extend, producing a continuous, reincarnated eternal artistic effect. This elastic curve is a main dynamic line, which can be expressed according to the needs of ceramic objects, it can be round, it can also be round, it can be round, it can be short, flexible and changeable, and the general trend forms a rhythmic, rolling and endless.

The decoration of ancient curly grass has been used in the decoration of ceramics, architecture, furniture, and utensils. In addition, in folk batik cloth, Buddhist decoration and carving, and bronze sacrificial vessels, it is also often decorated with curly grass patterns. However, the decoration of grass was the most brilliant in the Tang and Song dynasties, some were dominated by flowers, some were mainly leaves, and some were dominated by leaf stems. Later, this ceramic decorative pattern was transmitted to Japan and became known as "arabesque pattern", which had an impact on ancient Japanese decorative arts. Taking Tang and Song ceramics as an example, this paper discusses the characteristics of Tang and Song dynasty curly grass decoration from three aspects, as shown in Figure 3.

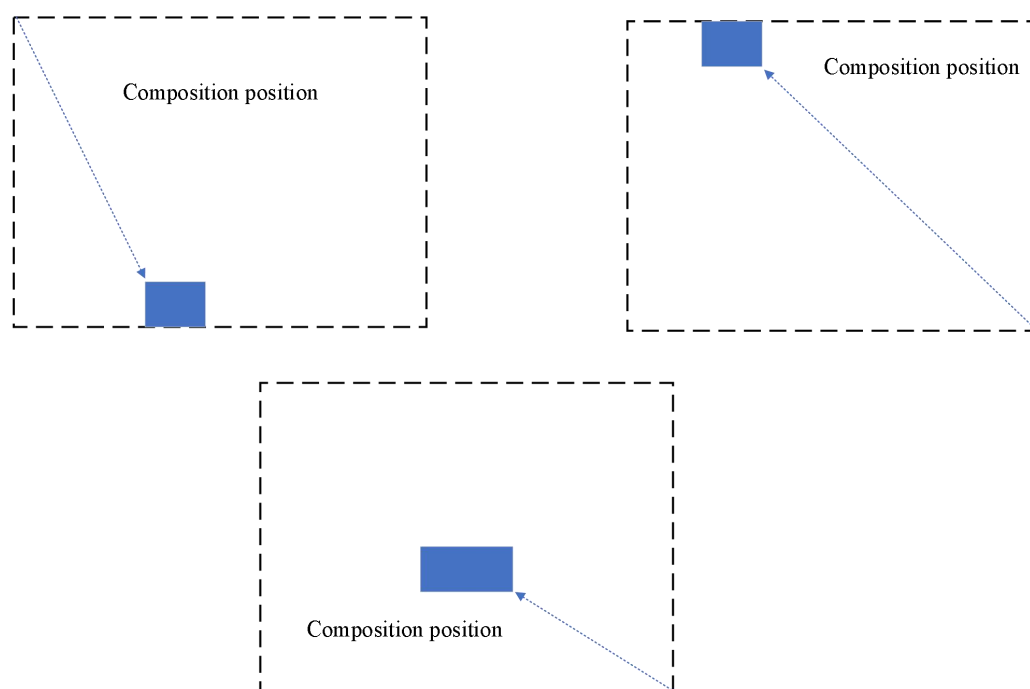


Figure 3. Composition Position of Curly Grass

As can be seen from Figure 3, the curly grass is based on the central axis to achieve the composition of the top, bottom and middle positions of the pattern, mainly to highlight the decorative role of the curly grass and set off the main pattern of the ceramic. Because the curly grass gives different meanings, the top composition is mainly matched with patterns such as cranes, the lower composition is mainly matched with patterns such as Ganoderma lucidum, and the middle is mainly with curly grass as the main line to highlight the decorative role of flowers and plants.

METHODOLOGY AND RESULTS

Research Methods

A handheld electron microscope (AM-111 model, Guangdong) and a miniature pressure sensor (Allison-300, Guangdong) were used as research tools. Among them, the observation factor of the microscope is 1 time and 1.25 times, and the measurement weight of the pressure sensor is 5 kg. The measurement index is the material, texture, combined decorative effect, and force balance of the ceramic, and the decorative characteristics are excavated and the artistic connotation is implied. Among them, the test sample is a 1:1 imitation, and there is no substantial

damage to the original cultural relics.

Ornamentation and Texture of Curly Grass

In the decoration of the past dynasties, a single pattern image often gives people a dull and monotonous feeling. However, the decoration of the Tang and Song grass scrolls is a rare exception, and when a single image appears, it gives a rich feeling. The Tang and Song dynasties constitute the rich crystallization of historical accumulation. Its abundance refers to the fact that from the Tang dynasty to the Tang and Song dynasties, the grass patterns were different in decoration and countless. But in the decoration, it is very simple, refers to the mother pattern is very simple, the structure of the law is almost the same, it is like the master's trick, the simple body pattern can also change the various shapes of flowers, the following observation of the Tang dynasty red pottery carving grass pottery coffin ornamentation, the pattern, the result is shown in Figure 4.

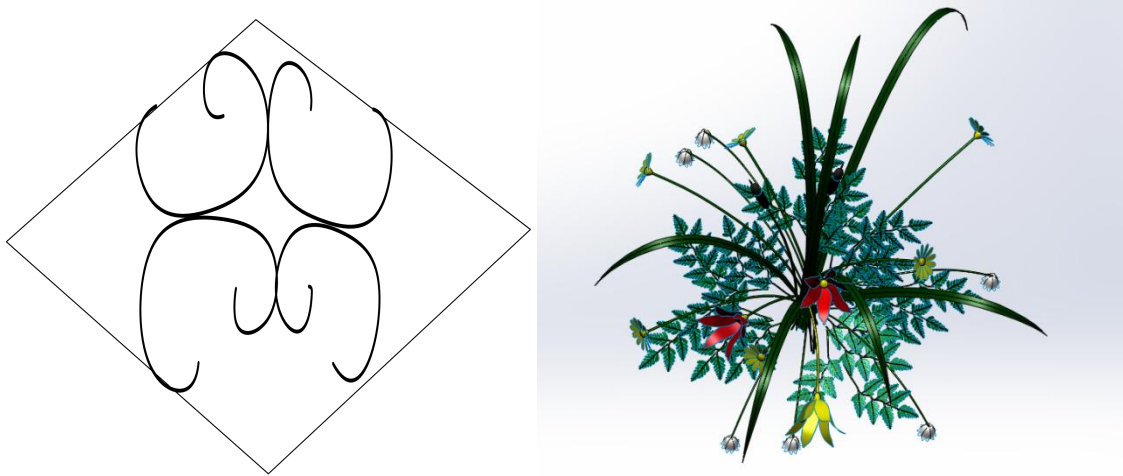


Figure 4. Illustration of a Curly Coffin Carved with Red Pottery

As can be seen from Figure 4, the curly grass pattern of the red pottery carved grass coffin is mainly arc-shaped, and the curves are symmetrical between the upper and lower, left and right, which is in line with the ornamental aesthetics of the Tang dynasty. Among them, the curly grass pattern is similar to the moire pattern of the Xia and Shang periods (2070~1046 BC), and contains the meaning of auspiciousness and ruyi, as shown in Figure 5.



Figure 5. Xiangyun Rubbings of Bronzes from the Shang and Zhou Dynasties

The auspicious clouds in Figure 5 are similar to the curly grass of the red pottery carved grass coffin, but there are also differences, mainly the symmetry of the grass up and down, left and right, while the auspicious clouds change in one direction, and the axis of symmetry is not vertical. In the terracotta carved curly coffin, the curly

grass pattern is used as the main decoration. In the decorative substrate, curly grass patterns are used, and in the technique, the decorative technique of carved flowers is used. In this square brick, rolling grass patterns cover the entire brick body. Due to the unique "S" shaped rhythmic beauty of the undulating grass pattern, it is interspersed with walking in the entire square brick body to form a rhythmic beauty. In addition, in the unique carving technique, the undulating grass pattern gives the pattern a dynamic beauty (Liu, Chen, & Zheng, 2023).

In the example above, the curly grass pattern, although a single image on the decoration, is connected in the same "S" shape, creating a continuous sense of movement. Therefore, although it is a single combination, the composition of the overall decorative unit pattern is very harmonious. It allows the square bricks to avoid the dull and monotonous decoration of a single decoration, and forms a rhythmic, dynamic, and energetic beauty under the decoration of curly grass decoration (D. Ma, Zhao, Jiang, Wang, & Luo., 2021). Allowing the audience to take this unique "S" shape during the viewing process produces a continuous and vivid visual viewing experience. At the same time, because it is the texture of the whole brick interface (H. Ma, Henderson, Evans, Ma, & Cui, 2021), the presentation of the full layout in the process of watching the Chinese style gives the audience a full visual experience, and because of its unique "S" shape, it will not give people a full form but a full shape, but there are not many of them, but there is a sense of rhythm and a full atmosphere, with a unique decorative beauty (Mo, Cao, Han, & Zheng, 2023).

Materials of Tang and Song Dynasty Ceramics

In the artistic effect of the combined image, the decoration of the Tang and Song dynasty curly grass also has its unique charm, and its charm is closely related to the pattern, and the material is also inseparable. The curly grass decoration developed in the Tang and Song dynasties, adding a new element to the single matrix image, the flower meaning, which became extremely free, rich, and complex, and the colors were more diverse, mainly cyan blue. The following is a microscopic observation of the blue glazed peony plum vase to observe its material composition, and the results are shown in Figure 6.



Figure 6. Observation of the Material of the Peony Plum Vase Carved by Blue Glaze

From the measurement results in Figure 6, it is found that the green glaze contains a large amount of FeO, CuSO₄ and other substances, which makes the green glaze appear cyan. Due to the different proportions of FeO and CuSO₄, the green glaze appears blue. From the observation in Figure 6, it is found that the peony plum vase carved with the green glaze in the Song dynasty is mainly made of kaolin, containing a large number of quartz components, and the crystal crystalline particles after firing are larger, and the expansion coefficient of the green glaze is changed, so that the circumference of the ice pattern is between 1.55 mm~6.88 mm. At the end of the Song dynasty (1200~1279 BC), with the rise of flower and bird painting in the Song dynasty, there was a direct relationship in the art of painting (Qi et al., 2022). Emperor Huizong of the Song dynasty, Zhao Ji, was himself a master of flower and bird painting, and he pursued the true reproduction of the natural form of flowers and birds. Subsequently, in the representation of curly grass decoration, we can see that in the Song dynasty, the

combination of curly grass decoration and other motifs appeared. There are many kinds of flower combinations, such as peonies, lotuses, group flowers, pomegranates, grapes and other gorgeous curly grasses, that is, the so-called "flower curly grass", "free curly grass" and so on. At this time, the grass is dominated by flowers, supplemented by vines, the flowers are full, the leaf veins are rotated, the form is complex and colorful, and the decorative effect is very high. It shows the rich and romantic imagination and creativity of the ancients. At the end of the Tang dynasty (850~907 BC), the red pottery carved curly grass pottery coffin, the pottery was clay red pottery, the pottery body was thick, and the surface was smooth. Longweng, Grau, oval wall, flat bottom, the observation results are shown in [Figure 7](#).

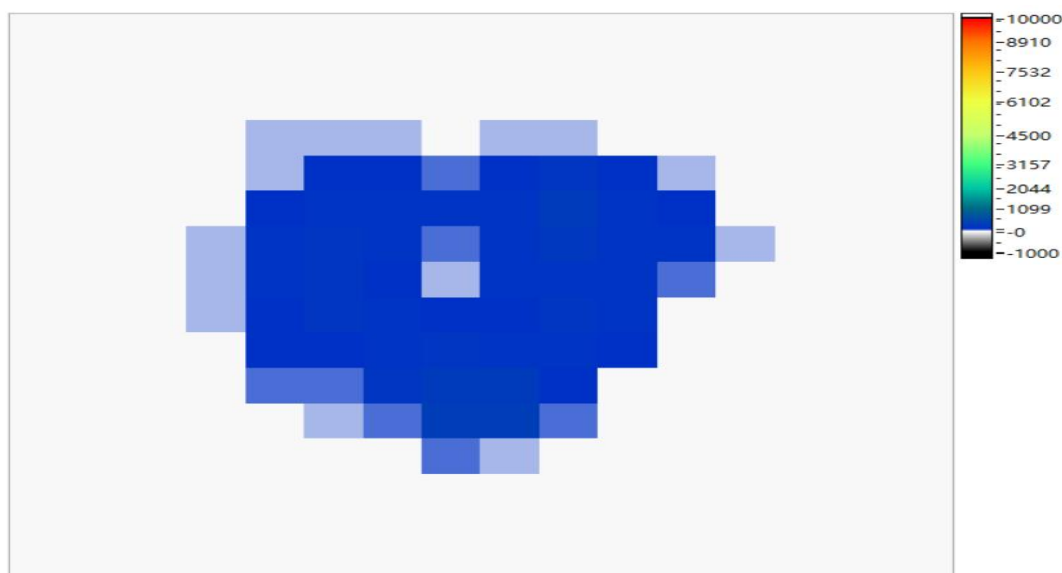


Figure 7. Observation of the Composition of the Red Pottery Carving Curly Grass Coffin

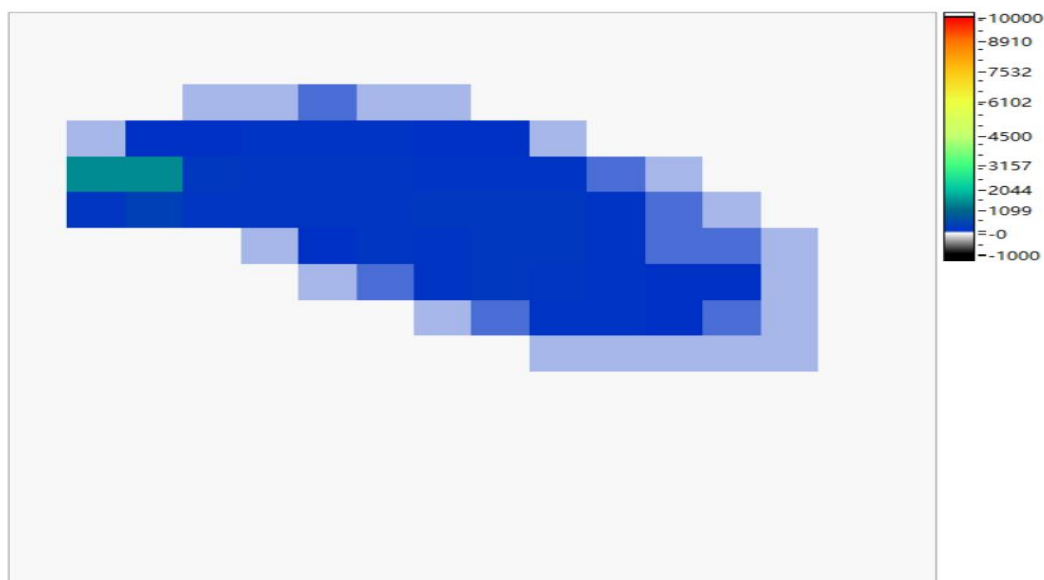
As can be seen from [Figure 7](#), the decorative effect of the curly grass pattern needs to be matched with the background color of the ceramic, so as to highlight the vitality of the grass, and the semantics are auspicious and vigorous. Therefore, the background color of ceramics in the Tang and Song dynasties was brown, and clay with high iron content was used as the embryo.

The Force of Tang and Song Dynasty Ceramics

The force balance of ceramics is one of the important criteria for porcelain decoration, and the force balance energy needs to be carefully calculated to complete. As the representatives of the curly grass decoration in the Tang and Song dynasties, the red pottery carved grass coffin and the blue glaze carved peony plum vase should be reasonable. To this end, the 5kg stress test was carried out on the red pottery carved curly grass coffin and the blue glaze carved peony plum vase, and the results are shown in [Figure 8](#).



Green Glazed Carved Peony Plum Vase



Terracotta Carved Grass Coffin

Figure 8. Stress on the Red Pottery Carved Grass Coffin and the Blue Glaze Carved Peony Plum Bottle

From the force analysis results of Figure 8, it can be seen that the force concentration of the red pottery carved curly grass pottery coffin and the blue glaze carved peony plum bottle is mainly concentrated in the center, and the surrounding force is less, indicating that the force concentration of Tang and Song ceramics is relatively stable. The analysis of the central force shows that there is no deviation in the central force, and the force in all directions is balanced, which shows that the curly grass decoration has no impact on the stability of the ceramics, and further confirms the superb decorative art of the Tang and Song dynasties. The compositions of the Tang and Song dynasties were freestyle and regular. The free flower shape is scattered, and the stem is a wave series. The regular flower shape is equidistant and the stem is a continuous shape. In the early Tang dynasty (618~720 BC), these two grasses themselves did not have the characteristics of wavy shapes, and they were also discontinuous, relying mainly on stems and vines. In order to enhance the sense of waves, the color treatment is mostly based on the shape of the wave edge of the stem and vine, which is divided into two different background colors, and the colors are connected to create a continuous sense of flow. In the middle of the Tang dynasty (720~800 BC), the morphology of curly grass leaves became larger and densely distributed. The freely undulating meadow tosses and turns, curls, and ends together, giving the feeling of a continuous wave current. The shape of the regular continuous grass is mostly a flat triangle, and the upper and lower phases are misaligned, and the wave rhythm is naturally formed between the flower shapes. The stems of the curly grass thread only play a role in the segmentation. With the development of the times, the composition of the late Tang and Song dynasties formed a

freer atmosphere, the regular grass was more orderly, and the wave rhythm was gradually smooth and orderly. Like a plum vase with curly grass, in this bottle decorated with curly grass, we can see that the ruling class of the Song dynasty favored the Taoism of "Qing, Xuan, Yuan, Qing, and Wuwei", advocating self-cultivation, simplicity, and simplicity. Therefore, in the ceramic glaze, the color in the bottle is the pursuit of the purity of one color, against the decoration of artificial algae. The soft and pure beauty of its glaze has reached an unprecedented peak! The very famous blue glaze in the bottle is between blue and green, containing a wisp of water, as if after the rain, the first ray of blue sky, exuding a pure and elegant moving soul. The rolled grass adopts the carving technique of flowers - the expression technique of yin carving, and under the decoration of the green glaze cap, it fits the bottle body with a unique rhythm, showing an elegant and light beauty.

THE INSPIRATION OF CERAMIC DECORATION TO MODERN ART IN THE TANG AND SONG DYNASTIES

According to the different positions of curly grass decoration, the artistic effect of curly grass decoration is analyzed, mainly auxiliary installations and theme decorations

Enhances the Ornamental of Curly Grass

Through the excavation of the decorative characteristics of Tang and Song dynasty ceramics, it is found that curly grass, as the main decorative pattern of Chinese ceramics in the 14th~17th century, can be fused with peony flowers, peony, *Ganoderma lucidum* and cranes and other patterns to form a decorative pattern that matches each other, and is wound around the ceramics to form an "S" shaped ring belt, and has a sense of rhythmic beauty, which can highlight the artistry of ceramic works, such as blessing, beauty, etc. The curly grass itself chooses its shape to form a rhythmic beauty that makes the ceramics seem to move. In this study, the white-brown lid jar of the Song Jizhou kiln is decorated with curly grass as the main line, and is decorated on the mouth, side wall, flat bottom, and lid of the can. In addition, the curly grass with different colors will also highlight solemnity and flexibility, and the outer wall is decorated with white and brown, and the main pattern of the body is curly grass. In this cylindrical vessel, a constantly turning curly grass pattern is used in the center of the vessel, which makes the vessels more closely combined in decoration and form. The undulating grass pattern is simple and smooth, natural and generous. Under the combination of brown glaze decoration and underglaze color, the simple characteristics of the undulating grass pattern decoration are vividly displayed, and the ceramics increase the beauty of the ceramic shape through the decoration of curly grass patterns and colors.

The Archaeological Connotation of the Fusion of Curly Grass with Other Motifs

In the archaeological excavation, it was found that the curly grass in the Song dynasty ceramics was dominated by unique "S" shaped sections, and the curly grass in the Tang dynasty was straighter, mainly used as an edge decoration, set off the main body, and integrated into the overall artistic effect, indicating that the curly grass in the Song dynasty has become a part of the ceramic decoration and integrated into the Central Plains culture. For example, in the peony pattern of square brick Tang curly grass, curly grass is matched with the peony pattern, although curly grass exists as the edge decoration of peony, the connotation of wealth and grace expressed is very prominent, and the decoration is a combination of square and circle, which is in line with the Chinese concept of heaven and earth. The circle is the theme of the peony pattern, because the grass pattern is leaf-shaped, it adopts a curved and beautiful form, and the role of the rounded and square corners to set off the main body is very harmonious, indicating that modern decoration can use curly grass as a decorative pattern to express different meanings. At the same time, because the "S" shape of the grass pattern contrasts with the center of the peony pattern, it plays the role of the visual center, highlighting the decorative art effect of the subject and enhancing the artistry of the ceramic. In the symbolic implication of decoration, the art of any nation is the epitome of his time. The Tang and Song dynasties were famous prosperous times in Chinese history. The Tang and Song dynasties reached an unprecedented peak in economy and politics, and it was in this period that the rolling grass pattern reached its peak. The Chinese ceramic art shows the tradition of the auspicious psychology of the Chinese people, especially in the Tang and Song dynasties, and the auspicious meaning expression of the rolling grass decoration can better reflect this feature.

Enhance the Cultural Connotation of Modern Art

In the Tang and Song dynasties, the combination of curly grass and flowers is more, and the combination of flowers with the strongest symbolic meaning of curly grass is to combine the crane of wealth and wealth to express the meaning of wealth and auspiciousness, and the symbol of pomegranate to express people's hope for the future at that time, as well as the symbol of auspiciousness. Longevity chrysanthemum A decorative bottle that symbolizes longevity and other Song dynasty peony scrolls. In the Tang dynasty ceramic decoration, a three-section decoration was adopted. The first floor of the planters is decorated with a separate scroll pattern. In the

main decoration, the peony scroll is the main decoration, and the lower layer is decorated with lotus flowers. In Songti ceramic decoration, the combination of curly grass and other patterns is already very close, and the decoration is also very perfect. In a symbolic sense, the curly grass itself does not have much meaning, and when combined with other motifs, its decoration expresses an expectation, while the crane in the center reflects the ancient people's expectations for longevity and wealth. Moreover, the lotus flower decoration blends with curly grass to express the Buddhist mood of seeking purity and happiness. From the Tang and Song dynasties, curly grass played an important role, in expressing people's expectations and hopes for life, so modern art design should be based on shapes, and patterns for curly grass matching.

CONCLUSION

The curly grass decoration in Tang and Song ceramics has distinctive characteristics and has been greatly developed in the Tang and Song dynasties (618~1279 AD). The vegetal pattern – the rolled curly grass began to dominate and had a profound influence on later decorations. In this paper, it is found through microscope and pressure sensor tests that the material of Tang and Song ceramics is mainly kaolin, and contains a high proportion of quartz, resulting in a large diameter of crystal particles in ceramics. Among them, the blue glazed peony plum vase contains FeO and CuSO₄ components, which are blue-blue, and the circumference of the ice pattern varies greatly. The red pottery carved grass coffin contains large particles of brownstone, the surface is rough, but the texture is hard and practical. The force test of Tang and Song dynasty ceramics shows that the curly grass decoration does not affect the balance of the ceramics, and the force is relatively concentrated, mainly concentrated in the center, and presents a rational balance. The ceramic patterns of the Tang and Song dynasties are similar to those of the Xia and Shang dynasties (2070~1046 BC), and contain auspicious and wishful meanings. There are also limitations in this study, mainly because it is difficult to obtain the research objects, and there are few objective data on the blue glaze carved peony plum vase and the red pottery carved curly grass pottery coffin, and the relevant data information will be enriched in the future.

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