




# The Beauty of Han and Tang Dynasty Terracotta Figurines Sculptures, the Promotion of Plastic Arts and the Innovative Culture of Contemporary Ceramics

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**Citation:** Xu, Z. (2024). The Beauty of Han and Tang Dynasty Terracotta Figurines Sculptures, the Promotion of Plastic Arts and the Innovative Culture of Contemporary Ceramics. *Mediterranean Archaeology and Archaeometry*, 24(3), 191–205.

[10.5281/zenodo.13626924](https://doi.org/10.5281/zenodo.13626924)

## ARTICLE INFO

Received: 03 Apr 2024

Accepted: 13 May 2024

## ABSTRACT

It is of great significance to dig deep into the charm and modeling value of Han and Tang Dynasty pottery figurines to promote the innovation of contemporary ceramic art. Therefore, on the basis of collecting domestic and foreign literature, Panasonic HD microscope 72x, 400K type (Toshiba, Japan, observation range of 0.5~5 times, presentation form: 3D) and infrared scanner 50~200°C, 2392 type (Guangdong, Guangdong, temperature range: 0~400 degrees Celsius) are used. Terracotta Warriors and Horses were measured and analyzed for their colors and shapes, materials and craftsmanship for their production, and cultural heritage from the Han and Tang dynasties. The results showed that the materials of the Han and Tang terracotta figurines were kaolin, quartz, long white stone powder, etc., and the painted dyes were earth red (Fe<sub>2</sub>O<sub>3</sub>) and stone blue (CuCO<sub>3</sub> · Cu(OH)<sub>2</sub>), Pb<sub>3</sub>O<sub>4</sub>, Cu<sub>2</sub>(OH)<sub>3</sub>Cl, goethite (FeOOH) and carbon black, etc.; In terms of shape, triangles and ovals are the basic components, and the overall design is streamlined; The Han and Tang terracotta figurines fully integrate the connotations of Western culture, Central Asian culture and local Confucian culture, and have both the rough artistic characteristics of the Han Dynasty and the soft beauty of the Tang Dynasty. Therefore, the sculpture of Han and Tang Dynasty terracotta figurines has the role of promoting and promoting the creation of modern pottery, and can realize the development of innovative culture.

**Keywords:** Han and Tang Dynasty Terracotta Figurines Sculpture, Art, Modeling, Charm and Beauty, Innovation.

## INTRODUCTION

The Han and Tang dynasties (202 BC~907 AD) were two prosperous periods in Chinese history, during which terracotta figurines and sculptures were constantly developed, not only in terms of artistic achievements and development to a very mature level, but also in terms of artistic expression and cultural connotation, reflecting great characteristics (Burdajewicz & Lagarce-Othman, 2022; Doman & Coutros, 2023). The sculptures of the Han Dynasty (202 BC~220 AD) terracotta figurines are very finely shaped, with vivid expressions and rich details of the costumes, reflecting the folk customs and aesthetic style of the Han Dynasty society. The Tang Dynasty (618~907 AD) gave birth to a variety of wonderful terracotta figurines because of its relatively open and tolerant society and a good cultural atmosphere. Among them, Tang Sancai has become a highly eye-catching skill, with bright colors (Deglin et al., 2023; Forte & Miniaci, 2023), gorgeous decorations, and graceful and luxurious styles, and enjoys a high reputation all over the world. In the history of Chinese culture and art, the sculptures of Han and Tang Dynasty terracotta figurines are not only valuable materials for the study of ancient Chinese social forms, history, religious beliefs, and aesthetic concepts, but also a key component in the development of ancient Chinese technology, crafts (Dewan, 2023; Garfinkel & Krulwich, 2023), and art. The Han and Tang Dynasty

terracotta figurines have witnessed the entire evolution of ancient Chinese clay crafts. Moreover, during the Han and Tang dynasties (202 BC~907 AD), ceramic sculpture artworks also showed the Chinese nation's unique aesthetic pursuit and cultural self-confidence to a certain extent. In the art history of Chinese terracotta figurines and the history of world art, the sculptures of Han and Tang terracotta figurines have a very high status. Influenced by social culture and aesthetic concepts, philosophical thoughts, and religious concepts, terracotta figurines and sculptures have multiple artistic expressions, wonderful cultural connotations, and profound artistic heritage, and the research on Han and Tang terracotta figurines sculptures is constantly deepening. First of all, the collection of Han and Tang Dynasty terracotta figurines' sculpture charm and beauty is mainly manifested in the shape and detail depiction, spiritual temperament and emotional expression, cultural connotation and characteristics of the times. It is classified according to the characteristics of plastic arts, and in form, line, structure, etc. Then, with the help of modern measuring equipment, the technical analysis of the Han and Tang terracotta figurines sculptures was carried out to study their cultural heritage, modeling and other characteristics, and to explore the sources of inspiration. Han and Tang Dynasty terracotta figurines sculpture is a very important part, Han and Tang Dynasty terracotta figurines sculpture has many advantages, such as its charm beauty, plastic art characteristics, etc., are extremely eye-catching advantages, through the Han and Tang Dynasty terracotta figurines sculpture of the charm of the beauty (Fischer et al., 2022), plastic art to carry out research, and analyze and discuss its role in promoting contemporary ceramic innovation culture. Finally, the characteristics of color, dye, and shape of Han and Tang terracotta figurines are analyzed, and sublimated into theories, and the analysis has a good role in promoting the innovation culture of contemporary ceramic art, for example, in terms of pattern creation and modeling design, Han and Tang terracotta figurines sculptures can provide inspiration for the design of contemporary ceramic designers.

## METHODOLOGY

### Research Methodology

The literature at home and abroad was collected on CNKI and WOS websites, and classified from the aspects of charm, modeling and design to form a theoretical basis. Then, a high-definition microscope (Toshiba, Japan, observation range of 0.5~5 times, presentation form: 3D), infrared scanner (Guangdong, Guangdong, temperature range: 0~400 degrees Celsius), infrared measuring instrument (Guangdong, Dongguan, measurement thickness: 0~1cm). The measurement indicators are: dye color, line modeling, production material, color thickness, and Han and Tang cultural heritage. The measured sample is a 1:1 imitation, and the literature is collected as public information, so the analysis process is not controversial.

## RESULTS

### Terracotta Figurines Color

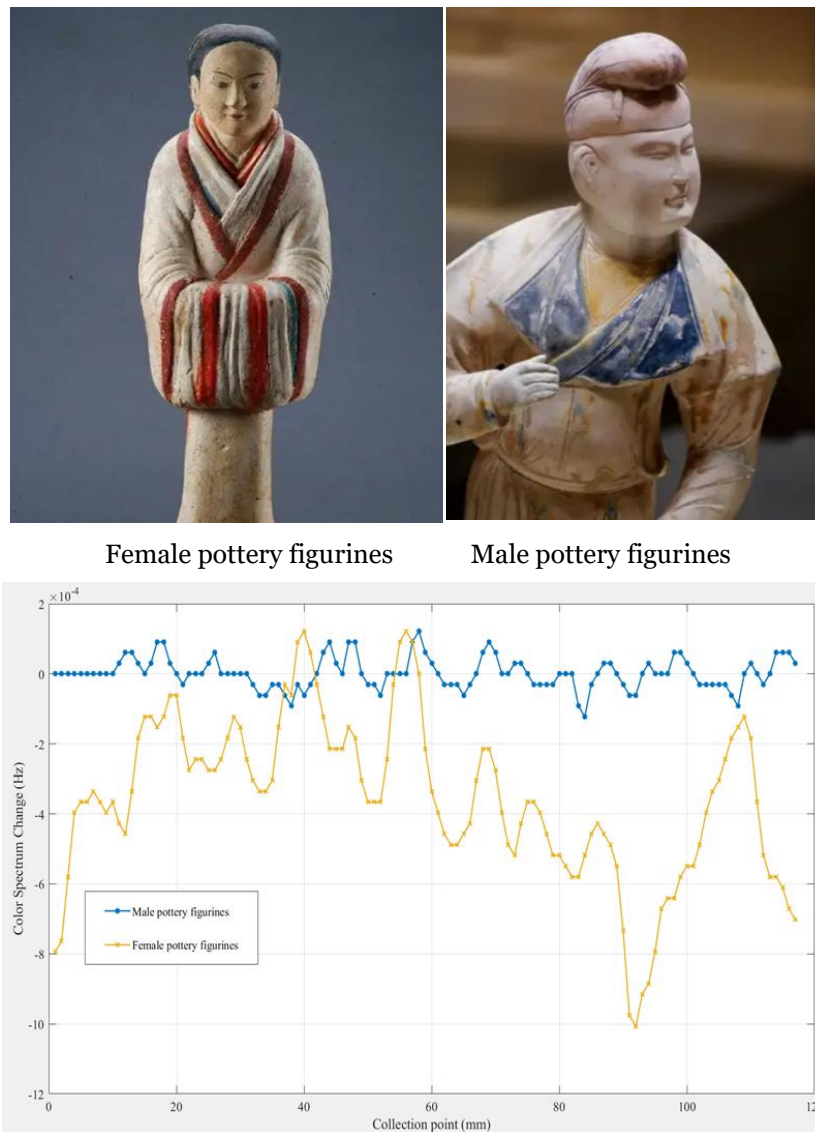
The results of comparing the color and composition of the dyes of the Han and Tang figurines are shown in Table 1.

Table 1. Color Comparison of Han and Tang Terracotta Figurines

Dynasty	Ingredient	Test area	Dye thickness	Whether it is a composite staining or not	chroma
Han dynasty tang dynasty	Fe <sub>2</sub> O <sub>3</sub>	2~3m <sup>2</sup>	2~4mm	not	20~30%
Han dynasty tang dynasty	(Fe <sub>2</sub> O <sub>3</sub> ) (CuCO <sub>3</sub> · I'm not afraid to be afraid of it. Cu <sub>2</sub> (OH) <sub>3</sub> Cl)	2~3m <sup>2</sup>	5~8mm	be	25~50%

From the comparison in Table 1, it can be seen that the color of the terracotta figurines in the Han Dynasty is single, mainly red and black, while the color of the terracotta figurines in the Tang Dynasty increases the color of stone blue (CuCO<sub>3</sub> · Cu(OH)<sub>2</sub>), lead dan (Pb<sub>3</sub>O<sub>4</sub>), and chrysorite (Cu<sub>2</sub>(OH)<sub>3</sub>Cl) make the terracotta figurines appear blue. Under the test area of 2~3m<sup>2</sup>, the dye thickness of the Han Dynasty (202 BC~220 AD) is thinner, which is 2~4mm, and that of the Tang Dynasty terracotta figurines is 5~8mm. Due to the Silk Road during the Tang Dynasty (618~907 AD), trade exchanges with Eastern European and Central Asian countries led to the

enrichment of its dye types, and many composite dyes appeared, especially blue, and the chromaticity also increased significantly. The color of the Han and Tang terracotta figurines sculptures has a certain artistic value, and through unique colors, such as cyan and blue, as well as exquisite technical expressions, it shows the profound cultural heritage of the Han and Tang dynasties, representing the highest artistic achievement of Chinese historical terracotta figurines sculpture. The color of the Han and Tang Dynasty terracotta figurines has become the biggest highlight in ancient Chinese sculpture art, and Tang Sancai, Han Dynasty red, etc., as shown in Figure 1.



Spectral analysis of the color of terracotta figurines  
**Figure 1.** The Color of the Han and Tang Terracotta Figurines

The color contrast in Figure 1 shows that the color fusion of the Han Dynasty terracotta figurines sculpture is extremely harmonious, and the color of the Han and Tang dynasties is mainly simple, and the color fusion is very delicate and natural. At the same time, the Han Dynasty (202 BC~220 AD) highly respected Confucian philosophy, so that the painting of Han Dynasty terracotta figurines sculptures was influenced to a certain extent. Compared with the pottery figurines of the Han Dynasty, the sculptures of the Tang Dynasty are relatively rich in color and more artistic. Tang Dynasty terracotta sculptures attach great importance to the depiction of human colors, especially cyan and blue, so their figures are often fuller, more vivid (Fowler et al., 2022; Jeremias & Rönnlund, 2023), and more three-dimensional. In addition, the color of the Tang Dynasty terracotta figurines sculpture also has a fine depiction of the costumes and French details of the characters, for example, from the color of some female figures' clothing, you can see their identity and status, to analyze the environment of the characters

through the difference in clothing color matching. In addition, compared with the Han Dynasty terracotta sculptures, the colors of the Tang Dynasty terracotta figurines are religious elements, such as Buddhist red and Taoist black, which are common colors in sculptures. In short, the color of the pottery figurines of the Han and Tang dynasties reflects the social culture and aesthetic taste of the time, and provides valuable color reference materials for the creation of pottery in later generations(He et al., 2023; Khries & Al-Gonmeen, 2024). The Han and Tang Dynasty terracotta figurines also had different color painting techniques, so there were certain differences in coatings, as shown in Figure 2.



Figure 2. Color Coating of Terracotta Figurines from the Han and Tang Dynasties

As can be seen from Figure 2, the Han and Tang Dynasty terracotta figurines are limited by the background of the times, and the thickness of the color painting is also different. The color expression of the Han Dynasty terracotta figurines sculpture is simple, which can reflect the social hierarchy, professional characteristics, and aesthetic concepts. The production of terracotta figurines in the Tang Dynasty paid special attention to the display of grade differences, and expressed loyalty to the terracotta figurines through different painting thicknesses. In response to the observations in Figure 2, the color data was recorded and the colors in the terracotta figurines were analyzed, and the results shown in Table 2 were obtained.

Table 2. Use of Color for Different Characters

	The median of the color number				Different colors are used at different frequencies
	Brown (n=1).	Black (n=4).	Red (n=2).	Purple (n=2).	
man	1.667	2.968	1.316	2.371	7.200
female	12.814	10.799	12.296	10.639	6.000
Waiter	11.667	12.969	11.315	12.371	7.200
Merchants	1.016	0.997	1.009	0.996	5.924
soldier	0.869	2.481	2.406	4.030	3.833
old man	3.717	2.432	1.529	3.983	2.300

As can be seen from Table 2, the use of blue is higher in males, and the use of brown and red is higher in females. The comprehensive color utilization rate of waiters and the elderly is high, mainly because of the diverse characteristics of the characters and the differences in occupations. Soldiers and merchants use less color, and purple is relatively high, mainly to highlight the solemnity and majesty of soldiers. On the whole, the use of different colors is mainly based on occupations and character characteristics. Among them, red and brown are used more, mainly because the color materials are limited, mainly iron oxide and ferric oxide.

For example, the figurines of high-ranking officials and generals are varied in color and have thicker coatings.

Han Dynasty terracotta figurines generally wore ornate robes and high crowns, so the overall color painting was thinner. Tang Dynasty terracotta figurines were socially hierarchical, with costumes being the most ornate and requiring multiple coatings to show off the color effect. For example, the terracotta figurines of Tang Dynasty generals wore armor and held weapons, with a thicker color coating to make them easier to distinguish briefly. Han and Tang Dynasty terracotta figurines will show different colors and coatings according to their professional characteristics (Imtiaz et al., 2023; Kodas et al., 2022). For example, civil official terracotta figurines are generally holding scrolls, and they look gentle and elegant, with indifferent expressions, and the colors are softer, mainly orange and light blue, and the coating is 1~2 layers. Military attaché terracotta figurines are generally armed with weapons, and their mental outlook is very vibrant, and they are full of majesty, and they will be mainly bright red, pure blue and yellow, and the coating is about 2~4 layers. The Han and Tang Dynasty terracotta figurines also reflect the differences of the times to a certain extent, for example, the shape of the Han Dynasty terracotta figurines is extremely simple, and its lines are simple and smooth, which can highlight the characteristics of the north. The Tang Dynasty terracotta figurines are obviously very gorgeous and rounded, indicating that the south pays attention to the display of delicate style (Incordino, 2022; Li et al., 2023). Fourth, the historical changes in aesthetic concepts. The image shaping of Han and Tang terracotta figurines sculptures can reflect the historical changes of the aesthetic concepts of the ancients. For example, the sculptures of terracotta figurines in the Han Dynasty have a strong sense of realism, and the artist strives for a realistic restoration of the figures. Tang Dynasty terracotta sculpture attaches great importance to the embodiment of charm, and Tang Dynasty terracotta sculpture artists often use exaggerated techniques to show the characters' psychological state and spiritual outlook (Laciak et al., 2023; Ren et al., 2023). It can be seen that the image shaping and character expression techniques of the Han and Tang Dynasty terracotta figurines sculptures can reflect their plastic art characteristics, and they pay attention to the display of social hierarchy and occupational characteristics, regional styles, aesthetic concepts, etc., and can recognize and understand the Han and Tang dynasties (202 BC~907 AD).history, culture and social outlook, and provide valuable information for this. The color of the Han and Tang Dynasty terracotta figurines sculptures shows the charm of Chinese cultural classic art with refined, distinctive shapes, excellent expressiveness, and colorful cultural symbols. The aesthetic principles followed by the color of the Han Dynasty terracotta figurines were to pay attention to simplicity and symmetry and to display social order and ritual culture. The Tang Dynasty terracotta figurines and sculptures paid full attention to the characteristics and individualization of the shape, paid attention to the capture of the dynamic beauty of the figures and the gorgeous characteristics of the costumes, and liked to show new visual effects through rich and gorgeous colors.

### Shapes and Lines of Terracotta Figurines

Comparing the shape of the Han and Tang Dynasty terracotta figurines, it will be found that they are mainly streamlined, and the expression is full, as shown in [Figure 3](#).



Soldier



Maid

Figure 3. The Expression of the Han and Tang Terracotta Figurines

Through the comparison of the terracotta figurines in Figure 3, it can be seen that there are great similarities between the Han and Tang terracotta figurines and the differences between men and women are mainly identified by color and outline, and they tend to be streamlined, making the expression fuller and highlighting a sense of joy and joy. In addition, the Han Dynasty terracotta figurines are more coarse (MacLellan & Triadan, 2023; Roig et al., 2023), but the Tang Dynasty terracotta figurines present a small feeling in terms of eyes, nose and mouth to highlight their gentleness, so the Tang Dynasty terracotta figurines have both the culture of the Western Regions and the Central Plains, which is the sublimation of the Han Dynasty terracotta figurines, highlighting the characteristics of a multicultural integration. The beauty of the Han and Tang Dynasty terracotta figurines lies in the vividness and image of the characters. In addition, the charm and beauty of the Han and Tang Dynasty terracotta figurines sculptures is also reflected in their vivid grasp of the spiritual temperament and emotional state of the characters (Menelaou & Kouka, 2022; Wang et al., 2022). For example, the sculptures of the soldiers are usually very resolute and calm, while the spiritual temperament of the female figurines is extremely gentle and subtle. At the same time, the emotional expression of the Han Dynasty terracotta figurines sculptures is also very detailed, for example, the stern state of the soldier figurines sculptures when they are on guard, which can show the soldiers' determination to fight and the seriousness of strict discipline. Secondly, the Tang Dynasty terracotta figurines are extremely diverse, including court ladies and soldiers, foreign envoys, Tang Dynasty ministers, etc. Each character is portrayed vividly, and the mental outlook and emotional characteristics of the characters can be fully revealed. For example, the portrayal of the ministers of the Tang Dynasty can usually show their grandeur and grandeur and rigor as important weapons of the state (Oggiano, 2022; Zhuravlev et al., 2022). The portrayal of ordinary court ladies attaches importance to their ceremonial postures and quiet and beautiful facial features, so as to highlight the delicacy of the characters. In addition, the Han and Tang terracotta figurines are composed of triangles and ovals, and the specific results are shown in Figure 4.



Body Contour



Facial Expressions

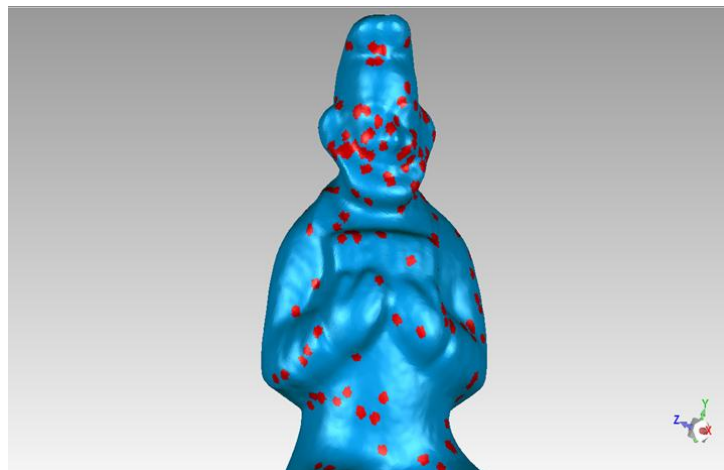
Figure 4. Compositional characteristics of Han and Tang Terracotta Figurines

Men mainly use triangles and large arc ovals as the main lines for delineation, while women mainly use small triangles and small arc ovals. The male facial contour is concave oval, presenting a large triangle and a large oval, but the body contour has a small triangle and a small oval, showing a sharp contrast. Comparatively speaking, women's compositions are the opposite of men's, presenting a striking contrast. The sculptures of the Han and Tang dynasties are generally very delicate in their appearance and based on this, the figures in the sculptures of the Han and Tang dynasties are often extremely realistic, and the details are also extremely vivid. In terms of the proportions of the figures, the artist is extremely precise and is able to depict the faces and bodies of the figures in great detail. The depiction of the Han Dynasty terracotta figurines sculpture is extremely realistic (Özer et al., 2022; Sherratt, 2022), and the depiction of details is also extremely particular, it can be seen that the folds in the costumes of the characters of the Han Dynasty terracotta figurines sculpture appear very clear, and the hair ornaments of the characters have superior line beauty, and the ornaments on the utensils are extremely fine, which can reflect the life insight of the Han Dynasty terracotta figurines sculpture artists, and reflect their extremely exquisite skills. Secondly, compared with the pottery sculptures of the Han Dynasty, the Tang Dynasty terracotta figurines paid more attention to exaggerated and stylized images. In other words, the artists of the Tang Dynasty terracotta figurines liked to use exaggerated artistic techniques to express the tension of the human figure, while in terms of form, the Han Dynasty terracotta sculptures attached great importance to simplicity and symmetry. For example, the lines of the Han Dynasty terracotta figurines are simple and clear, and there are basically no complicated decorations, and artists often hope to outline the various forms of the figures with very few lines. In this way, the Han Dynasty terracotta figurines show a very unpretentious beauty, and at the same time lose their elegance. Symmetry is also very important in the design of Han Dynasty terracotta sculptures (Pawlowska & Shillito, 2022; Wang et al., 2022). For example, whether the figure is standing or sitting, it can show a certain sense of harmony and balance and a sense of beauty. The symmetry and harmony of the Han Dynasty terracotta sculpture are manifested not only in the shape of the figures but also in its overall layout and various details and decorations. Second, in terms of lines, the lines of Han Dynasty terracotta sculptures tend to be extremely smooth and concise. In the sculptures of the Han Dynasty terracotta figurines, whether it is the texture of the figure's clothing, or other details of the figure, such as the hair bun and gestures, etc., all show the simplicity and power of the lines. During the Han Dynasty (202 BC~220 AD), artists paid attention to the refinement of lines, and based on this, they depicted the level of detail of the terracotta sculptures to make the whole work vivid and concise. In this way, the image of the character is highlighted, resulting in an extremely realistic, refreshing, and clean effect. Third, the structure is balanced and stable (Ruiz, 2023; Solongo et al., 2023). The structural design of the Han Dynasty terracotta figurines attaches great importance to balance and stability, and the image of the figure also pays attention to the expression of composure and solemn posture. The artists of the Han Dynasty terracotta figurines would carefully arrange the proportions and layout between the various parts when creating to ensure the sculpture's beauty and stability. Even in a dynamic scene, terracotta figurines can maintain a certain sense of balance under clever design. Balance and stability represent the social order and values of the time;

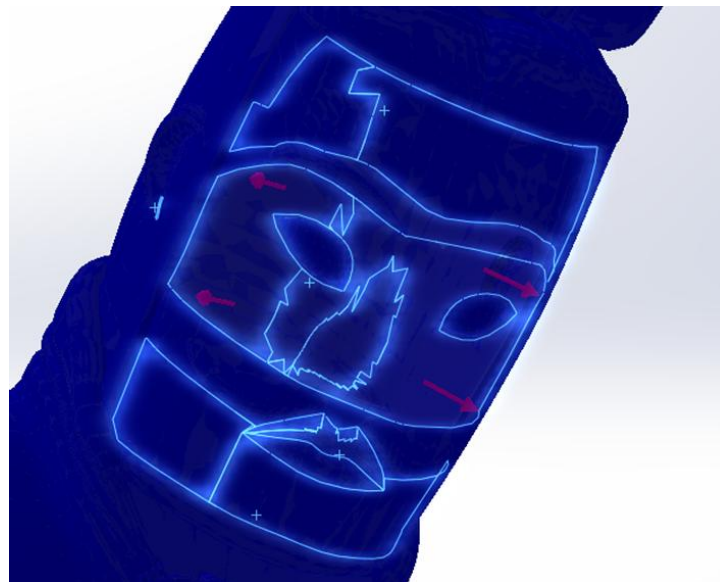
### The Shaping of the Charm of the Han and Tang Terracotta Figurines

The Han Dynasty terracotta figurines are rough and mighty, and the Tang Dynasty terracotta figurines are delicate and have good temperament, so there are characteristics of internal and external fusion between the two, and the use of 3D imaging technology found that the Han and Tang Dynasty terracotta figurines have a lot of

fusion expenditures, and the specific results are shown in Figure 5.



3D scan results



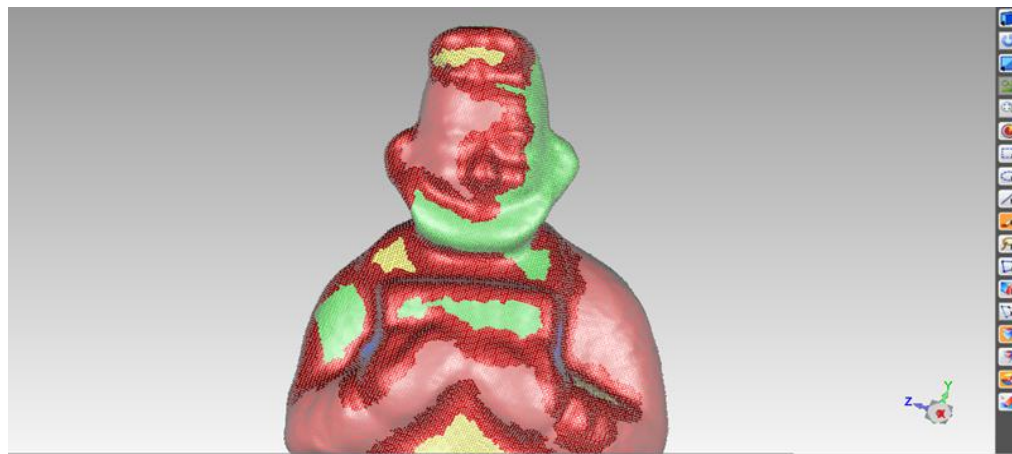
Facial feature delineation

Figure 5. Protruding Points of Terracotta Figurines from the Tang Dynasty

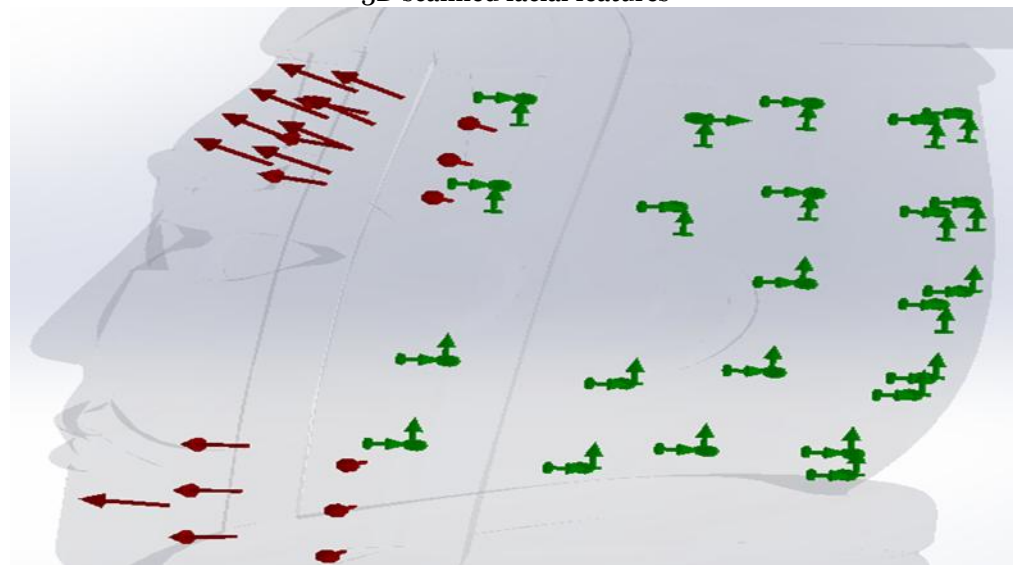
Through 3D presentation, it is found that there are many protruding points in the Tang Dynasty terracotta figurines, and the protruding points present an overall symmetry, outlining the outline of the terracotta figurines, indicating that the Tang Dynasty terracotta figurines pay great attention to the construction of the outline, which is similar to the Western drawing technology. The facial expression is prominent among them, and the overall outline is even more obvious. However, the expression and color of the Han and Tang terracotta figurines are single, starkly contrasting the scanning results. Therefore, the Han and Tang Dynasty terracotta figurines show the expression of the terracotta figurines through spatial display and highlight point presentation. The charm and beauty of the Han and Tang Dynasty terracotta figurines sculptures are also reflected in their cultural connotation and the characteristics of the times. The sculptures of the Han and Tang dynasties not only have high artistry, but also have profound cultural connotations. For example, every clay figurine sculpture of the Han and Tang dynasties can reflect the background of the times and the active pursuit of a better life. During the Han Dynasty (202 BC~220 AD), the society greatly admired the Confucian etiquette system, and emphasized social order, good customs and moral order, and the values can be glimpsed in the sculptures of the Han Dynasty. Secondly, the Tang Dynasty terracotta sculptures were also influenced by the social and cultural context of the time. In ancient Chinese history, the Tang Dynasty (618~907 AD) was the most open dynasty and one of the most culturally prosperous periods. In the Tang Dynasty (618~907 AD), the open and inclusive social atmosphere was vividly displayed in the rich colors and diverse styles of Tang Sancai. It can be seen that the sculptures of the Han and Tang dynasties have a very unique charm and beauty, and the artist shows the world the ultimate pursuit of



"charm and beauty" in ancient Chinese sculpture art through realistic shape shaping, real and vivid emotional communication, and rich cultural connotation. The depression points of the terracotta figurines were scanned, and the results are shown in Figure 6.



3D scanned facial features



Facial features identified by the Analysis software

Figure 6. Scan Results of the Depression Points of the Terracotta Figurines

Figure 6 The results of the concave points of the terracotta figurines show that the face is on the left and the body is on the right, which is contrary to the single posture of the Han Dynasty (202 BC~220 AD) and the design style of the central axis, indicating that the terracotta figurines in the Han and Tang dynasties paid more attention to the presentation of posture and presented the characteristics of overall streamlining. Tang Dynasty terracotta sculpture attaches great importance to the three-dimensional sense and vividness in shaping human figures. Artists are often not satisfied with simple frontal depictions, but will show various postures and expressions through clever design, and show the characters' dynamic expression and emotional details. For example, the dancing female figurines in Tang Dynasty terracotta sculptures often show whirling and jumping dances, and their facial expressions are very rich and varied, which can make people feel real. In addition, Tang Dynasty terracotta figurines can accurately grasp the proportions and other details of human limbs, which also highlights the natural beauty of Tang Dynasty terracotta figurines sculptures. Second, elaborate clothing and hairstyles. In Tang society, clothing was a detail of art. The costumes of the Tang Dynasty are rich and diverse, and they are all well presented in the terracotta sculptures of the Tang Dynasty. Tang Dynasty artists liked to use the delicate display of lines and combine a variety of colors to show the folds, patterns, and decorations on their clothes. On different occasions, the clothes worn by people of different identities often have very different characteristics and have their own characteristics. For example, the costumes in the court were often extremely elaborate and ornate, while the folk costumes were very simple and functional. In addition, the hairstyles of the Tang Dynasty terracotta figurines are also different, for example, the court hair bun is complex, towering and gorgeous, while the folk hairstyle is extremely simple and natural, all of which are displayed in the Tang Dynasty terracotta sculptures, and

the Han and Tang Dynasty terracotta figurines sculptures have brilliant artistic achievements and profound cultural implications. First of all, the artistic achievements and cultural connotations of the terracotta figurines sculpture in the Han Dynasty are mainly manifested in: first, the figure modeling is very solemn and dignified. The figures of the Han Dynasty terracotta figurines are extremely solemn and dignified, which shows the importance that Confucianism attaches to social order and etiquette. For example, the figures in the sculptures of the terracotta figurines of the Han Dynasty basically appear in a solemn and dignified posture, for example, during the Han Dynasty (202 BC~220 AD). Whether standing or sitting, the posture of the figures is extremely straight and majestic, which can show that Confucian etiquette had strict requirements for officials in ancient times. For example, the figurines of soldiers are generally in a neat line, and their facial expressions are often extremely serious, which can show the extremely strict military discipline in Han society and the importance that Confucianism attached to military order. Second, the details of the costume are very standardized and neat. The figures' costumes in the Han Dynasty terracotta figurines also reflect the artist's general adherence to Confucian etiquette and norms. For example, the costumes of terracotta figurines are generally strictly differentiated according to their social status and occasion, which can show the hierarchical system and etiquette of the Han Dynasty's clothing and crown system. For example, officials of different ranks, the clothes they wear will be clearly distinguished, for example, their patterns and belt ornaments, etc., can show the identity and responsibilities of the characters. In other words, Han Dynasty terracotta figurines can reflect some of the ideas of Confucianism, such as strict requirements for order and attention to etiquette. Through the sculpture art of terracotta figurines in the Han Dynasty, we can feel the respect of Confucianism in the Han Dynasty society. In view of the above analysis, the modeling of the terracotta figurines of the Han Dynasty was analyzed, and the relationship between the artistic characteristics and the terracotta figurines was found, as shown in Table 3.

**Table 3.** Analysis of the Artistic Characteristics of Terracotta Figurines in the Han Dynasty

Figure	Feature points			Color interpretation rate			Styling interpretation rate		
	Personality points	Commonality rate %	% of artistic influence	Personality points	Commonality rate %	Explanation rate %	Personality points	Commonality rate %	Explanation rate %
Man	3.719	61.989	61.989	3.719	61.989	61.989	3.688	61.461	61.461
Female	2.236	41.585	103.574	2.236	41.585	103.574	2.268	37.793	99.254
Waiter	0.037	37.265	140.839	-	-	-	-	-	-
Merchants	0.007	0.624	141.463	-	-	-	-	-	-
Soldier	0.000	0.143	141.605	-	-	-	-	-	-
Old man	-0.000	0.122	141.727	-	-	-	-	-	-

Note: If the correlation between the current analysis data is too strong/too weak, the results may not be applicable, it is recommended to find the strong/weak correlation and remove it and analyze it again

As can be seen from Table 3, the personality points of men and women are obvious, and the personality points of the elderly and soldiers are the least, mainly because of the variety of clothing of women and men. As a result, the commonality rate among males, females, waiters, and businessmen decreased, mainly due to occupational differences. In terms of color and modeling, men and women have a high color recognition rate, mainly blue and red, and the style is mainly hair buns, headwear, clothing, etc. In terms of influence on the arts, women, soldiers, the elderly, and attendants had a greater influence, while the influence of men was relatively small, mainly because there were more wars in the Han Dynasty, and the characteristics of soldiers already represented men. On the whole, the color and shape of the Han Dynasty terracotta figurines have a significant influence on modern art, and they have obvious characteristics, which have an enlightening effect on modern art. In addition, the results of this study are consistent with the Han Dynasty bamboo slip literature.

## DISCUSSION

### The Promotion of Han and Tang Terracotta Figurine Sculptures to the Innovative Culture of

## Contemporary Ceramics

### Enhance the Han and Tang Dynasty Heritage of Pottery

At the same time, the image shaping and artistic expression of the Han and Tang Dynasty terracotta figurines sculptures are also very charming, pay attention to aesthetics, and can play a role in promoting the innovative culture of contemporary ceramics. In the production of Han and Tang terracotta figurines sculptures, exquisite craftsmanship and beautiful modeling represent the quality and texture of traditional elements, so contemporary ceramic designers can reinterpret and apply some traditional elements in Han and Tang terracotta figurines sculptures, so as to achieve innovative purposes. For example, contemporary designers can draw enough inspiration from the Han and Tang Dynasty terracotta figurines and sculptures to appropriately integrate traditional elements such as multiple patterns and patterns of Han and Tang terracotta figurines into contemporary ceramic works, so as to make contemporary ceramic works have rich cultural connotations and historical weights, and improve their value. For example, designers should deeply study the traditional patterns and patterns in the Han and Tang Dynasty terracotta figurines sculptures, analyze the aesthetic connection and integration of the patterns and patterns with their own pottery works, and combine the characteristics of various decorative elements of the Han and Tang Dynasty terracotta figurines sculptures to apply them to their own pottery works. In this way, through the creation of ancient and modern integration, new thinking concepts and aesthetic tastes can be stimulated, and the connotation of traditional culture can be displayed, and the value of contemporary ceramic works can be reflected. The artistic achievements and cultural implications of the Tang Dynasty terracotta figurines. The Tang Dynasty terracotta figurines are the glorious creators of the development history of ancient Chinese terracotta figurines. Tang Dynasty terracotta figurines generally have exaggerated expressions and postures, bringing people a very relaxed and pleasant sense of image. In the Tang Dynasty (618~907 AD), the forms of terracotta figurines and sculptures were often extremely diverse, and the images were lifelike, which could show a certain vitality, and show the social life and aesthetic taste of the Tang Dynasty. Tang Dynasty terracotta figurines and sculptures generally express the concepts of Buddhism and Taoism, which can be analyzed and understood from different perspectives. First, from an aesthetic point of view, during the Tang Dynasty (618~907 AD), society was influenced by Buddhism and Taoism, so the artist's creation was no exception. Buddhism advocates the pursuit of detachment from the world and inner tranquility, so from the perspective of artistic expression, it often has the characteristics of solemnity, sacredness, and restraint. Taoism emphasizes the harmony of nature and the peace of encounter, and advocates the pursuit of natural beauty. Both Buddhist and Taoist aesthetic concepts have influenced Tang Dynasty terracotta sculptures, so Tang Dynasty terracotta sculptures not only have a sense of exaggeration and comics, but also incorporate many mysterious elements with otherworldly characteristics. At the same time, contemporary technologies and materials have been innovated, giving contemporary ceramic innovation much room to play. Contemporary ceramic designers should combine contemporary materials and technology, the image shaping form of Han and Tang ceramic sculptures, etc., to do a good job of experimentation and innovation to improve the value of their works. For example, designers can use 3D printing technology to recreate the intricate patterns of Han and Tang Dynasty terracotta figurines and apply them to their own pottery creations. Alternatively, designers can add new types of glazes to blend in with the design and add decoration to their pottery works, which in turn give their pottery pieces an antique look and a contemporary texture. In addition, the aesthetic beauty and plastic art characteristics of the Han and Tang Dynasty terracotta figurines can be integrated into the contemporary ceramic innovation by designers after combining the contemporary digital design and intelligent control, so that the charm of the plastic art of pottery production can be effectively displayed, and help the artist create a fuller human image. Moreover, using the precision instruments of contemporary ceramic art, designers can also combine the traditional artistic modeling and craftsmanship of Han and Tang Dynasty pottery figurines to provide materials for contemporary ceramic creation, so as to make contemporary ceramic works more traditional charm and at the same time lose the sense of the times. Then, the cultural significance and profound historical heritage of Han and Tang terracotta figurines can also promote the innovation of contemporary ceramic creation. For example, the Han Dynasty terracotta figurines and sculptures of the Han Dynasty focused on the expression of Confucian culture, and the Tang Dynasty terracotta sculptures focused on the display of Buddhist and Taoist aesthetic concepts, which can be integrated into the innovation of contemporary ceramics, so that the creation of contemporary ceramics is full of mystery, ancient religious characteristics, and traditional cultural heritage, thereby influencing contemporary ceramics, so that it can integrate ancient and modern ceramic design concepts to combine the charm of more contemporary characteristics. Designers need to deepen their research on Han and Tang terracotta sculptures, and use a variety of methods to show the collision of traditional and contemporary ceramic creations, and then let the two blends with each other to achieve a degree of complementarity.

### Promote the Innovation and Development of Ceramic Modeling

From the existing analysis, the form of Han and Tang terracotta figurines sculpture has traditional Chinese

aesthetic characteristics, which can be combined with contemporary technology and materials to carry out the innovation and practice of contemporary ceramic creation, so as to achieve the purpose of ceramic innovation. The sculptures of Han and Tang Dynasty terracotta figurines pay attention to the portrayal of facial expressions and some details, and pursue the display of the spiritual temperament and form of the characters, so they can inspire contemporary ceramic designers. Designers can also combine the current situation of contemporary scientific and technological development, and use 3D printing technology to show the facial features of Han and Tang Dynasty terracotta figurines and other plastic art details, so as to integrate contemporary art and traditional aesthetics better, so as to achieve innovation in ceramic creation. In addition, in the creation of contemporary ceramics, the application of new glazes can also help designers better show the depiction of the color of the characters in the Han and Tang Dynasty ceramic sculptures, and combine them with traditional forms to achieve a higher level of artistic expression, so as to highlight the collision of contemporary people's artistic taste and traditional art. When applying 3D printing technology to innovate ceramic works, designers can also make effective breakthroughs based on the analysis of the traditional forms of Han and Tang terracotta sculptures. First, the production of Han and Tang terracotta figurines generally has to go through many processes, through manual molding operations and special firing processes to achieve the final effect. With 3D printing, this complex process can be greatly simplified. Designers should use modern computer software to draw on the complex patterns and structures in the terracotta figurines of the Han and Tang dynasties (202 BC~907 AD), design them, and complete direct physical printing through 3D printing technology, so as to achieve innovation in traditional hand-made production. In terms of self-expression. Both Buddhism and Taoism attach great importance to the inner world of people, so this inspired the Tang Dynasty terracotta figurines and sculptures. Buddhism emphasizes the purification and detachment of the mind, and from the perspective of artistic expression, it is to create a pious and detached, calm image to express the inner pursuit of the human figure. Taoism emphasizes personal emotion and self-cultivation, and from the perspective of artistic expression, it attaches importance to the display of individual emotions and attitudes towards life. The shaping of the spiritual outlook of the characters in the Tang Dynasty terracotta figurines sculptures was generally influenced by the ideological concepts of Buddhism and Taoism. Therefore, the figures of the Tang Dynasty terracotta figurines are exaggerated and funny, and there is an artist's deep exploration of the inner world of people. Therefore, the aesthetics of Tang Dynasty terracotta figurines are very diverse, which can immerse people in the rich and colorful art world and feel the rich cultural aesthetic experience. There are many patterns in the sculpture of Han and Tang terracotta figurines, and the structure is also relatively complex, so it is difficult to achieve accurate manual reproduction, so designers can combine modern technology to achieve the purpose of accurately reproducing traditional patterns, and combine the creative thinking of the works to show personality and enhance the aesthetic value of the design. For example, in the field of ceramics, designers can find inspiration from the sculpture of Han and Tang Dynasty terracotta figurines, observe its overall structure and design, and based on this, apply 3D printing technology to reproduce some of the fine details, and based on this to process and decorate, so as to achieve the innovation of contemporary ceramic works, and improve the three-dimensional sense and artistic expression of contemporary ceramic works. Third, the colors of the Han and Tang Dynasty terracotta figurines are generally more colorful, but it is difficult to combine the traditional crafts of the time to show the pottery works rich in the Han and Tang Dynasties style. For this reason, contemporary designers should use new types of glazes to combine traditional pottery techniques to achieve effective innovation. Based on this, designers can combine the color and texture of the Han and Tang Dynasty terracotta figurines to conduct in-depth research, and combine with contemporary glazes to complete the coloring of the works. In short, combining the charm and beauty of Han and Tang Dynasty pottery figurines and the characteristics of plastic art with contemporary innovative technology can improve the aesthetic value and production efficiency of contemporary ceramic works, and provide more wonderful elements for the innovation of traditional pottery.

#### Sublimation of the Charm of Modern Ceramic Innovation

As we all know, the sculptures of the Han and Tang dynasties show a beautiful charm and are very attractive. The so-called "aura beauty" means that the work is not only realistic in appearance but can also convey the terracotta sculpture's spiritual outlook or temperament and inner emotion through the artist's detailed portrayal. First, the charm and beauty of the Han Dynasty terracotta figurines sculpture is reflected in its extremely stable and simple style, and the facial expressions of the characters are very natural, and the posture is elegant and dignified. Second, the Tang Dynasty terracotta figurines attached great importance to expressiveness and decoration, showing that the Tang Dynasty (618~907 AD) society was prosperous and open. For example, the three-color terracotta figurines sculpture has bright colors and smooth lines, and the costume details of the Tang Dynasty terracotta figurines sculpture are also extremely colorful, which was favored at that time. In addition to the beauty of the charm, the plastic art of the Han and Tang Dynasty terracotta figurines sculptures is also very distinctive and innovative. During the Han Dynasty (202 BC~220 AD), terracotta sculpture attached great

importance to concise, symmetrical, and concise forms, as well as smooth lines and balanced structure. Second, the Tang Dynasty terracotta figurine sculpture has a rich variety of plastic art forms, which are extremely vivid and three-dimensional in terms of human figures, and there are many fine and subtle depictions in clothing and hairstyles. Especially when using Tang Sancai techniques, it can show a unique color style. Finally, the cultural significance of the Han and Tang terracotta figurines sculptures is also extremely profound. During the Han and Tang dynasties (202 BC~907 AD), there was great development in terms of political economy, culture, and social thought. Based on this, the art of terracotta sculpture in the Han and Tang dynasties also moved towards a peak of historical development. Han Dynasty terracotta sculptures reflect Confucianism, emphasizing order and etiquette. The Tang Dynasty terracotta figurines and sculptures focused on traditional religious ideas such as Buddhism and Taoism, pursuing individual emancipation and self-expression, and were significantly freer. All in all, the Han and Tang Dynasty terracotta figurines have a very profound cultural heritage and exquisite skills, which have an extremely important position in the history of Chinese and world art, and at the same time, they have also greatly influenced later generations.

## CONCLUSION

The beauty and plastic art of the Han and Tang Dynasty terracotta figurines sculptures are very distinctive, which can highlight the aesthetic value, traditional techniques, and vivid charm of the terracotta figurines sculpture art in the Han and Tang dynasties, and make positive contributions to the inheritance of traditional Chinese culture and art. The results show that during the Han and Tang dynasties, the color of terracotta figurines changed from white, red, yellow and black to composite colors, and orange, blue, brown, etc., and the addition of stone blue ( $\text{CuCO}_3 \cdot \text{Cu}(\text{OH})_2$ ), lead dan ( $\text{Pb}_3\text{O}_4$ ), chlorite ( $\text{Cu}_2(\text{OH})_3\text{Cl}$ ). The composition of the Han and Tang terracotta figurines is more complex, adding quartz, Changbai stone powder and other substances to make the texture more crisp, and through the way of multiple coatings, the status and identity of the terracotta figurines are displayed. Regarding modeling, the Han Dynasty terracotta figurines are rough, and the Tang Dynasty terracotta figurines have delicate lines, mainly triangular and oval, and the expression and body contour are in strong contrast. During the Tang Dynasty (618~907 AD), the terracotta figurines broke the single outline characteristics of the Han Dynasty and presented the characteristics of the overall streamline, increasing the vividness of the terracotta figurines. Therefore, the Han and Tang Dynasty terracotta figurines have distinctive cultural characteristics and charm, which can provide connotation, case and technique support for the production and innovation of modern terracotta figurines. The limitations of this research are mainly due to the fact that there is too little case data to form an overall comparison, resulting in the results of the study staying at the qualitative level. In the future, we will continue to collect data to improve the quantitative Ness of the study results.

## ACKNOWLEDGEMENTS

Art General Project of National Social Science Foundation: Research on Contemporary Landscape Pottery Culture Design, 22BG141.

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