Study on the Method and Value of Vignette in the Murals of Koguryo Tomb in the Design of Cultural and Creative Derivatives

Chang Xin*

School of Media, Tonghua Normal University, Tonghua, China *Corresponding author: im_q12@163.com

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Abstract: Murals of Koguryo Tomb can be divided into 3 periods of history according to the development of the years. The vignette of its mural has distinctive artistic features which is the treasure of history. This paper explores the characteristics and forms of decorative patterns of different themes left over from the murals of Ji'an Murals of Koguryo Tomb. It also explores the design method of cultural and creative derivatives development on the basis of extracting the element symbols. so that it can makes the design of cultural and creative derivatives become the products which has national symbol value and makes the essence of the nation be gradually transformed into the design elements which are visual and conform to the concept of modern design culture. It has promotion and application function in the emotional expression, design output and transformation of Koguryo cultural and creative derivatives design and its symbolic symbolism.

1. Introduction

Koguryo has more than 1 thousand years of history, in addition to the Qing Dynasty ban on Changbai Mountain, Koguryo's civilization has been sealed by history for a long time. The murals which are preserved by Koguryo Tomb are fancy arts. It can not only reflect the life, art, aesthetics and many other aspects of Koguryo aristocracy, but also has practical significance for the cognition of this nation's personality, aesthetic way and ideological of thinking. At the same time, it can also realize the practice of derivatives design today, which has practical significance and application value to explore its derivatives design method [1].

2. A brief introduction on the development history of the Murals in Koguryo Tomb

Mr. Geng Tiehua pointed out in his book: "A total of 127 Koguryo murals have been found in China and North Korea at present [2]"According to the development of the years can be roughly divided into three historical periods and the contents and forms of murals displayed in each historical period are different.

2.1. Early period

The 4-5th century AD was an important reform period in the history of Koguryo. The early Koguryo murals were first portrayed accordance with the strict feudal hierarchy in the expression of characters and adopt the performance technique of bigger people than mountains [3]. For example, on the hunting murals, the mountain was so small that it used this expression with strong decoration. Secondly, the elements created by Koguryo's early murals are represented by lines. The painting skills are simple and austere. Things which are represented by lines are absolutely lifelike and free. Thirdly, the pictures of early Koguryo mural art are composed in whole form, which makes the look compact, rich and full. But there were fewer vignettes in this period.

2.2. Middle period

In the 5-6th century AD, the murals of Koguryo Tomb began to appear decorative painting patterns in the middle period and presented diverse forms and styles. In particular, there are more lotus patterns changing from realism to pattern in tomb murals. This makes the composition balanced,

compact, and highlights the integrity of the picture. This period also appears the color murals and uses the the graphic arts expression means to paint.

2.3. Later period

In the 6-7th century, Koguryo began to enter the recession period. A large part of the contents of the murals show the contents and forms of religious and mythical themes. Among them, the four gods represented by Zhuque, Xuanwu, Qinglong, Baihu are the most representative pictures of the "four gods"[4], it has the meaning of orientation. In addition, the image with the theme of mythology also appears in the murals, and occupies the main position, reflecting the imagination of artistic expression. The late Koguryo Mural also applied the mosaic technique to the murals [5], which shows great wisdom and creativity and makes the murals look more aesthetic.

3. Classification and Expression of vignette in the Murals of Koguryo Tomb

Most of Koguryo's royal and aristocratic tombs are located in Ji' an area. So far, nearly 20 murals have been discovered by archaeologists. By systematically combing the murals of Ji'an Tomb, the subject categories can be divided into the following categories, These categories are full of Ji'an tomb murals in the third period of the early, middle and late. Different periods have their own focus [6].

3.1. Social daily life

3.1.1. Music and Dance Scene

The Koguryo nationality is good at singing and dancing, which is also the main entertainment in their daily life. In the early tomb murals, the large-area singing and dancing scenes usually appeared. Such as the long sleeve dance scene in Wuyong tomb(Figure 1.), The right side of the group dance 5 people, male and female, the posture is consistent, arranged in an orderly manner, the dancers raise their hands to dance with long sleeves turned back. In addition, the Koguryo people also have the spirit of martial arts. They like martial arts or athletics. This kind of theme is reflected in the Jiaodi map in the murals of the tomb.



Figure 1. Long sleeve dance scene in Wuyong tomb

Excerpt from: Geng Tiehua, A Study on the Murals of Koguryo Tomb

3.1.2. Hunting Scene

The Koguryo people are good at horse riding and shooting hunting in addition to music and dance. It is not only an amusement, but also an agricultural production activity. It can make up for the shortage of production, and also has an important role in military and sacrificial. Among the more than 20 murals in Ji'an, there were hunting scenes in 7 tombs [7]. It is one of the most descriptive subjects.

The hunting scene in Ji'an Wuyong tomb (Figure 2.), it has simplified and abstract features in modeling, The concrete performance is in the mountain range mainly uses the line to carry on the modelling and highlights the line's thick and thin, false and reality performance. In this scene the lines are free and vivid at the same time extremely decorative, forms the strong contrast with the hunting dynamic character, the painting skill is simple and austere. The scene represented by the line

is highly extracted and condensed, with a symbolic aesthetic form, is a good work in Koguryo murals.



Figure 2. Hunting scene Wuyong tomb

Excerpt from: Geng Tiehua, A Study on the Murals of Koguryo Tomb

3.1.3. war

Koguryo's society developed on the basis of military democracy at the end of primitive society. Therefore, the Koguryo people have the spirit of martial arts, like to plunder and fight. In their view, war is the highest honor and the man's duty. On the right side of the tomb on the north side of Tomb No.12 in Donggou tomb shows a picture of the war. This tomb is also names Macao tomb. This kind of war-themed mural reflects Koguryo's national character of liking to fight [8].

3.2. Use of vignette

3.2.1. Lonicera vignette

Lonicera is also called honeysuckle. Because of its tenacious vitality, just like pine and cypress trees which are tough and unyielding, honeysuckle is also regarded as the embodiment of perseverance. It has strong meaning when the Lonicera vignette is used for decoration. This kind of decoration also appears naturally in the daily life of the noblemen of the murals in the tomb of Koguryo. This also shows the host's psychology and hope. Lonicera vignette not only have aesthetic form, but also contain profound meaning of longevity, mystery, auspicious [9].

3.2.2. Lotus vignette

The widespread existence of lotus vignette in the murals of Koguryo Tomb is closely related to the influence of Buddhis. The early lotus vignette of Koguryo mural shows the pure and extensive style of lotus by means of realistic imitation. In the later period, Koguryo painters used lines to outline the lotus flower in real life as a very decorative pattern, and gradually evolved into an exaggerated abstract painting symbolized auspicious meaning decorative pattern. Most of these patterns are symmetrical, orderly, vivid and implying the auspicious symbol of Koguryo's love of lotus. There are many tombs which has the lotus vignette. It has often appeared in tomb murals as a common auspicious pattern, such as Ji'an Wukui tomb No.4 tomb [10].

3.2.3. Clouds and rings vignette

There is also a place for clouds vignette in the murals of the tomb of Koguryo. Liu Yafei scholar narrates in his works: "The clouds vignette symbolizes high rise and auspiciousness. Its origin is that people worship nature and immortal [11]." On the murals the Jiaodi tomb of the Koguryo tomb group, the fuzzy vignette which is painted above 2 strong man is called clouds vignette whose shape is like fire. It has a simple and clear artistic effect. The clouds vignette adopted by the Koguryo people usually has auspicious and beatific meaning, and its fine lines are smooth and the forms depicted are colorful.

Koguryo murals tomb in addition to clouds vignette, it also appeared ring vignette. The ring vignette of ring vignette mural arranged neatly with the same size and spacing. The ring is a circle. These ring vignette are simple and bright, rich and elegant in color.

3.3. Worship of the gods

3.3.1. The sun, moon and stars

Koguryo's ruling class made up myths and legends before. These myths and legends have gradually been perfected and supplemented in the Koguryo nationality and finally tend to mature, and spread in the form of tomb murals around the fourth century AD. Mythical patterns such as "Sun and Moon God" are common in the murals of Koguryo Tomb. Although it is consistent with the national theme of Han Dynasty, the specific practical scope is different. The Sun and Moon God in the Han tombs of the Central Plains are generally used in a single picture of the sky. The image of the The Sun and Moon God in the murals of the tomb of Koguryo is generally fixed oriented towards a fixed direction. Liu Ming thinks:" Koguryo's tomb is accustomed to the whole tomb as a whole part and then draw the sun in the east of the tomb according to the direction of the sun and the moon rising and falling in the universe, while the moon is placed in the west of the tomb. These two parts are on the centre of the east and west of the tomb [12]."

3.3.2. Fuxi, Nywa

The image of Fuxi sun god appeared in the murals of Koguryo, and his hands held the red sun which called "Jin wu" high. Nvwa, The goddess of the moon, whose coat was red, raised the toad shape of the moon with her hands. Both Fuxi and Nvwa appeared in the form of the unity of human and beast, wearing a short jacket in Koguryo's traditional dress, the upper body is a human image, with a human head and arms, while the lower body is a snake body (Figure 3). Fuxi, Nvwa and other image in the murals of the tomb of Koguryo model exaggerated and show the human head and snake tail of the reorganization exaggeration deformation. They each hold the sun and moon flying in the sky. The lines used concise, smooth and thought-provoking.



Figure 3. Fuxi, Nvwa

Excerpt from: Geng Tiehua, A Study on the Murals of Koguryo Tomb

3.3.3. Four gods

There are a large number of paintings in the tomb of the four gods in Koguryo (Figure .4), the tomb of Wukui No. 4 and 5, also known as the "four spirits beast". They are Zhuque, Xuanwu, Qinglong, Baihu On the murals of the tomb of four gods Tomb, Xuanwu is painted in the north wall, Zhuque in the south wall, Qinglong in the east wall, Baihu in the west wall. They represent different directions, four seasons, four colors and mean to escort the soul after death to heaven. Therefore, the "four gods" can be said to be a kind of symbol that satisfied people after the death that the soul will go to a better place. The four gods also have different characteristics with the development of the Koguryo nation. The four-god picture of the early murals has gradually changed from the realistic style to the late four-god image drawn by the supernatural composition technique with vivid and smooth line [13].



Figure 4. Four Gods Painting

Excerpt from: Geng Tiehua, A Study on the Murals of Koguryo Tomb

4. The Design Ideas and Methods of Koguryo Cultural and Creative Derivatives

This paper focuses on the vignette in Ji'an Koguryo murals. Its cultural and creative derivatives mainly adopt design ideas of the original cultural elements, focusing on the overall planning of culture and design aspects. On the one hand, it studies the central role of Koguryo culture in Ji'an period and expresses cultural content through cultural elements and symbols or mural images; On the one hand, the core role of Koguryo culture in Ji'an period is studied, and cultural content is expressed by cultural elements or mural images other symbols; on the other hand, by refining design symbols and expressing the connotation of national culture. So that cultural and creative derivatives design will become the carrier of product communication with national symbols and the essence of the nation will gradually changes to the design elements with image and accord with the concept of modern design culture. This can be applied to the emotional expression, design output and transformation of Koguryo derivatives design and its symbol symbolism. The following will think about the design method of Koguryo cultural and creative derivatives.

4.1. Extract the native cultural elements directly

The direct extraction of the original cultural elements of Ji'an Koguryo is to take the social life, decorative elements and mythical patterns in the murals as the theme and use modern scientific and technological means and various media forms to design the whole process of derivative development of cultural and creative derivatives. This method of direct extraction of the original elements is not a simple reproduction, but to extract the most representative original cultural patterns in the murals of the Koguryo and inject the designer's cognition of the Koguryo culture into it. Through the art condensed, the abstract process that the designer's cognition will be aesthetic, symbolic. So it can finally not only strengthen and highlight the original cultural characteristics and historical context of the Koguryo nation, but also can convey to the viewer the unique cultural purpose of the nation.

The purpose of direct extraction of the original cultural elements of Ji'an Koguryo murals is mainly focused on two aspects. One is to discover the inner real kernel under the shape of Koguryo's original cultural elements, which is an important aspect to excavate the significance of the original cultural elements. The inner reality is the essence connotation of national culture reflected under the appearance of the original cultural elements. The second is the direct extraction of symbolic mural elements of the representative Koguryo national culture, which can accurately convey the historical, cultural and artistic values of the national culture. After the corresponding art design and processing, it can highlight the significance of its cultural symbol and continuation and inheritance [14]. For example, using the method of direct extraction, the design in Ji'an Koguryo murals is represented by Man nationality paper-cut form and made into exquisite illustrated books or handmade scrolls, so as

to display the image of Koguryo and spread the national culture.

In the process of direct extraction of the original cultural elements in the murals of Ji'an Gaoguli Tomb, it should not be limited to the use of the simple original modeling language, but should be promoted through the comprehensive artistic treatment and design of the original modeling itself and the environment that constitutes the original historical and cultural form. So that it can form a complete symbol system of the original natural form. This symbol system reflects the whole cultural development process of the murals in the tomb of Koguryo. On this basis, the development and design of derivatives can facilitate the viewer to form a systematic symbol system of Koguryo mural culture and collect, remember and publicize at any time.

4.2. Extract the core elements of native culture elements

Core cultural elements are the essence of Koguryo mural culture. The core cultural elements have three characteristics: essential elements, characteristic elements, and recognition [15]. First of all, the core elements in the murals of Ji'an Koguryo Tomb are the external embodiment of their national culture and ideas and the essential elements reflecting the national spirit of Koguryo. Secondly, the core elements can represent the image and symbol characteristics of Koguryo murals with a high degree of recognition. These elements with typical core culture are integrated into the development of modern design (Figure .5) and the original elements are endowed with the characteristics of modern design through the process of abstracting and refining, which can be widely recognized by people and thus highlight the aesthetic charm of national culture.



Figure 5. Core Element Derivatives Design

Source: Author leads team design

4.3. Derivation of native cultural elements

Using derivative method to design the derivative of Ji'an Koguryo is to use the mural pattern and modern design to combine and innovate under the condition that the motif is unchanged, so as to highlight the use of the derivative of the mural pattern. It is feasible to integrate Koguryo's original cultural elements into modern design method. Such as combing the Koguryo national murals in the decorative elements and patterns to design through 3D of online clothing method and use the form of AR to display (Figure 6), This combination of tradition and modernity can give birth to new symbolic forms, draw closer distance from national culture and give larger imagination space to national culture. So that it will form a visual image of Koguryo nationality with both form and spirit, modern fashion and easy to accept.



Figure 6. AR Creative Dress Show (Partial screenshot)

Source: Author leads team design

4.4. Exaggerate Mutant Native Cultural Elements

The original culture of Ji'an Koguryo murals presents a simple original ecological form. Redesigning the formal sense of exaggeration or variation allows native elements to be displayed in their unique visual form. For example, the H5 derivative design on the line, in the background lotus decorative pattern of the original form after the technical processing produce exaggeration or variation of the external image and create a visual impact of the picture, so as to show the Koguryo culture and close the distance with people.

4.5. Symbolic Elements of Native Culture

Symbolism is embodied in two aspects: One is embodied in image, the other is embodied in connotation. Connotation is symbolic meaning, the appearance of the image expression of inner meaning. The symbolic image and the inner meaning unify together [16]. The most biggest characteristic of the original pattern of Ji'an Koguryo mural is its symbolism. And the symbolism is highly metaphorical. This metaphorical expression is based on social thought and identity. For example, the Koguryo nationality has the characteristics of loving lotus, the figure of lotus can be seen everywhere. The decorative patterns such as lotus flowers in Koguryo murals are applied to Koguryo costumes and innovated through certain rules of formal beauty (Figure 7), In addition to the symbolic bearing cultural significance, it can also make this kind of Koguryo innovative dress younger and form a strong national emotional consciousness in the thinking and memory of young groups. At the same time, it gives the new era a new spirit.



Figure 7. Clothing Derivative Design

Source: Author leads team design

4.6. Original Cultural Elements with Use Function

It is the innovation of design idea and thinking that gives the use function of Ji'an Koguryo's products and enables Koguryo culture to enter people's life field. The function of using Koguryo products can be designed from the aspects of material, technology and form. On one hand, the derivative products with elements of Koguryo murals can be combined with different media designs to achieve the artistic purpose of being able to see, touch, use and appreciate. As shown in Figure 8, the Koguryo paper carving lamp is a work of original cultural elements with use function. This work combines Fuxi and Nuwa images from Koguryo murals skillfully with modern paper carving techniques and displays them in the form of lamps with appreciation and collection value and use function. It can not only meet the needs of life, but also add interest to life, show personality for designers and become a characteristic product for people to express their cultural taste and personality. So that build Koguryo culture brand and enhance its added value.



Figure 8. Koguryo paper carving lamp

Source: Author leads team design

4.7. Deconstruction and Grafting of Native Cultural Elements

Using the deconstruction and grafting of the original elements of Ji'an Koguryo mural to design the cultural and creative derivatives is the design method to realize the transformation from traditional to modern. Deconstruction and grafting is based on maintaining the original Koguryo national culture, using the rule of formal beauty to disperse the original elements, grafting the core elements of murals with new forms, new contents and new functions into the form of reconstruction. And finally become the design products that modern people like. For example, the different decorative elements in Koguryo murals are applied to the creative design of clothing, and the elements are deconstructed and grafted through the form of VR interaction. So that Koguryo costume culture can form game interaction with people through this kind of interaction. Through the game to enhance people's understanding of Koguryo culture and Interaction and sharing of national culture.

5. Thinking on the Value in the Design of the cultural and creative derivatives

5.1. To express inheritance, reconstruction and dissemination in culture

Based on the cultural derivatives derived from the original elements of Ji'an Koguryo murals, this paper combines the analysis and understanding of Koguryo's cultural content with the modern design and the characteristics of the times and extracts a series of "cultural derivative reconstructions" designed by material form and spiritual and cultural elements. The value of Koguryo's creation lies in the inheritance, reconstruction and dissemination of national culture. The best way to inherit Koguryo's traditional culture is to use it. Nowadays, objects of national cultural value are collected by museums, so it is difficult to approach the daily life of public and produce distance from people's life. The derivative product of national culture which joins the fashion element is the bridge. At the same time, it can bring culture into people's daily life in a modern way, embody the national artistic image and cultural ideology, contribute to the development and spread of the national cultural region and spread the Koguryo culture.

5.2. Acquire Aesthetic and Emotional Experience in perception

The decorative patterns of Ji'an Koguryo murals have artistic characteristics and permeate deep national feelings. The process of design and development of derivative products is not only an artistic thinking activity, but also an aesthetic creative activity, which embodies people's aesthetic consciousness. Therefore, the design and development of Koguryo derivatives in the pursuit of beauty needs to be in accordance with the diverse needs of people. Through a variety of feelings, such

as vision, touch, listening and so on, the products, the present and the traditional way of life, artistic existence, thoughts and feelings are closely linked together. To make cultural and creative products with traditional culture have modern flavor and make people truly feel the beauty of product culture, poetic beauty, the beauty of the shape and color of objects and the beauty of the coexistence of the external form and the aesthetic form of cultural creation products. This will enhance the aesthetic value of Koguryo's products. At the same time, the aesthetic value of Koguryo's derivatives can not be understood unilaterally as adding only simple beauty elements to cultural and creative derivatives, but to show a pursuit of national art beauty in a wider range.

The Koguryo's derivative not only makes people get the aesthetic experience of direct image, but also makes people produce the emotional experience imperceptibly and enlightenment comprehension. This emotional experience is mainly through the way of imagination to obtain spiritual pleasure and emotional sublimation. In the design of Koguryo's cultural and creative products, we should not only pay attention to attracting people's attention with the unique visual attraction, but also make full use of the analysis of the connotation of the original elements of murals to arouse people's associations. This is not only the fashion leading people's material life, but also the internalization of spiritual and emotional life.

5.3. Reflect business value in innovation

The pattern, form, material, technique, medium and any other ways in Ji'an Koguryo murals are used as a kind of original design element for creating and redesign. This combination of tradition and modern can attract people's attention skillfully and establish the communication and exchange of material form and spirit, while conveying the information of national culture, it can make people pay attention to the design and function of derivative products, so as to reflect the commercial value and produce economic benefits.

6. Conclusion

The composition and shape features of the murals in the tomb of Koguryo show the regional aesthetic, which contains unique charm and national cultural characteristic. The application of these themes and artistic expressions in the design of cultural and creative derivatives helps us to observe the national cultural resources from the unique perspective of Koguryo nationality. It can also help us to master the design method of the original cultural elements of the nation, to refine the core elements of the national culture, to create a new form of the derivative products of the national culture and to show the characteristics and application value of the national culture.

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References

- [1] Ge Zhang, Xiaojing Zhang. Koguryo Art Design Culture Research [M]. Changchun: Jilin University Press, 2011.08, Page 9.
- [2] Tiehua Geng. Koguryo Mural Research [M]. Changchun: Jilin University Press, 2017.12.
- [3] Na Li, Yafei Liu. Analysis of the Art of Murals in Koguryo Tomb [J]. Beauty and Time, 2015(11):68.
- [4] Na Li, Yafei Liu. Analysis of the Art of Murals in Koguryo Tomb [J]. Beauty and Time, 2015(11):69.
- [5] Mei Wng. Discussion on the Art of Mural in Koguryo Tomb [J].Big Stage, 2010(09):47, Page

- 47.
- [6] Ming Liu.Research the theme of Ji'an Koguryo murals [D]. Bohai University, 2012: Page 5.
- [7] Ming Liu.Research the theme of Ji'an Koguryo murals [D]. Bohai University, 2012: Page 9.
- [8] Ming Liu.Research the theme of Ji'an Koguryo murals [D]. Bohai University, 2012: Page 6-7.
- [9] Ming Liu.Research the theme of Ji'an Koguryo murals [D]. Bohai University, 2012: Page 22-23.
- [10] Xiu Guo. A Study on the Decorative Expression Technique of the Murals in Koguryo Tomb [D]. Fujian Normal University, 2008, Page 10.
- [11] Yafei Liu. Decorative Patterns in the Murals of Koguryoi Tomb and Its Influence on Modern Design [J]. Journal of Tonghua Normal University, 2016, 37 (07): Page 8-9.
- [12] Ming Liu.Research the theme of Ji'an Koguryo murals [D]. Bohai University, 2012: 14.
- [13] Ming Liu.Research the theme of Ji'an Koguryo murals [D]. Bohai University, 2012: 24.
- [14] Yanbin Gu, Xinhe Liu. Design and Development of Prairie Tourist Souvenirs [M]. Beijing: Minzu University of China Press, 2012.06: 279.
- [15] Yanbin Gu, Xinhe Liu. Design and Development of Prairie Tourist Souvenirs [M]. Beijing: Minzu University of China Press, 2012.06: Page 284.
- [16] Yanbin Gu, Xinhe Liu. Design and Development of Prairie Tourist Souvenirs [M]. Beijing: Minzu University of China Press, 2012.06: 288.