

4th International Conference on Contemporary Education, Social Sciences and Humanities (ICCESSH 2019)

Research on Chinese Rat Pattern in Costume Design*

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Abstract—Rat pattern in China has a long history and possesses unique humanistic charms and artistic values. Through analyzing the historical origin, artistic characteristics and humanistic implications of Chinese rat pattern, the paper adopts pattern composition rules and costume aesthetics principles to explore the integration of Chinese rat pattern and modern costume, and provides feasible design thinking for the application of rat pattern in costume design. Meanwhile, the paper attempts to apply rat pattern in modern fleece design. The research purpose is to better carry forward Chinese rat culture and seek innovative development in costume design field.

Keywords—Chinese rat pattern; costume design; rat culture

I. Introduction

The wise and diligent ancient people recorded the respect or friendly worship of rats in different artistic vectors, creating colorful and amazing mouse patterns. In the field of costume design, the rat patterns have been applied in embroidery and brocade. At present, the application of rat pattern in the field of costume design needs to recombine various elements, so that it can inherit the core of tradition and nationality in spirit and have a modern and fashionable sense in form.

II. HISTORICAL ORIGIN OF CHINESE RAT PATTERN

"Rat" is a very common rodent which has colorful cultural implications in China and breeds unique rat sign culture of the Chinese nation. As the first animal in twelve Chinese zodiac signs, rat is ubiquitous from belief to life and from text to image. It not only affects the life of people, but also takes root in consciousness. Together with social changes, there appear distinctive rat patterns.

A. Chinese Rat Pattern

Rat, the leading animal in twelve Chinese zodiac signs, is always the creation source favored by people. Sagacious and diligent working people in ancient times recorded their respect or friendly worship for rat in different art carriers by Zhaoqing Li**
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various forms, and created rich and original rat patterns. Ratthemed folk art works mainly include *The Rat Steals Grapes* (see "Fig. 1"), *The Rat Climbs the Lamp Stand* (see "Fig. 2"), *The Rat Steals Pumpkin* (see "Fig. 3"), *The Rat Steals Chinese Cabbage* (see "Fig. 4"), *The Rat Offers Birthday Felicitations* (see "Fig. 5"), *The Rat Bites the Heaven* (see "Fig. 6"), *and The Rat Marriage* (see "Fig. 7"). The witty rat patterns created by life-loving folk artists have been handed down to this day as the expression of folk life message. These lively and imaginative rat patterns fully reveal the wisdom and unrestrained imagination of ancient people, and betray unique art expressive force and affection.



Fig. 1. The Rat Steals Grapes.



Fig. 2. The Rat Climbs the Lamp Stand.²



Fig. 3. The Rat Steals Pumpkin.³

^{*}Fund: The National Social Science Fund of China: History of Modern Fashion Design (1900-1949) in China, 2018CG00773.

The Provincial Social Science Fund of Fujian Province: Fujian's Costume Westernization Origin, Art Rheology and Contemporary Applied Research Project under the Background of Maritime Silk Road Culture, FJ2016C194.

¹ Li Zhenan. Brief Analysis on the Inheritance and Innovation of Folk Art Image — Based on the Analysis of Rat Artistic Image in Twelve Chinese Zodiac Signs [J]. Beauty & Times (Volume I), 2016(01): 19-21.

Same as 1





Fig. 4. The Rat Steals Chinese Cabbage.4



Fig. 5. The Rat Offers Birthday Felicitations.⁵



Fig. 6. The Rat Bites the Heaven.⁶

III. ARTISTIC CHARACTERISTICS AND HUMANISTIC IMPLICATIONS OF RAT PATTERN

Chinese rat pattern has peculiar modeling features and artistic characteristics, humorous signs, distinctive texture, and prosperous symbolic meanings. In modern and contemporary works created by folk artists, the new images of rat emerge endlessly. Moreover, the pattern of rat also appears more abundant and exquisite and carries forward people's infinite expectations for the future.



Fig. 7. The Rat Marriage.⁷

- Portrait for Rat [J]. Invention and Innovation, 1996(02): 1.
- Same as 1
- Same as 1
- Xu Liu. Rat Grass Root Art [D]. Hunan Normal University, 2010.
- Sheng Jingling. Explanation for Tujia Brocade "The Rat Marriage" Pattern [J]. Nationalities Forum, 2010(06): 48-49.





Fig. 8. Blessing of Prosperity in Year of the Rat.



Fig. 9. The Rat Eats Watermelon.9

A. Artistic Characteristics of Rat Pattern

Rat in traditional Chinese legend bites the heaven and earth, steals seed grains and fosters oriental agriculture civilization for mankind. For this reason, rat is often associated with crops. Artists design plenty of rich rat patterns with their creative thoughts. As for appearance, rat often appears as a smart and lovely thing with bright eyes, long tail and small paws. As for decoration, the modeling of rat is mostly brief and concise without excessive figures. For meticulously portrayal, rat is often drawn with saw tooth and crescent figure.

For instance, in "The Rat Steals Pumpkin" (see "Fig. 3"), a little rat is sprawling on and vividly gnawing two pumpkins depicted with curves; in "The Rat Steals Grapes" (see "Fig. 1"), a little rat is creeping to the luxuriant grape trellis to taste grape; in "Blessing of Prosperity in Year of the Rat" (see "Fig. 8"), the little rat has round ears, big eyes, long mouth and crooked tail. It looks cute and lovely. The overall modeling is very brief. Decorated with hollowed saw tooth and crescent figure, it seems to be more stereoscopic and plump; as shown in "Fig. 7", in "The Rat Marriage", the rat is personified. The scene is divided into two parts. In the lower part, the rat bride is sitting in a bridal sedan chair sideways because of the bumpy road, and the bridegroom, riding on the horse and wearing a flower on chest, is following the bridal sedan chair with smiles on face. Those rats lifting the bridal sedan chair that are turning their heads around and making eye contact seem to chat with each other. In the upper part, a crowd of rats are holding high flags and umbrella, beating gongs and drums to escort the bride to the wedding. The scene is rather boisterous and jubilant full of folk vitality. It is really a good work. Besides, the state of different rats increases the congruence, compactness and concord of the composition and highlights the joyous atmosphere.

Xu Liu. Rat Grass Root Art [D]. Hunan Normal University, 2010.

⁹ Xu Liu. Rat Grass Root Art [D]. Hunan Normal University, 2010.



B. Humanistic Implications of Rat Pattern

Since ancient times, the image of rat has experienced evolution from realism to symbolism and the cultural implications of rat also turns increasingly abundant. The creation for rat pattern of Chinese people is out of the psychology of "worship for rat", "pray for rat" and eventually "deratization". Rat, admired and loved by people, conveys the affection of all nations and symbolizes the renewal of things and blessing for offspring.

- 1) Worship for rat rat bites the heaven and everything turns fresh again: Guangyang Notes in Qing Dynasty explained the ranking of twelve Chinese zodiac signs by way of the tale "The Rat Bites the Heaven". Rat is viewed as the God of Creation who has the ability to pioneer the heaven and earth. Simultaneously, rat makes lots of contributions to mankind by stealing sun and moon. Out of the worship for rat, folk artists create rich rat patterns to express the vision for the New Year. For instance, the "Blessing of Prosperity in Year of the Rat" (see "Fig. 8") incorporates the image of rat, fish and peony to betray the longing of people for a happy and wealthy life, as well as their optimistic attitudes and beautiful wishes.
- 2) Praying for rat dispelling disasters and praying for blessings and offspring: Due to the backward civilization and thoughts, people in the Agrarian Age had no means to wipe out rat infestation but could only pray for safety by rat sacrifice. Therefore, the belief of people in rat is very contradictory since they on the one hand worship the God of Rat and on the other hand pray that rats in real life would not bring more disasters and inconvenience to them. By the same token, rat pattern also conveys people's wish to dispel disasters and aspiration for blessings. People anticipate sending rats away by marriage and usher in good harvest this year. Additionally, considering the tenacious viability of rats, people pin their hope for a consummate marriage and fruitful descendants on rat pattern.

People associate the tenacious viability of rat with their ardent hope for fruitful descendants. As "rat" in zodiac is the homophone of "child" in Chinese, the folk society tends to endow rat with the auspicious meaning of "fertility and fortune" and hangs colorful rat patterns at home. In reality, the combination of rat with grape, watermelon, calabash and other "seedy" fruits and the scene where the rat steals grape, eats pumpkin and drags calabash also reflects the eager for "child". For instance, Gansu Qingyang embroidery "The Rat Eats Watermelon" draws five white rats eating the watermelon. Watermelon is the symbol of harvest and fertility. By showing rat and watermelon on bellyband embroidery, the creator expresses the good wish for offspring. Such aspiration can be also found in the tale of "The Rat Climbs the Lamp Stand" because of the similar pronunciation of "lamp" and "child" in Chinese. As "cabbage" and "fortune" is a pair of homophones in Chinese, the tale of "The Rat Steals Chinese Cabbage" reflects the implication of accumulating fortune and flourishing population.

IV. EXPLORATION OF CHINESE RAT PATTERN IN COSTUME DESIGN

By applying rat pattern in costume design, people essentially convert the aesthetics of rat pattern to the carrier of costume, convert two-dimensional plane to three-dimensional object and convert paper art to fabric and costume art10. In costume design process, designers should firstly learn about the stylistic features and formation cause of rat pattern so that they can inherit and innovate such pattern in modern costume design. According to the author, designers should take notice of the following three points while incorporating traditional Chinese rat pattern into costume design, namely the integration of rice pattern in modern costume modeling, reconciliation of rat pattern and different costume texture, combination of rat pattern with costume craft.

A. Integration of Rat Pattern in Modern Costume Modeling

On the basis of traditional culture, costume design should not only satisfy the demands of audiences, but also satisfy the aesthetic pursuits in contemporary times for vigorous inheritance. The rich rat patterns, interesting figures and special implications afford the inspiration source to designers. Designers can integrate rat pattern with modern costume to cater to the costume modeling aesthetics in contemporary society, unity rat pattern with modern costume modeling and arouse the reflection and resonance among audiences. To be specific, it is a good choice for designers to refine and reconstruct rat sign and reinforce the modern sense of rat pattern in modeling, therefore changing public stereotype of rat and making people see more modern rat pattern. Moreover, traditional pattern should make breakthroughs in aesthetic concepts, theme, and humanistic implications of modern costume design. What designers should do is to explore how to integrate the intense visual style of Chinese rat pattern in modern modeling design. Rat patter should get rid of the constraint imposed by traditional mode. For responding to people's pursuit for the new age, pattern design may appropriately add modern festival or daily article and other similar factors.

B. Reconciliation of Rat Pattern and Different Costume

In terms of the application of traditional pattern in costume, attention should be also paid to the contrast balance and rational analysis of costume texture besides pattern variation and application means so as to unify form and style. While applying rice pattern in costume, designers are supposed to ensure the diversity and high fashion of costume and meanwhile explore the reconciliation of rat pattern and different costume texture. Through incorporating rat pattern into all sorts of fabrics and texture ranging from flimsy silk to thick knitted wool, designers are able to shape the unique quality of Chinese rat pattern.

Wang Weijing, Li Yanxiao. Aesthetic Principle and Application of Chinese Par Cuttings Art in Costume Design [J]. Silk, 2016, 53(05): 50-54.



C. Combination of Rat Pattern with Costume Craft

To a large extent, the inheritance and development of traditional culture is to relocate traditional culture in the new art environment and market competition, and help modern art expression form adapt to modern social aesthetics. Together with the continuous development computer technology, the textile printing and dyeing industry ushers in huge historical revolution and development opportunities which request designers to abandon past thoughts and integrate digital technology with costume design. As to the craft of zodiac rat totem in costume, designers may choose digital printing in plane design, and embroidery, drawn work, applique and crocheting in stereoscopic design.

- 1) Plane-digital dyeing: As to the application of dyeing technology in modern costume design, it mainly falls into digital dyeing and heat transfer dyeing. In particular, the latter belongs to the traditional means while the former belongs to the modern craft. Obviously, digital dyeing is more popular because of its intense sense of modernity. Digital dyeing device processes rat pattern with computer technology, improves the efficiency and receives higher reputation among people. Through breaking up the limitations in traditional colors and format, digital dyeing enjoys unparalleled advantages. It is able to realize high-end dyeing of rat pattern and simultaneously ensure the environmental protection property of production.
- 2) Three-dimensional stereoscopic craft: Three-dimension craft usually includes embroidery, drawing, applique, crocheting and suture. By way of these techniques, designers can reinforce the superficial texture of costume, turn the pattern more stereoscopic and shape more unique decorative effects. Moreover, in specific design of embroidery pattern, designers have to notice the discrepancy of costume pattern and form as it may affect the choice for pattern shape and form. The design principle should be symmetry and harmony. In order to cater to diverse styles, it is necessary to sort out pattern as per figures or tailoring. Furthermore, designers can rationally apply rat pattern in modern costume by embroidery and other stereoscopic crafts. It can turn the costume more elegant and fashionable.

V. ATTEMPT OF CHINESE RAT PATTERN DESIGN IN MODERN FLEECE

Pursuant to above design surveys and design exploration, the author reviews rat pattern and creatively makes a try in "rat fun" fleece collection design. The author realizes the modern reconstruction of rat pattern by preserving the pure and smart image of rat and incorporating the unique oriental humanistic implication represented by rat into the costume.

A. Modern Reconstruction of Rat Pattern

The oracle bone inscription "rat" is just like a little rat eating something in the mouth. The author subtly designs the modeling of rat according to the font structure of Chinese characters by weakening text, reinforcing graphic effects and creating unique rat signs (see "Fig. 10"). Such design means

breaks up conventional text and image form. Furthermore, diversified expression means accurately and intuitively depicts the image of rat and shows strong sense of enjoyment.



Fig. 10. Textualization of the rat image (painted by the author).

The rat pattern as the foremost zodiac pattern has been widely retrieved and applied. Beginning with the humanistic implication of rat, the author realizes the reconstruction of primitive pattern through realistic and enjoyable changes (see "Fig. 11") exaggerates and refines single and continuous patterns from the outside to the inside to obtain a new pattern. Meanwhile, it also contains primitive custom culture and eventually achieves the perfect combination of form and content. The new pattern designed with clear structure and rhyme endows new implication to the whole set of costume.

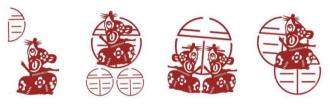


Fig. 11. Reconstruction of original rat patterns (painted by the author).

B. Application of Rat Pattern in Modern Fleece Design

After the retrieval and reconstruction of rat pattern, the author tries to apply it in modern fleece (see "Fig.12"). The fleece full of modernity and conciseness sense is available in color white, crimson and dark blue. This collection fully reveals oriental connotations. Specifically speaking, the author continually and symmetrically sorts out rat pattern, applies the pattern in costume partially or wholly, repeats the modeling and arranges layout as per aesthetic rules for combining the mobility of pattern with the inertia of entire costume. Besides that, the author focuses on the decoration and exquisitely makes the pattern on lower hem correspond to cuff to shape a fashionable and elegant style. Eventually, the author draws the front side and reverse side of the collection (see "Fig. 13").

The emphasis of this attempt is to rebuild a proper rat pattern, apply it in embroidery and select fabric and colors to design delicate costume and create special national flavor. At the same time, the author expects to offer new thinking to the design application of zodiac rat element in costume design.





Fig. 12. "The Funny Rat" series garment design (painted by the author).

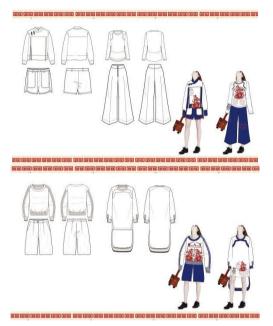


Fig. 13. Costume design diagram (painted by the author).

VI. INHERITANCE AND INNOVATION SIGNIFICANCE OF CHINESE RAT PATTERN IN COSTUME DESIGN

Nowadays, the government stresses the protection of regional cultural characteristics and respects the development of regional, folk and traditional culture to form a diversified benign cycle. Under the call of the government, fashion design is moving towards a more diversified and pragmatic orientation. The design application of traditional elements has already entered the field of modern design, but it still requests further research in terms of the collaboration with fashion design. The special visual sign of Chinese rat pattern incorporates the unique cultural concept, life style, emotional connotation and rich imagination of ancient Chinese people. In modern fashion design, designers are supposed to learn from traditional Chinese culture, acutely seize the fashion trend, keep up with times, integrate traditional aesthetic experience with new aesthetic message, create modern costume full of epoch characteristics and lead traditional Chinese art to march to international fashion circle.

VII. CONCLUSION

China has a profound belief in rats. From faith to life, from words to images, "rats" are everywhere. It affects people's lives and takes root in people's consciousness. The traditional characteristics of Chinese rat patterns add to the national identity of clothing, which is conducive to the inheritance and development of cultural heritage. For modern fashion designers, the most important thing in design is to shelter the places in the Chinese rat pattern that are worthy of inheritance, and to perform in a younger and more energetic form, so that it will last forever in the fashion world and even in the times.

REFERENCES

- [1] Xu Liu. Rat Grass Root Art [D]. Hunan Normal University, 2010.
- [2] Li Zhenan. Brief Analysis on the Inheritance and Innovation of Folk Art Image — Based on the Analysis of Rat Artistic Image in Twelve Chinese Zodiac Signs [J]. Beauty & Times (Volume I), 2016(01): 19-21.
- [3] Sheng Jingling. Explanation for Tujia Brocade "The Rat Marriage" Pattern [J]. Nationalities Forum, 2010(06): 48-49.
- [4] Portrait for Rat [J]. Invention and Innovation, 1996(02): 1.
- [5] Liu Boxin. "The Rat Marriage" Image Variation Research [D]. Central Academy of Fine Arts, 2018.
- [6] Lv Yuan. Cultural Implications and Art Modeling of New Year Picture "The Rat Marriage" [J]. Seeking Roots, 2018(01): 65-71.
- [7] Wang Weijing, Li Yanxiao. Aesthetic Principle and Application of Chinese Par Cuttings Art in Costume Design [J]. Silk, 2016,53(05): 50-54.
- [8] Liao Wenhua, Wang Hongfu. Image Exploration and Application of Central Asia Ikat Pattern in Modern Costume Design [J]. Silk, 2016, 53(01): 39-47
- [9] Wu Hongmei, Zhang Wenqi. Research on Pattern Modernization in Traditional Costume [J]. Science Tribune — Electronic Edition (late issue). 2017. (8): 164.
- [10] Xu Jingya. Research on the Application of Chu Phoenix in Costume Design — Taking Phoenix Pattern in Chu Textile as the Example [J]. West Leather, 2015, 37(15): 46.