Study on Intangible Heritage Value and Digital Protection of Clay Sculpture in Guanzhong Area of Shaanxi Province

Yingli Sun¹ Chaolu Mao²

^{1,2} School of Arts, Xi'an University of Science and Technology, Xi'an, Shaanxi 710054, China

ABSTRACT

Guanzhong area has a unique geographical location and a long history and cultural tradition, deeply influenced by the region and culture, and the variety of its traditional folk handicrafts; In the current situation of the prevalence of intangible cultural heritage protection, as one of the most representative Guanzhong clay sculpture, protection and research is essential; By collecting and collecting and screening relevant data of Guanzhong folk customs, this paper firstly analyzes the intangible cultural heritage of Guanzhong clay sculpture and its intangible cultural heritage value. Secondly, through the analysis of the current situation of digital protection in Guanzhong, it finds that the digital protection of Guanzhong clay sculpture is one-sided and ignores the protection of cultural genes, and proposes solutions to this problem. In this way, the clay sculptures in Guanzhong area get higher attention and better inheritance and protection.

Keywords: Clay sculpture in Guanzhong area, Intangible cultural heritage, Intangible cultural heritage value, Digital protection.

1. INTRODUCTION: HISTORICAL AND CULTURAL BACKGROUND OF GUANZHONG REGION

Guan refers to East Tongguan, Xisan Pass (Dazhen Pass), Nanwu Pass (Languan Pass) and Beixiao Pass. Currently, Guanzhong region is located in the middle of Shaanxi Province, including Xi'an, Baoji and Xianyang. Guanzhong has a long history and culture. As the ancients said, "Guanzhong is the ridge of the world and the dragon head of Central Plains", "the first imperial capital with a history of five thousand years" and "eight hundred miles of Qinchuan", Guanzhong culture is an indispensable part of Shaanxi culture and an important root of Chinese culture.[1] Because Guanzhong has the largest number of capitals and the longest history, it has a long historical tradition. The culture of Guanzhong can be summarized as "ancient". Literature and art are "ancient", such as the Book of Songs and Han White Opera. The culture is "ancient", the elegant and vulgar culture is also ancient culture; Literature and art are "ancient", and folk literature and art are

rich and colorful, such as Fengxiang clay sculpture, Xi'an mud calling, Baojishe fire facial makeup;In terms of "ancient", the ancient Guanzhong dialect has a profound influence on opera and other arts, which makes it possess unique regional characteristics.[1] Guanzhong area is deeply influenced by "ancient" culture and "ancient" literature and art. There are a wide variety of folk handicrafts with regional characteristics.

2. GUANZHONG AREA INTANGIBLE CULTURAL HERITAGE

Guanzhong folk culture and art have a long history, with a wide variety of folk handicrafts, with a very strong regional and strong cultural characteristics, heritage is still popular with the majority of the audience. Guanzhong folk handicrafts listed as intangible cultural heritage are divided into clay sculpture, woodblock New Year pictures, embroidery, She Huo facial mask, handpainted door curtain, paper cutting, ceramics, shadow play, face flowers, etc., which contains rich cultural heritage.

Fengxiang clay sculpture in Guanzhong area is very representative. Fengxiang clay sculpture is a unique folk art. The history of clay sculpture can be traced back to more than 600 years ago, and it has been passed down from generation to generation. In addition to Fengxiang clay sculpture, Xi'an Yuhuazhai Clay sculpture, Changwu Temple clay sculpture and Jintailuo's colored clay painting are also members of Guanzhong's intangible cultural heritage of clay sculpture. Xi'an Clay Clay is a kind of folk handicraft toy product, which is called "playing goods" by local people. It has various types and contents, most of which are legendary gods and dramatic characters, with small shapes and folk characteristics. Demonstrating the traditional historical and cultural traces; Changwu Temple clay sculptures and Jintai Luo's colored sculptures and paintings were both produced under the background of local religious beliefs and national culture, with rich historical, spiritual and cultural connotations. Their images are mainly figures, forming a unique artistic style.

Fengxiang New Year wood-block Prints have been named as the first batch of national intangible cultural heritage. With a history of more than 500 years, Fengxiang New Year wood-block prints have a wide range of themes and various forms, which are mainly divided into sacrificial paintings, grain rain paintings, spring ox paintings, opera paintings, auspicious paintings, and genre paintings, etc. Abundant opera story paintings and auspicious paintings praying for good fortune constitute the colorful art world of Fengxiang New Year woodblock prints.[2]¹¹⁰ Embroidery mainly includes Western Qin Dynasty embroidery and Chengcheng embroidery;Xiqin embroidery is a general term for all kinds of craft supplies made from flat embroidery. It has been inherited and developed for more than three thousand years, with rich contents including traditional auspicious patterns, dragon and phoenix ligers, etc. Xiqin embroidery is simple in shape, strong and vivid in color, implicit and healthy in meaning, which is closely related to local folk customs and permeates in every field of life.[2]¹¹⁶ Chengcheng embroidery inheritance is different, Chengcheng embroidery in the neighborhood of oral inheritance, Chengcheng embroidery is extremely ornamental and practical, permeated in every aspect of People's Daily life, its variety is rich, vest, door curtain and other patterns and color collocation very local characteristics contains a strong cultural heritage. Baoji is the

birthplace of Zhou and Qin cultures. Baoji Shehuo Facial mask not only shows the traces of Zhou culture's "Big Exorcism" but also has the legacy of the Shang Dynasty. Baoji Shehuo Facial mask has a long history and has been passed down from generation to generation by folk artists. Compared with drama masks, Baoji Shehuo facial mask is more primitive, freer and more romantic with national emotions and rich artistic imagination, which has a strong cultural heritage.[2]¹²⁴ Chengcheng and Huazhou face flowers are very representative in Guanzhong area. Face flowers are often used as gifts for relatives and friends. They are diversified in form, concise and vivid in shape, bold and exaggerated, and have wonderful ideas.

Paper cutting refers to Yongshou folk paper Xunyi color paste cutting and paper cutting; Yongshou folk paper-cut has a long history, originated in the Southern Song Dynasty prevailing in the Ming and Qing dynasties, Yongshou folk paper-cut novel concept, rich pattern style, different styles, its artistic features include the delicate and elegant style of the south paper-cut, and reflects the bold and simple characteristics of the north papercut, and Yongshou folk paper-cut change the traditional straight lines for arc lines; Its theme is rich and each paper-cut contains a legend and blessing. Different patterns express the local people's yearning for a better life. Yongshou papercut is closely combined with the customs and habits of different periods, which contains rich cultural implications; Ten-yi color paste paper-cut is developed from the monochromatic folk paper-cut in the late Qing Dynasty and the early Republic of China. Ten-yi paper-cut is different in that a complete piece of work needs to be cut and paste, interlining technology, and embellishment, and its main content includes folk customs, religious beliefs, etc.[3]⁹⁰

Yaotou ceramics in Chengcheng have a long history, which began in the Tang Dynasty and flourished in the Ming and Qing Dynasties and has been spreading for more than 2,000 years until now. Yaotou ceramics are made of special raw materials, made of local crucible soil with high production requirements, and are all made by hand. It is famous for its unique black porcelain and black glaze, with words such as "Fu, Lu and Shou", which reflect a prayer for a better life. Yaozhou Kiln began in the Tang Dynasty and continues to the present when it reached its peak in the Song Dynasty. Yaozhou Kiln is also made purely by hand. The production process is complicated, and the varieties of Yaozhou kiln are reflected in all aspects of life. Liquan shadow puppets are highly decorative and have artistic characteristics. Their shapes are simple and appropriate, with a combination of vanity and reality. Their colors are gorgeous and pleasing to the eye, with a strong local flavor and local characteristics.[3]⁹² Handpainted door curtain of Chengcheng, commonly known as "door curtain painting", is a kind of folk art reflected in the cloth art with the technique of traditional ink painting. Its picture is divided into two parts, the upper meaning is the round sky and the lower meaning is the place, and its pattern implies that the folk concept and the yearning for a better life are fully conveyed.

3. THE INTANGIBLE CULTURAL HERITAGE VALUE OF GUANZHONG CLAY SCULPTURES

Intangible cultural heritage has historical value, cultural value, spiritual value and many other values; Among Guanzhong intangible cultural heritage, Fengxiang clay sculpture is the most familiar one. Besides Fengxiang clay sculpture, Guanzhong clay sculpture also includes Yuhuazhai clay sculpture in Xi'an, Changwu Temple clay sculpture and Jintai Luo's painted clay sculpture. The intangible cultural heritage value of Guanzhong clay sculptures has been reflected in many aspects.

The historical value of Fengxiang clay sculptures: Fengxiang clay sculptures are the oldest handmade clay sculptures with the most national characteristics; The clay figurines were unearthed in the tombs of the Spring and Autumn period, the Warring States period and the Han and Tang Dynasties. In the Ming Dynasty, Zhu Yuanzhang's soldiers were stationed here, so it was called "Six Ying". At that time, the soldiers made all kinds of clay toys in their spare time. Today, Hu Shen, Hu Yongxing and other craftsmen inherited this craft, so that this unique folk art continues to be inherited and developed. Three thousand years of cultural deposition is the reason why Fengxiang clay sculptures can be handed down. In the long historical process, Fengxiang clay sculptures show strong vitality and still have a wide space for living, which is also the historical basis and value of Fengxiang clay sculptures.[4] Cultural value of Fengxiang Clay sculptures: the thick historical culture and special regional environment of Fengxiang clay sculptures formed a deep-rooted farming culture. The conservative farming culture made it difficult to spread religious beliefs, so the patterns of Fengxiang clay sculptures did not religious elements. The contain cultural characteristics reflected by Fengxiang clay sculptures are to find a kind of spiritual comfort in daily life from the perspective of its content, and a spiritual transmission of blessings and wishes from the perspective of its function. From the point of view of its material, it shows the simplicity of diligence, frugality and the plainness and delicacy of natural Taoism. From the pattern of the case, can feel the good hope.[5] Fengxiang clay sculpture is a cultural inheritance carrier combining education with entertainment. At the beginning, the clay sculpture artists had low cultural knowledge, so they taught skills and knowledge through oral and physical teaching. In order to better educate the next generation, they used "playing goods" as an intuitive educational tool to transfer traditional cultural concepts to the future generations through different modeling styles. The folk value of Fengxiang clay sculpture: the folk cultural value refers to the folk custom is the root of national culture, the year festival is a custom folk activity in life, Fengxiang clay sculpture in the background of folk culture combines realistic modeling with metaphorical stories, carrying people's good wishes, in the "send spring", "Laozi riding green bull, bull fighting" meaning is to wish the new annual opportunity infinite; "Sitting tiger, tiger face hanging piece" used in the Spring Festival, when the baby is full moon, meaning peace and happiness, many children and more happiness; "Ma Gu offering longevity, Guan Gong, Chinese zodiac, etc." are used to ward off evil spirits and attract wealth; "Five poisons, Zhong Kui, etc." used in the Dragon Boat Festival, town house exorcism, set Fu Na Xiang; The folk value of Fengxiang clay sculpture is closely related to its local folk activities. With the rapid development of society, some traditional folk activities disappear. The folk value of Fengxiang clay sculpture is also weakening.

The historical value of the mud in Xi'an: the mud has a long history. Tracing its roots to the source, many pottery loudspeakers are inextricably related to the mud. Xun is the most representative pottery microphone, which has a history of more than seven thousand years and has been spread among the people. Mud whistles reflecting its production principle are all over the countryside, and Xi'an mud is one of the representatives. Yuhuazhai is the birthplace of Xi'an mud. Xi'an has experienced the changes of dynasties, with profound historical accumulation and high and

passionate personality, just like the unique local opera, Qin Opera, bold and heroic, so it has laid the foundation for the expression of mud calling.[6]³¹ The cultural value of the mud calling in Xi'an: the mud calling in Xi'an has a unique regional environment and deeper cultural connotation; In the early stage, Xi'an clay was mainly made of animal images, because some animals' voices were in line with human cognition, and the sounds made by all the production were mostly imitations. Later, the human form evolved to reflect the awakening of human self-consciousness. The concept of animism taking animals as totems and deification of animals was changed to the mature concept of clay sculptures' self-expression. Xi'an clay is a kind of clay blowable modeling toys, become the ancient pottery whistle in today's continuation, as a symbol of human childhood utilitarian aesthetic materialization, is the spiritual culture of the original ancestors.[6]³³ The folk value of Xi'an mud calling: mud calling is the material carrier of folk customs and folk culture, associated with certain folk customs or folk beliefs, mud calling in the witchcraft ceremony, as a behavior prop, reflects the passion of human childhood witchcraft and religious-like piety; $[6]^2$ The mud in Xi'an is mainly based on the figures of opera figures, which is closely related to the widely spread local operas. The mud in Xi'an integrates the history and opera culture into the creation of characters, and expresses the mythic legends and historical stories with a fixed image. The folk culture activities in rural areas are mainly operas, which reflect the spiritual pursuit and thought and sentiment of the people.

There are many similarities between Changwu Temple clay sculpture and Jintai Luo's painted clay sculpture influenced by history, culture and thought, which makes Changwu Temple clay sculpture and Jintai Luo's painted clay sculpture have the same intangible heritage value.In terms of historical value, Changwu temple clay sculpture and Jintai Luo painted clay sculpture have a long history. In the farming life of local residents, solid material is used to shape the image and worship god for the purpose of entertainment, and the traditional folk culture containing history, religion, folk custom and other multicultural contents has a profound social and historical origin. Since the Ming and Qing Dynasties, Confucianism, Buddhism and Taoism have been widely spread. It has created a broad cultural space for clay painting.[7] In terms of cultural value, the clay sculptures in Changwu Temple and Jintai Luo's painted clay sculptures

involve a variety of religions, reflect the characteristics of various religious beliefs of local residents, and have a profound impact on the folk cultural life. Their themes are wide, mysterious and popular, with meaningful meanings, reflecting the rich and colorful shapes of folk customs and high artistic level, and have a potential role in traditional moral and ideological education.In terms of folk value, the clay sculpture custom of Changwu Temple and Jintai Luo's colored plastic painting custom reflect the ancient traditional worship consciousness and the phenomenon of social sacrifice culture, which has the profound function of remembering historical and cultural information. Through the form of sacrifice, the traditional cultural sacrifice ceremony can be preserved and continued, which has the research value of national folk culture.[8]

4. GUANZHONG CLAY SCULPTURE DIGITAL PROTECTION STATUS AND PROBLEM SOLVING APPROACH

The folk art in Guanzhong area of Shaanxi Province is rich in content, variety and form. As a large branch of the folk art, clay sculpture, like other folk art, is produced in the daily life of the working people, reflecting the material life and spiritual culture of the local working people.

4.1 Current Situation of Digital Protection of Guanzhong Clay Sculptures

By collecting and consulting relevant literature on the digital protection of Guanzhong clay sculptures, it is found that in the research on the digital protection and Innovation of Fengxiang Clay Sculptures Based on User Experience, Niu Wenging carried out the research by extracting the color and pattern of Fengxiang Clay Sculptures, focusing on user experience, and developing clay sculpture game APP.[9] Duan Yanjie, in his paper Research on Information Visualization and Application of Fengxiang Clay Sculptures, analyzed the artistic characteristics of Fengxiang Clay sculptures in detail, and discussed the digital preservation of the material and intangible culture contained in Fengxiang Clay sculptures through the way of information visualization and the way of mobile communication, and built a digital model.[10] Li Yixuan and Gong Xin used modern drawing software to vector draw the patterns and shapes of Fengxiang Clay sculptures and build a digital material library in Digitization Research on

Fengxiang Clay Sculpture Plastic Art.[11] In Digitization Protection and Development of Shaanxi Fengxiang Clay Sculpture Art, Ding Zhuo et al. proposed to construct an art resource library of Fengxiang Clay Sculpture.[12] Chen Shanshan designed the digital clay sculpture display system in the Design and Implementation of the Digital Shaanxi Fengxiang Folk Clay Sculpture Display System, established the 3D interactive scene and realized the 3D visualization of the clay model.[13] Sun Yingli and Chen Xiao put forward scenario construction technology to improve interactive experience in Research Status and Problem Analysis of Digital Protection of Fengxiang Clay Sculptures, and proposed to introduce inheritors into the design and development of digital products.[14]

Among the collected documents about Xi'an clay sculptures, Zang Weijun studied its origin, inheritance and variation in the Inheritance and Variation of the "Yaohui" in Yuhua Village, Xi'an.[15] Zang Weijun analyzed the modeling and painting techniques, inheritance and protection of the Yuhuazhai Mud in Xi'an in the Investigation Report on the Modeling and painting techniques of Yuhuazhai Mud.[16] Qian Yun and Dong Sun introduced the origin, production process, artistic characteristics, protection and inheritance of Dizhai Mud whistle in Dizhai Mud Whistle Technique and Key to its Inheritance.[17] Dong Yishan, in A Study on the Folk Mud Calling in Xi'an, mentioned the origin of the mud calling story, the traditional pattern structure and the comparison between Yuhuazhai and Dizhai mud calling, and proposed the idea of redesigning the mud calling so as to better inheritance and protection.[18] Qu Yuan, in the Study on Decorative Art of Shaanxi Guanzhong Doll Whistle, elaborated the origin of folk culture and Guanzhong doll whistle art, introduced the characteristics of the decorative art style of Guanzhong doll whistle, and put forward the thinking of Guanzhong doll whistle decorative art in cultural inheritance.[19]

4.2 Problem Analysis and Solution Approach

Guanzhong clay sculpture has a strong cultural heritage. From the analysis of Fengxiang Clay sculpture digital protection articles, it is found that it fully reflects the necessity of the combination of national culture and modern design. However, when considering the combination of national culture and modern design, its cultural heritage and cultural value are ignored. Its origin and inheritance protection are analyzed in the relevant literature and materials about the research of Xi'an clay sculpture, but the digital protection of Xi'an clay sculpture is not mentioned. There are few books and literature about Changwu Temple clay sculpture and Jintai Luo painted clay sculpture. There is no relevant research about Changwu Temple clay sculpture and Jintai Luo painted clay sculpture in the searched materials.

Fengxiang clay sculpture has a strong cultural heritage. Under the current situation of the prevalence of traditional culture, it is essential to explore and study the cultural factors of Fengxiang clay sculpture. The traditional cultural genes of Fengxiang clay sculpture are analyzed from the aspects of form, color, semantics and pattern, etc. According to the function of cultural factors, Fengxiang clay sculpture cultural factors are divided into dominant factors and recessive factors. The database of Fengxiang clay sculpture cultural factors should be built to fully display the cultural value and connotation of Fengxiang clay sculpture, so that Fengxiang clay sculpture can be more comprehensively protected and inherited.

Xi'an Clay sculpture, Changwu Temple clay sculpture and Jintai Luo's color sculpture and painting are the essence of folk art. Their workmanship requirements are quite high and they belong to pure handmade crafts. To better protect and inherit them, the first thing is to improve the popularity of Xi'an Clay sculpture, Changwu temple clay sculpture and Jintai Luo's color sculpture and painting. Understand its historical value and cultural connotation so as to get a high level of attention. Secondly, carry out digital protection so as to make it spread forever. Through the digital record of the material selection and production process of the inheritors, digital collection from the shape, pattern and color is established. The analysis of its artistic characteristics, the establishment of digital model for 3D visualization display processing; The analysis of its traditional cultural gene, the establishment of cultural factor database, so that its cultural connotation can be fully protected and inherited.

5. CONCLUSION

Guanzhong area has a long history of folk art and culture, with profound intangible cultural heritage value. There are many kinds of intangible cultural heritage in Guanzhong area. As a typical representative of the folk culture in Guanzhong area, Guanzhong clay sculpture has unique intangible cultural heritage value such as history, culture and folk custom. The intangible cultural heritage of Guanzhong clay sculpture includes Fengxiang Clay sculpture, Xi'an Clay sculpture, Changwu Temple clay sculpture and Jintai Luo's colored sculpture and painting. The digital protection of Fengxiang clay sculpture should fully consider its cultural value and cultural deposits, so as to obtain comprehensive digital protection. The digital protection of Xi'an Clay sculpture, Changwu temple clay sculpture and Jintai Luo's colored sculpture and painting is also imminent. Digital protection is one of the most effective ways to protect the clay sculpture in Guanzhong area. Digital technology can make the clay sculpture in Guanzhong area get better and more comprehensive inheritance and protection.

REFERENCES

- [1] Zhao Yidan. Research on Guanzhong Folk Arts and Crafts Culture Ecology [D]. Zhejiang University of Science and Technology, 2015,10.
- [2] Shaanxi Intangible Cultural Heritage Protection Center. The First Batch of Intangible Cultural Heritage List of Shaanxi Province [M]. Shaanxi People's Fine Arts Publishing House, 2008.11
- [3] Shaanxi Intangible Cultural Heritage Protection Center. Catalogue of the First Batch of Intangible Cultural Heritage in Shaanxi Province [M]. Shaanxi Normal University Press, 2010.5
- [4] Su Rong, Analysis on the Value Composition and evaluation Signs of Fengxiang Clay Sculptures in Shaanxi [J]. Silk Road, 2011, (02): 54-55.
- [5] Hou Xiaochun. Guanzhong Daya: Research on Fengxiang Clay Sculpture Art [M]. The Commercial Press. 2019,8
- [6] Zhao Mingnan. Clay Sculpture in Xi'an [M]. Xi'an Jiaotong University Press. 2015.8
- [7] Intangible Cultural Heritage Database of Shaanxi Province. The historical origin of the clay sculpture custom in Changwu Temple. Changwu County Culture, Sports and Tourism Bureau. Shaanxi Intangible Cultural Heritage

Database - Shaanxi Intangible Cultural Heritage Protection Center (sxlib.org.cn)

- [8] Shaanxi Intangible Cultural Heritage Database. The main value of clay sculpture custom in Changwu Temple. Changwu County Culture, Sports and Tourism Bureau. Shaanxi Intangible Cultural Heritage Database -Shaanxi Intangible Cultural Heritage Protection Center (sxlib.org.cn)
- [9] Niu W Q. Research on digital protection and innovation of Fengxiang Clay Sculptures based on user experience [D]. Shaanxi University of Science and Technology, 2014
- [10] Duan Yanjie. Research on Information Visualization and Application of Fengxiang Clay Sculpture [D]. Shaanxi University of Science and Technology, 2017.
- [11] Li Yixuan, GONG Xin. Digital Research on Fengxiang Clay Sculpture Plastic Art [J]. Journal of Xi'an Polytechnic University, 2018, 32(04):409-413.
- [12] Ding Zhuo, Liu Ying, Wang Shuo, Nima Wangqing. Digital Conservation and Development of Fengxiang Clay Sculpture Art in Shaanxi Province [J]. Journal of Northwestern Polytechnical University (Social Science Edition), 2014,34(04):77-81.
- [13] Chen Shanshan. Design and Implementation of Digital Fengxiang Folk Clay Sculpture Display System in Shaanxi Province [D]. Beijing University of Technology, 2014.
- [14] Sun Yingli, Chen Xiao, Analysis on the research status and problems of digital protection of Fengxiang Clay Sculpture [J]. Jingu Wenchuang. 2021,(22)88-89.
- [15] Zang Weijun. The inheritance and variation of "Yaohui" in Yuhua Village in Xi'an. People's Forum, 2011, (26): 260-231.
- [16] Zang Weijun. Investigation Report on the formation and drawing Process of Yuhuazhai Mud in Xi'an [J]. Contemporary Art, 2011, (03): 73-75
- [17] Qian Yun, DONG Sun. Dizhai Mud Whistle Technique and Its Inheritance Key [J]. Art of Design (Journal of Shandong Institute of Arts and Crafts). 2009, (01): 77-78
- [18] Dong Yishan. Study on Folk Mud Calling in Xi'an [D]. Shaanxi Normal University. 2015,4.

[19] Qu Yuan. Study on Decorative Art of Doll Whistle in Guanzhong, Shaanxi [D]. Xi'an Academy of Fine Arts, 2012, 6.