

# A Preliminary Study on the Creation of Contemporary Filigree Craft

Kai Ren, Wenjing Min, Yuan Xie

Institution of Jewelry, China University of Geosciences, Wuhan, China

Email: 1026845097@qq.com

**How to cite this paper:** Ren, K., Min, W. J. & Xie, Y. (2020). A Preliminary Study on the Creation of Contemporary Filigree Craft. *Art and Design Review*, 8, 228-236. <https://doi.org/10.4236/adr.2020.84018>

**Received:** November 4, 2020

**Accepted:** November 27, 2020

**Published:** November 30, 2020

Copyright © 2020 by author(s) and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

Filigree craft is a traditional metal handicraft technique, which is worthy of continuous practice and inheritance by contemporary artists and designers, while in the process of inheritance, the shape and pattern tend to be single and conservative, which is worth thinking about by craftsmen. From the perspective of the characteristics of filigree technology, the author tries to use the silk-making process to show natural things and show the beauty of nature. And the author realizes the requirements of filigree technology for producers-meditation on things, abandons miscellaneous thoughts, and understands the spirit of contemporary craftsmen. Leonardo da Vinci is a great painter, inventor and artist. Since childhood, he was full of curiosity about nature, pursued persistently in different fields, and made achievements that attracted worldwide attention. The author takes “BRID” as a form to pay tribute to his pursuit of artistic creation.

## Keywords

Filigree Craft, Realism, BRID, Modern Technology

## 1. Introduction

Filigree craftsmanship, also known as “filigree mosaic”, as China’s intangible cultural heritage, is known as the first of the “Yanjing eight unique”. The traditional silk craft is a jewelry craft that serves the royal family, and it can also be said to be the art of the court. With the development of the times, handicrafts that used to be enjoyed by only a few people have been able to popularize the public. However, most of the contemporary silk handicrafts and silk jewelry are traditional shapes or follow the ancient patterns and shapes of hundreds of years ago. It is difficult to satisfy the rich aesthetic experience of contemporary young people. For this reason, the author has done a lot of creative research on the rea-

listic performance of filigree craft by combining modern technology and design methods.

## 2. Filigree Craftsmanship in Chinese History

Since ancient times, silk handicrafts have been popular among aristocrats and royalty all over the world. It is also one of the many traditional crafts in China. Through the accumulation and inheritance of the experience of craftsmen of past dynasties, we have found out its unique techniques-pinching, filling, accumulating, welding, stacking, building, knitting and weaving. As early as the warring States period, people used gold wire to make earrings. Gold earrings were unearthed from Tomb No. 1 in the cemetery of King Shang in Linzi (**Figure 1**) (Yan, Zhang, & Sun, 2016). When silk handicrafts developed to the Yuan Dynasty, the number of earth relics increased significantly compared with that before the Tang Dynasty, and the number, types and craftsmanship level of unearthed cultural relics reached the peak of ancient production in the Ming and Qing dynasties. Such as the Ming Dynasty Ding ling unearthed Ming Wanli emperor Gold Crown (**Figure 2**), ingenious structure, superb craftsmanship, all



**Figure 1.** Gold earrings (Source: Journal of Guangxi University for Nationalities).



**Figure 2.** Gold Crown by personal imitation (Source: Individual collections).

woven with gold wire. The process adopts many processes such as silk rubbing, wire choking, wire filling, base wire and so on, which reflects the superb production level of this type of silk in the Ming Dynasty (**Figure 3**) (*The Palace Museum, 2016*). The Beijing Special Handicraft Federation, established in 1949, explicitly regards “filigree craftsmanship” as a kind of special handicraft industry, which is not only used to name specific types of handicrafts. The month is also used to refer to the products produced by the filigree industry in a specific manual workshop as “filament mosaic”. In 1958, Beijing established the largest jewelry factory in Asia-Beijing Filament Mosaic Factory. With the social and cultural progress and the change of production structure, the process production has been further improved. Filigree mosaic works mainly serve diplomacy and national economic construction. In the 20th century, in the 1970s and 1980s, the filigree mosaic factory was once brilliant in the international arts and crafts market, and the technological level reached a new peak (**Figure 4**).



**Figure 3.** Eighteen hand.



**Figure 4.** Silver incense powder box (Source: Individual collections).

### 3. The Present Situation of the Research on Filigree in Contemporary China

In recent years, Chinese cultural units, universities and enterprises at all levels have invested a lot of manpower and material resources in the research and promotion of traditional technology. For example, Yang Xiaoling's "Chinese Fine Gold Craft and Cultural relics" (Yang, 2008) and the Imperial Concubine Jewelry Picture Dictionary of the Qing Dynasty published by The Palace Museum (2012) systematically sort out the fine gold craftsmanship from a historical and aesthetic point of view. A number of art universities in China have also invested a lot of educational resources in the research of traditional technology in teaching and scientific research, and a number of professionals have been devoted to this field every year. Some enterprises, such as Chao Acer, Bai Tai and Chow Tai Fook, have also actively expanded to develop the market business of jewelry and handicrafts with traditional process design. Since 2017, the Ministry of Culture, the Ministry of Education, the National artists Association and other important administrative agencies have also set up art funds, and art exhibitions promote the whole society to pay attention to the protection and research of traditional crafts. Although the study of traditional technology has entered the situation of letting a hundred flowers blossom, there is still a huge research space for the aesthetic study of ancient fine gold handicrafts as well as the modeling characteristics and artistic expression of the process itself.

### 4. Research on the Modeling of Filigree Technology under Modern Technology

Filigree technology can give people a sense of lightness, dexterity and exquisite styling. Starting from the characteristics of filigree technology and expressing it in a realistic way, the author designs and makes jewelry and handicrafts with the characteristics of filament technology, which embodies the beauty of craftsmanship and nature.

#### 4.1. "Guo Shi"

"Guo Shi" is a very realistic and thick silk work. Using the process shape creation of "Komatsu" in the filigree process, "Komatsu" is usually used to close the edge and embellishment in the traditional filament process, playing the role of decorative belt. The author breaks the inherent pattern and takes it as the main body to express a pair of "naughty litchi" in the fruit bowl of life (Figure 5).

#### 4.2. Feather

"Feather", originated from a technological experiment, and then created through continuous experiment and improvement. The author believes that this is just like the natural expression of natural artifacts (Figure 6). The very fine silver wire (0.17 mm) of each feather is arranged and welded in parallel in an orderly manner to restore the lightweight texture of the feather.

### 4.3. Dandelion

Dandelion works are created by using the craft shape of “filament” in filigree craftsmanship. “Filigree” is usually used to weave filigree and pinch edges and shape in traditional filigree craft. The author breaks the inherent pattern and takes it as the main body to express a bouquet of florets in nature (**Figure 7**).

### 4.4. LUCK BIRD

“LUCK BIRD”, in the author’s opinion, silk craft is the craft of picking people. He needs the producer to meditate on one thing, and get rid of distractions and complete ascension of your own soul. Da. Finch’s greatness lies in



**Figure 5.** Gilded silver works “Fruit”.



**Figure 6.** Gilded silver works “Feather”.



**Figure 7.** “Dandelion”.

his knowledge of Pepsi, and some of the sophisticated flight machinery components even amaze people today, but the driving force behind all this is a simple idea in his mind-I just want to be a flying bird. From the author's point of view, this is the driving force of all artistic creation, and it is the most primitive power of human inner emotion without any modification, which is not affected by any external factors, so the author uses the most beautiful spirit in nature as a reference, through filigree craftsmanship, the combination of technological process and image, to explore the eternal motif of artistic creation, such as materialization in the heart and new creation of all things.

A large number of bird photos were selected and sketched on the basis of copying and observation. On the basis of determining the shape, the production part is subdivided into head, back, abdomen, wings, tail and claws. Different parts, the shape and quantity of feathers are different, and the techniques used are also different, all of which are determined in the sketching stage (**Figure 8**).

The body of the bird is molded with plaster, the skeleton is shaped with thick silver wire, and then covered with a set of blanks, fitted, trimmed and welded. After welding, immerse it in water and blow off the plaster (**Figure 9**).

Based on the experience of a bird made in 2016 (**Figure 10**), the author uses three techniques to express the feather texture of the whole bird: the first kind of feather is realistically reproduced according to the growth structure of the feather, thick silk is made into rods, filaments are arranged and welded regularly, and the feathers are trimmed after completion. The second is a new attempt to cut the silver directly into a thin filament, which is convenient for production, but also conducive to welding different thickness of silk performance hair and down; the third kind of feather is fan-shaped, a single area is small but requires a large



**Figure 8.** LUCK BRID, hand drawing.





**Figure 9.** LUCK BRID, plaster moulding.



**Figure 10.** LUCK BRID, testing piece.

amount, so a long silver wire is bent and welded directly.

The small feathers at the top of the picture are pressed into a flat circle with the silver wire of 0.50 mm as the trunk, and the silver wire of 0.17 mm is folded into a V-shaped arrangement and welded, reflecting the texture of fluff. In the middle of the picture, the large pieces of feathers on the bird skeleton are pressed into a flat circle with 0.90 mm of silver wire as the trunk of the feathers, and the silver wires of 0.21 mm are closely arranged and welded according to 50°, which fully shows the fineness, air permeability and texture of the wings and feathers. The most horizontal silver strips arranged in the middle of the picture are 0.1 mm pieces of silver cut into 20 mm pieces with scissors, and the length is determined according to the shape of the bird skeleton. Then cut parallel from the wide side with scissors to form densely arranged filaments, each of which is between 0.02 mm and 0.07 mm in thickness, showing the texture of the fluff under the feathers (**Figure 11**).

According to the feathers and process characteristics in the sketch, the laminated layers are welded (only the body, wings and tail are made separately and then welded with the body). The size and shape of the bird's claws and beak, the



**Figure 11.** Feather making in LUCK BRID, works by Kai Ren, 2018.



**Figure 12.** LUCK BRID finished works by Kai Ren, 2018.

use of fine gold chisel carving process and modern green wax carving after casting (**Figure 12**).

## 5. Epilogue

In this paper, through the innovative exploration of the technological process of



filament process, a large number of process experiments have been done in writing, hoping to make a new breakthrough in the performance of traditional filigree craft based on the current technical conditions. When “craft” changes from noun to verb, the process of “growth of all things” in the logic of the craft world shows the unique natural beauty of each process.

### Acknowledgements

One of us (R. B. G.) thanks: Technical support—Wenqian Li, Hai Huang, Wenjing Min; Intellectual support—Wenjing Min, Jie Zhou; Photograph—Chengyu Ji.

### Fund

This paper is CJHI contribution CJHIXM-2020013. The authors acknowledge the financial support of a Grant (CJHIXM-2020013) from Center for Jewelry Heritage and Innovation, a Hubei Provincial Key Research Base for Humanity and Social Sciences.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

### References

- The Palace Museum (2016). *Classics of the Forbidden City* (p. 208). Beijing: The Forbidden City Publishing House.
- The Palace Museum (2012). *The Jewelry Picture Book of the Imperial Concubine of the Qing Dynasty*. Beijing: The Forbidden City Publishing House.
- Yan, J. C., Zhang, M. F. & Sun, S. Y. (2016). The Origin and Definition of the Concept of “Filigree Inlay”. *Journal of Guangxi University for Nationalities (Natural Science Edition)*, 22, 30-38.
- Yang, X. L. (2008). *Chinese Fine Gold Crafts and Cultural Relics*. Beijing: Science Press.