

A Study on the Forging Process of the Miao Traditional Silver Ornaments

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Abstract: The Miao ethnic group is one of the oldest ethnic groups in China, and as a representative of the Miao cultural symbols, the Miao silver ornaments are highly recognizable in the ethnic family and have extraordinary aesthetic value at the same time. However, the development of the Miao silver ornaments is not optimistic, and the inheritance of the forging process of the Miao silver ornaments has encountered unprecedented challenges. This paper will start from the origin, classification, forging process, and the dilemma of inheritance of the Miao silver ornaments and try to analyze and provide constructive solutions at the theoretical and practical levels to help the inheritance of the Miao silver ornaments develop in an orderly and healthy way.

1. The Origin and Development of the Miao Silver Ornaments

1.1. Introduction to the Miao Ethnic Group

The Miao, one of the oldest ethnic groups in China, can be traced back to the "Jiu Li" in the time of the Yellow Emperor and the "San Miao" in the time of Yao and Shun [1].

The "The Emperor's Time in China" contains: "Chi You's group was strong and competed with Yuwang for the King position at the foot of Zhuolu". There are other relevant historical materials and documents, compared which with the historical myths and legends of the Miao and the analysis of unearthed cultural relics, we can prove that the Miao originated more than 5,000 years ago, when it was called the "Jiu Li" and lived in the middle and lower reaches of the Yellow River. Later, due to war and defeat, the whole Miao tribe was disintegrated, and part of them stayed in the original territory, while the other part migrated to other places.

The Miao are widely distributed not only in the provinces in China, such as Guizhou, Hunan, Yunnan, Hubei, Hainan, Guangxi but also in Thailand, Laos, Vietnam, the United States, France, and other countries abroad. They migrated to different regions and formed different cultures with their characteristics. According to their dress and living environment, they are divided into "Red Miao", "Black Miao", "White Miao", "Green Miao", "Flower Miao", "Small Flower Miao", etc.

1.2. The Origin of the Miao Silver Ornaments

When did the the Miao people start to make silver ornaments? Experts differ on this question, and there is no definite conclusion yet. Some scholars believe that the ancestor of the Miao is Chi You, who is recognized as the founder of the metal weapons, thus we can infer that in the Chi You period they began to master the technology of smelting metal. As the descendants of Chi You, we can tell that the Miao ancestors in the Chi You period had mastered the initial technology of smelting metal and could use the metal as a decoration. But when did the Miao start to use the metal silver for decoration, historians believe that "the Miao silver ornaments appeared together with coins". Because the Miao are always in migration in history, how to transport the wealth during migration is a big problem. So wearing silver as ornaments is a more convenient way to transfer. In documents, it can be found that the Miao people wearing silver ornaments began to appear in the Ming Dynasty historical records, there is "the rich wears gold and silver earrings, many to five or six rings". In the Qing Dynasty, there is "old or young, wrings on their wrists which are silver" [2].

It is clear that at least from the Ming Dynasty, the Miao silver ornaments began to appear and become popular.

Although there is a lack of records about the origin time of the Miao silver ornaments, it can be speculated from the archaeology of silver ornaments that the Miao silver ornaments began in the Warring States period, started to mature in the Ming Dynasty, and has been popular until now. With the increasing production skills and material living standards, the Miao silver forging skills have been improved in an orderly inheritance, The silver ornaments made by craftsmen are various, beautiful, and gorgeous, bearing the values, life attitudes, and aesthetics of this ethnic group.

1.3. Status of the Miao Silver Ornaments

Undoubtedly, the Miao silver ornaments have achieved great success in aesthetics, with their exquisite and clever shapes, unique styles, and superb craftsmanship, which are very impressive. People know the Miao silver ornaments often by their symbolic silver horns, clothing accessories, etc., which are considered to be worn by the Miao people in festivals and ceremonies and are a clever blend of the Miao people's aesthetics and values.

However, although the Miao silver ornaments have many advantages, its does not develop well. After five great migrations, the Miao people finally settled in western Hunan, Guizhou, and the southern part of Yunnan, which were isolated and economically backward in ancient times, so the smelting technology of the Miao silver ornaments was difficult to be improved and developed was very slow. Until after the 1980s, with the reform and opening up, the economy of the Miao region was given unprecedented development opportunities. However, the Miao silver ornaments do not develop as the economy develops but remained in the traditional stage and the production process is backward, far behind the current international standards of jewelry design and manufacturing process. In addition, the market of the Miao silver ornaments is still limited to the internal Miao, it is more difficult for non-Miao people to obtain beautifully made the Miao silver ornaments. As the Miao silver ornaments are purely handmade, the production is inefficient and the technology is backward. But the Miao silver ornaments that are made of modern machinery manufacturing are very crude and can not meet the market needs. In general, the development of the Miao silver ornaments is not ideal and has stopped.

2. The Classification and Shape of the Miao Silver Ornaments

The Miao silver ornaments are an important achievement of the civilization of the Miao culture, covering almost all Miao-related history and culture, including all aspects of the Miao handicraft.

Regarding the classification of costume ornaments by domestic scholars, this paper introduces the Miao silver ornaments, headdress, necklaces, clothing, and hand and foot ornaments respectively.

2.1. Headwear

Headwear is the most important kind of the Miao silver ornaments and the most complicated of all kinds of ornaments, among which the silver horn is the most obvious one with the largest quantity. Silver horn takes the shape of the buffalo horn, with two horns forked and generally engraved with the decoration of two dragons playing pearl, and the carvings are all convex reliefs, which are exquisite. Silver horn is very large, about 80 centimeters high. As they are mostly worn by the female, the silver horn occupies almost half of the height, so the silver horn is very conspicuous in the Miao silver ornaments. In addition to silver horns, there are silver hats, silver children's hats, silver top flowers, silver wrap-around pads, silver pins, silver floating head rows, silver net chains, silver flower combs, silver earrings, silver hairpins, silver fans, and other accessories, all of which are worn on the head. The structure is of primitive simplicity, with various shapes, such as chrysanthemum, plum blossom, chessboard flower, peach, butterfly, Guan Gong broadsword, etc., with colorful silk bouquets hanging from them [3].

They are made for different people to wear, such as the silver phoenix crown, which is an ornament worn on the forehead of the Miao girls under the age of 17 who have not been married.

2.2. Neck Decorations

The chest and neck can wear silver ornaments in a large area and as they are in the visual intersection, they have always been a very important part of the Miao costume, for which silver collars have always been very important in the Miao silver ornaments, with exquisite design and careful production. Silver collars are rich in design and have many types, which can be divided into two kinds: chain type and circle type. Chain-type silver collars are formed by interconnecting chainrings, which can be moved and are similar to modern necklaces. Circle-type silver collars are made of a complete silver piece or silver bar, which cannot be changed once it is made. Some combine the two of them, combining their strong points, the production technology is more complex. As they are made of sterling silver, the neck decorations are not very light, their weight ranging from 300g to 1000g, and it is beautifully embossed with exquisite relief, often a male and a female hook at both ends, which looks more beautiful.

Silver breastplates are another large category of neck decorations, worn to flatten the folds on the clothes and were thus named. The Miao silver breastplates are evolved from the longevity lock with various shapes, mostly in the form of a semi-circle, but the size is much larger than the longevity lock. They are decorated with complex patterns on their surface, so the production process is complex and changing. Techniques such as round carving, relief, and perspective carving are applied, with complex modeling and exquisite craftsmanship. The main pattern on the silver breastplates is two round carved silver dragons, with a movable hollow silver ball in the center, on which the silver dragon leaps, and under which the silver flowers are clustered, with exquisite modeling and craftsmanship [4].

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2.3. Clothes Ornaments

The Miao like to wear silver ornaments, and there are a large number of fine ornaments on their clothes. The main ornaments of silver clothes are silver pieces. The silver pieces are divided into the main piece and the matching piece. The main piece generally uses exquisite relief patterns to

decorate the main parts such as the hem, back, and lapels of the clothes, which are well made and beautifully decorated. The matching pieces are smaller in size and have simpler patterns, and are mainly used for sewing in the gaps between the main pieces, connecting and embellishing the main pieces. The main pieces of the silver clothes pieces are of various styles and exquisite shapes, including round, square and rectangular, with various relief carvings on the surface, such as lions, tigers, butterflies, phoenixes, cranes, membrane phosphorus, pheasants, dragons, flowers, Fairychild, arhats and other images [5].

There are many bell pendants on the matching pieces, decorating the cuffs and hems, and as people walk around, the small bells clash with each other and make a clear and pleasant sound. In addition to silver clothing pieces, there are also apron chains, silver buttons, silver backplates, silver waist pendants, and many other kinds of silver ornaments.

2.4. Hand and Foot Ornaments

The silver ornaments on the hands are mainly bracelets and rings. There are many kinds of bracelets, heavy ones can reach more than 300 grams, and they can be divided into more than twenty kinds according to their shapes. Some of them can be opened and closed, and some are made as a whole. Rings are also rich in variety, the most famous is the "inseparable four rings of plum blossom set of rings", which is unique in style, with the four rings interlocked. Each ring is decorated with several plum blossoms, carved exquisitely with different styles, or open or close. Four rings can also be folded flat into 90 degrees. All rings are stacked together, and each can open and close. The Miao also have the custom of wearing foot ornaments, mostly made of silver wire and are often worn by children. Its main function is to ward off evil.

3. The Forging Process of the Miao Silver Ornaments

The Miao is the one group that prefers silver ornaments the most among the 56 ethnic groups in China. For the Miao, silver ornaments represent wealth and status on the one hand, and on the other hand, they can ward off evil spirits and bring good luck. The manufacturing of Miao silver ornaments is very complicated, with more than twenty processes in total, which can be divided into three stages in general.

3.1. Making the Base of Silver Ornaments

To make a silver ornament, the production of the base is an essential step. The first is the selection of raw materials. There are many types of silver, and all have different colors and softness, such as 99 silver which is a highly pure silver that has not been mixed with alloy, and which is not suitable for many types, unless they are brushed and woven or very small or larger and coarser. Handmade silver ornaments are mostly made of 99 silver. Therefore, the material and softness of the silver should be decided by the volume and use of the silver ornaments. However, with the popularization of mechanization, this process which in the past was established only by the intuition and experience of the craftsman was replaced by efficient machines, which can directly be equipped with the required proportion of silver to produce large quantities of various semi-finished products such as silver pieces, silver bars, silver lumps, silver bricks, etc. The craftsman just needs to purchase the semi-finished products of silver ornaments for processing [6].

The next step is to dissolve and smelt the silver, which is to melt the silver through high temperature to remove impurities and obtain pure silver. The third step is to make the base for the silver ornaments. After the silver liquid is cooled by pouring it into the mold, the base is finally formed into the one you want by repeatedly adding and pounding the shape of the base.

3.2. Processing of Semi-finished Products

After the base of the silver ornaments is made, the general shape of the silver ornaments appears. The next step is the key step, which makes the silver ornaments present a variety and beautiful appearance. This stage includes forging, hammering, base pressing, base punching, engraving, gilding, hollowing, wire drawing, frying beads, inlay, cutting, and other processes. Different processes are chosen to make different silver ornaments. Many silversmiths call this process "carving". The tool used for carving is a small hammer and some burins, which have a variety of shapes such as sharp, round, flat, crescent-shaped, petal-shaped, etc. we choose according to the need, and this is the key step. Among them, the wire drawing process is the best technology for the production of Miao silver ornaments, in which the solidified hot silver should be hammered and compacted first, then hammered into square strips, and finally hammered into cylindrical strips with a diameter of about 3mm. Then, the hammered fine silver bar is made with a pointed end with a file rasper and then drawn with a drawing board. The drawing plate is divided into 52 holes of different diameters, and a silver bar is almost as thin as a human hair after 52 times repeated drawing. Then the silver wire which is as thin as a hair is rolled and pinched to beautiful patterns such as peace drum, phoenix tail, magpie, plum blossom, fish, and butterfly.

3.3. Integration and Decoration of Silver Ornaments

After the first and second steps, the main body of the silver ornament and the scattered parts are obtained, and these parts, big or small, have to be mounted onto the main body to produce a whole silver ornament product. To integrate and decorate silver ornaments, several techniques must be applied: cutting, welding, riveting, inlaying, and decorating. Before the making, the master craftsman must show the final pattern of the silver ornament in his mind and on the drawing, to complete the combining of the silver ornament. Here we take the phoenix crown, for example, there are as many as hundreds of small accessories, such as phoenixes, dragons, butterflies, flowers and plants, etc. The installation steps and positions of these accessories can't be wrong, otherwise, the whole phoenix crown will become defective, so this integrating process is a great challenge to the craftsman's techniques.

After the above three stages and more than twenty processes, a pure handmade silver ornament is finally completed. It is the dream of every Miao girl to have a complete set of silver ornaments, which not only is decorative but also has the value to preserve and appreciate.

4. The Difficulties in the Inheritance of the Miao Silver Forging Process

The Miao silver ornaments are unique and exquisite and have always been loved by people all over the world. But along with the popularity of the achievements of the industrial revolution, large-scale mechanical production is used around the world, the Miao silver ornaments as a hand-based manufacturing method have suffered a great blow. Some Miao also began to use standardized mass production instead of traditional hand-building, using cheap Baitong instead of pure silver materials. These crude silver ornaments have affected the reputation of Miao silver ornaments, thus the development of Miao silver ornaments is facing difficulties and the inheritance of pure hand-forging technology has also met a great challenge.

4.1. Market Situation: Ornaments are Rich in Types and the Machine Manufactured Ones are to seize the Market of Pure Handmade Miao Silver Ornaments

With the development of tourism, many foreign tourists visit the Miao region. Their concept of aesthetics and consumption impacted the Miao people, making the Miao girl's beauty standard also begin to change. The traditional pure handmade silver ornaments are no longer a continuation of tradition, no longer represents a good wish, but has become a commodity. This concept hinders the inheritance of the Miao silver forging process.

4.2. Lack of the Joining of Young Generations, the Inheritance of Techniques is Hindered

The orderly inheritance of the Miao silver forging skills requires young people to join in, which means, a master takes several apprentices, they can take over the mantle of the master only after long-term teaching and training. However, if there is no one to succeed, it will mark the demise of the intangible cultural heritage. However, with the development of the market economy, many young people prefer to enter the labor market to earn a living, and very few people are willing to learn silver forging skills, which is also the common reason for the gradual loss of folk crafts.

5. Thinking about the Inheritance of the Miao Silver Forging Skills

The key to preserving culture is the inheritance of culture. The inheritance and protection of the intangible cultural heritage such as the Miao silver ornament forging technique are imperative. To continue the inheritance of the Miao silver forging craft, it should be improved from the following aspects.

5.1. Transforming the Function of Miao Silver Ornaments

Based on the current market economy, it is difficult to motivate the Miao to carry on this traditional craft without immediate and potential returns. Therefore, the function of the Miao silver ornaments should be transformed to make them have economic value. We should promote the trend in society - good, traditional silver forging process has a collection, aesthetic value so that more people know the Miao silver ornaments and are willing to pay for them. Secondly, we need to re-invigorate the love of the Miao women for the Miao silver ornaments. In the past having a complete set of Miao silver ornaments is the dream of all Miao girls. Now only through the Miao silver ornaments that are recognized by the Miao women can we bring back this enthusiasm, and the silversmiths can have the value and reason to forge. There are other consumers of silver ornaments - the tourist group, who need more silver ornaments with ethnic characteristics, exquisite and cost-effective. According to the consumer body, we produce different silver products that fit the aesthetics of consumers. Good circulation can further promote inheritance.

5.2. Combination of Manual Production and Machine Production

The Miao silver forging process has a long history, and if we want to develop in the current fierce market competition, we must make some corresponding adjustments. In the past, limited by productivity, silver ornaments could only be made by pure hand. But with the development of machinery, many processes can be replaced by machines. Therefore, the Miao silver ornaments can combine manual production and machine production. Manual production is mainly aimed at customers who are willing to pay more for handwork, while machine production is aimed at the general market. Through the combination of the two production methods, the Miao silver ornaments

may be able to take a place in the fierce competition. The segmented market requires different products, and different processes are for different markets. A prosperous market requires many practitioners so that the traditional Miao silver forging process will find its place and achieve self-consistency under the market economy, which is a reasonable and feasible solution for the protection of traditional culture.

6. Conclusion

The Miao silver ornaments are the representatives of the Miao ethnic group, and silver ornaments impress people with their exaggerated shapes, complicated patterns, and delicate processing. However, the development of the Miao silver ornaments is not optimistic, and the inheritance of the forging process of the Miao silver ornaments has encountered unprecedented challenges. On the one hand, as ornaments produced by the machine crowded the market of the Miao silver ornaments, pure hand-made Miao silver ornaments have lost their living space. On the other hand, the inheritance of the Miao silver forging skills has a shortage of young people, as many young people prefer to go out to work for a living rather than inherit the craft. To solve the difficulties in the inheritance of the forging process, on the one hand, the function of the Miao silver ornaments should be transformed so that it has economic value; on the other hand, machine production and hand production should be combined to meet the needs of the market.

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