

# The Exploration on the Inheritance Way of Chinese Tin Process\*

Jing Qian

Taizhou University  
Taizhou, China 225300

**Abstract**—Tin process in China has a long history of development, in the long development process, this technique has been from the traditional tin as craftsmen in traditional family heritage, teacher and pupil inheritance and continuation. It has the spontaneity characteristics. With the impact of the market economy and the change way of people's life, some traditional crafts had troubled and close in peril. With the rise of non-material cultural heritage protection awareness, Chinese traditional tin technology also begins to get a new development, the traditional model in addition to the original traditional family inheritance, master and apprentice inheritance, plus a government forces and the social competition mechanism. The change of the traditional model of tin technology in China tells people: arts and crafts heritage is not a "dead", "living state", it is inevitable with the development of the society, and the corresponding strain.

**Keywords**—Tin; process; inheritance way

## I. INTRODUCTION

China has a long history of using tin to make utensils. However, the raw materials of copper and tin once became the scarce industrial resources in China. In addition, many new materials such as glass, aluminum, stainless steel and so on were much cheaper than tin products, so tin ware gradually lost its practical position in people's life, and the traditional tin industry gradually declined. However, it did not die out. Although the former glory was lost, it still shines the brilliance in the folk. As a special traditional technology, tin beating technology can be inherited until today, and there must be a specific way of inheritance to support its development. At the same time, with the development of the society, the traditional tin process also has the driving forces from the government and various social forces.

## II. TRADITIONAL INHERITANCE OF TIN PROCESS

The traditional handicrafts of China are generally inherited by following the tradition of passing down from generation to generation and teachers and apprentices inheritance, and the traditional tin process is of no exception.

---

\*Project: 2018 University Philosophy and Social Sciences Fund Project: Research results of Taizhou cultural and creative product development and design research, Project No.: 2018SJA1888; 2017 research project of Taizhou University high level talents research initiation fund: phased research results of Taizhou traditional technology culture and creative product design research, Project No.: TZXY2017QDJJ004).

However, there is no special record about the inheritance of traditional tin craft family, so it can only be understood through some oral reports of artists. Therefore, through field investigation, a relevant research on the inheritance system and development status of tin operation in China has been made, as well as to achieve a theoretical summary.

### A. Family Inheritance

In ancient Chinese families, the Confucian concept of "filial piety" has been advocated for thousands of years, which leads to the family craftsmanship linked by the families. Under the strong cultural atmosphere of attaching great importance to the family teachers, many disciples have the psychological pressure of not humiliating his family, so they are conscientious and self-motivated under the influence of the family atmosphere. At the same time, this kind of concept also stimulates their continuous efforts, thus forming a virtuous cycle, so that the family skills can be handed down from generation to generation and keep continue. In addition, for some tin masters, their skills may be handed down from generation to generation. In the era of low productivity development, narrow market and backward production technology, when members of the industry "support their families by the crafts and have no other livelihood", their skills are highly confidential. Some key technologies are only handed down to their descendants, which is also the feudal conservative behavior of the masters to protect the interests of their own family. In the practical development of tin crafts, this kind of family inheritance method has broken through the limitation of the old so-called "passing on to sons but not passing on to daughters".

1) *Father-son inheritance*: Tin beating skills are mostly inherited between father and son. For example, many people engaged in tin beating industry in Xinghua City, located in the middle of Jiangsu Province, and the skills are generally passed down from generation to generation. Chen family, a tin craftsman family in Xinghua City, whose ancestral home is in Dangtu Ma'anshan, Anhui Province, came to Xinghua to make tin in the year around 1800. Later, they stayed in Xinghua and settled down. Now Chen Lianfu, the inheritor of Xinghua's Tin work, is the 11th generation of Chen's descendants. He began to learn how to make tin at the age of 13. Over 30 years study and hard work have lead to his excellent skills. Now he doesn't need to use the original

model and can directly make and carve various kinds of southern traditional tin wares only with the help of his own hands and eyes. There are also many such situations in Taiwan tin industry, such as Ruixing tin shop of Li Hanqing's family in Lugang Town, Zhanghua County, Taiwan, Jinyuanxing tin shop of Lin Mengjin's family in

Anhe Road, Tainan City, Wanneng Tin Shop of Chen Wanneng's family in Lugang Town, Changhua County, etc. Their tin beating skills are inherited from generation to generation. (As shown in "Table I") It can be seen that in the inheritance of traditional tin crafts, the father-son inheritance is commonly existed.

TABLE I. INHERITANCE OF EXISTING TIN SHOPS IN TAIWAN OF CHINA

Name of the Tin Shop	Address of the Tin Shop	Inheritance Line
Ruixing Tin Shop	No. 25 Jingfu Road Jingfu Li Lugang Town, Zhanghua County	Li Jinzan →Li Chuikui→Li Hanqing→Li Zhenghao, Li Zhengzhong (Grandfather) (Father) (First Son) (Second Son)
Jinyuanxing Tin Shop	No. 36-19-8 459 Alley of Anhe Road, Tainan City	Lin Shouyuan→Lin Rongtai→Lin Mengjin (Grandfather) (Father)
Yirui Tin Shop	No.34-18,1122Alley, Wenxian Road, Tainan City	Tainan Yuanxing Tin Shop Lin Shouyuan→Lin Rongtai→Lin Qingyi (Yirui Tin Shop) (Grandfather) (Father)
Wanneng Tin Shop	No. 635 Zhangu Road, Lugang Town, Zhanghua County	Chen Ci→Chen Tao→Chen Wanneng→Chen Jiongyu, Chen Zhiyang, Chen Zhisheng (Grandfather) (Father) (First Son) (Second Son) (Third Son)
Source: According to field investigation		

2) *Inheritance between other family members:* Under the influence of the traditional "patriarchal clan" thought, in order to protect the interests of the family, the traditional handicraft in China generally adheres to the custom of "passing on to the son and not passing on to the daughter", but with the development of the society, this concept has gradually faded away, and it has long been common to pass on the skills to other members of the family. For example, Sibao Township, Liancheng County, Longyan City, Fujian Province is famous for its tin beating technology. There are many famous tin beaters in Sibao village, of which Ma Enming in Mawu village is the most typical. His tin ware has attracted the attention from many people, and many outsiders have come to order tin ware. The Ma Enming family also inherited the tradition of the Sibao Tin Process family. All six members of their family learned the tin beating skill from him. His wife and son were his good helpers when the customers were in urgent need of goods. In addition to the inheritance of the small family as a unit, there are also inheritance of brothers and relatives in the tin industry. For example, there are many such situations in the tin industry in Taiwan.

**B. Master-Apprentice Inheritance**

In addition to taking the form of family inheritance as mentioned above, master-apprentice inheritance is also a very important way of inheritance of the traditional handicrafts of tin beating. In the process of tin ware technology inheritance, master-apprentice inheritance is another main way.

1) *The contractual relationship between masters and apprentices:* There is a big difference between the master-apprentice inheritance and that of family type in that the master and the apprentice should establish a trust relationship, which is not as simple as blood relationship. Therefore, in tin process industry, it is not easy to become an apprentice even if you want to. At the beginning, you need to pass the test of the master before becoming an apprentice. Tin master will try their best to test the perseverance of apprentices by asking them to do as many boring and tedious basic work as possible. Not only that, after becoming a master, the apprentice often must have a certain contractual relationship with his/her master to ensure his interests. Generally, the master will provide the apprentice with accommodation and a small amount of wages. The learning time is generally three years and four months. During this period, the apprentice must obey the master's orders. If he wants to leave before the end of the learning period, he needs to compensate for the previous food expenses and return the received wages. At the end of three years and four months, when the apprentice has completed his apprenticeship, he will be awarded a set of tools by his master, and then he is graduated. After graduation, he can leave his master to do his own business, and the tin master can also ask him to work in the shop sometimes.

2) *Tendency in the process of inheritance:* In the learning process of tin making, the master doesn't teach too much. The main learning method is to learn through long time practice. The apprentice's work is some tedious and

boring basic work. It often takes a year and a half to just practice the model inversion, and only at the end of the study can one actually operate the tin beating work. In the process of participating in the master's work, the apprentice need to pay attention to the whole working process, not only should know the location of various tools and molds and the nature of the working environment, but also should know what tools and molds should be used under different structure, details and to what extent, which all should be practiced repeatedly. This not only requires a long time participation and observation, but also requires the great patience of the apprentice. Even so, they only learn some basic skills of beating tin at the end of the learning. Every famous tin master often has his own unique experience, which often not directly taught to his apprentices. This is mainly because the inheritance method of apprentice type is totally different from the family inheritance mentioned above that there is no blood relationship between the master and the apprentice, and the apprentice often competes with his master in business after learning the skills, so "the master only taught his apprentice 70%-80% of his skills, and leave the rest 20%-30% to himself. There is also a practice that skills pass to his son, not the son-in-law. This is because in the past, the life of craftsman was not guaranteed".<sup>1</sup>

3) *Individual trend in inheritance*: In the early days, many people went to learn tin process because of poor family conditions, or because there were many brothers and sisters at home. As the eldest son, they could only go out to look for job opportunities, or they were introduced to tin shops as apprentices.

An apprentice, he must be good at observing and learn in the process of participating in the work of a master. He can learn the essence of skills in the process of constant observing and practicing, and firmly remember every work procedure and all the skills of the master. In the evening or at rest, there are few opportunities for him to practice, and this kind of practice opportunity is often only allowed by the master. Usually, this kind of practice opportunity is very few. In this situation, whether or not to finish the apprenticeship at the due time depends on the intelligence of the apprentice. Some new tin makers are also very clear that even after three years and four months study, their skills are still insufficient if they want to prove their skills in other tin shops. So they will constantly change their working environment to increase their work experience by learning from other tin makers who are good at different skills through observing and discussing with each other, and keeping in mind the pithy formula and craft in their work, which can be regarded as "learning skills secretly". In this way, by virtue of their own intelligence, they can quickly accumulate what they have learned and apply to practical work. A considerable number of apprentices have surpassed their masters in their later skills. The so-called "blue out of blue is better than blue, know

better than one's teacher" is achieved depend on the apprentice's individual intelligence.

The inheritance mode of apprentice type provides more possibilities for the production of tin, because outside apprentices can inject fresh blood into the family skills and bring new vitality to the tin industry.

### III. THE NEW WAY OF INHERITING TIN TECHNOLOGY

The local governments of China also pay great attention to the tin beating process which is on the verge of losing. In order to revive this traditional technique, many governments have made great efforts to help folk artists solve the problems of production funds and selection of successors, so that the traditional tin making technique has been injected more vitality in the existing situation of inheriting the traditional way.

#### A. *Inheritance Mode Promoted by the Government*

Since the reform and opening up, due to the attention and support of Chinese government to the traditional handicraft which is on the verge of being lost, the tin process in many places has renewed its vitality. For example, the tin carving technology of Laiwu, Shandong Province, which has been listed in the national intangible cultural heritage list, is just like this. The seventh generation successor of the local tin process brand "Luwang Workshop" has been transferred to work and study in the provincial arts and crafts research laboratory, and has been guided by artists such as Wang Fengnian, Professor Chi Bin, and other artists, and also been able to learn from other traditional handicraft workers which helped open up his horizons and greatly improved the skills. With the support of national power, the tin carving industry in Laiwu is booming. As early as in 1993, Taiwan of China set up the global Chinese culture and art salary project, which aimed to carry forward traditional culture and aroused the global Chinese to pass on the Chinese culture and art, to rescue these traditional crafts in the form of teachers and apprentices who are still engaged in some near lost skills funded by the government. This is also different from the above-mentioned inheritance method of apprentice type. Most of the apprentices mentioned above are forced to make a living and choose to learn tin making when there is no way. Here, most of the apprentices advocated by the government are teachers and students from the Art and Design Department of the universities. For example, Lai Tinghong, a teacher from Kaohsiung University, studied tin in Ruixing Tin Shop of Li Hanqing's family in Lukang Town, and he introduced his students to the Wanneng Tin Shop of Chen Wanneng's family in Lukang town. Although the basic skills of each tin shop are similar, each teacher often has his own unique skills, so that they can learn from different master at the same time to draw their advantages and make up for disadvantages. At the same time, these teachers and students from the universities often have higher artistic skills and aesthetic cultivation. After learning the basic process of tin beating, they can often make innovations on the basis of tradition, so that the traditional tin process can be further improved on the original basis.

<sup>1</sup> "On Arts and Crafts" attached "Research on Patterns", written by Pang Xunjin.

### *B. Inheritance Mode Driven by Social Competition Mechanism*

With the development of the times and the progress of industrial technology, some producers also set up companies of tin crafts, which makes tin wares enter the new operation mode of brand establishment from the family workshop mode. In Laiwu, Shandong Province, China, there are many emerging tin products companies that combine modern technology with handicraft, among which "Luwang Workshop" is the most famous one. Among the inheritors of the past dynasties, the more famous one is Wang Yeji, also called Yuanji, the third generation inheritor. The exact written records show that Wang Yuanji was already a famous maker of tin wares at that time, Zhang Dai of the Ming Dynasty mentioned in "The Dream of Taoan" that "Wang Yuanji is the superior producer of tin making, followed by Gui Maode..."<sup>2</sup>; The tin carving made by Wang Junting, the fifth generation inheritor of Luwang Workshop, once won a silver medal at the World Expo. It is worth mentioning that the inheritance of the tin process of "Luwang Workshop" is not completely in accordance with the family inheritance and apprentice inheritance mode of the general traditional tin craft, but chose the most skilled craftsman in each period as its inheritor, the inheritance mode of survival of the fittest that is beneficial to the development of the industry is conducive to the brand's standing out in the industry competition.

#### IV. CONCLUSION

After a long period of cultural baptism, China's traditional tin process still maintains its original state of inheritance and internal development mechanism. At the same time, in response to the changes of the new era, they strive to let other new forces connect with industries under the support of government power and self breakthrough in addition to maintaining the traditional inheritance mode of family inheritance and apprentice inheritance. This not only enriches the lives of modern people through the essence of the traditional craft of tin, but also extends the connotation and quality tradition of traditional craft through different forms of modern life of more people of different cultural levels. This is of great practical significance for the protection of the intangible cultural heritage, especially for the continuation and development of tin ware technology under modern conditions.

#### REFERENCES

- [1] [Ming] Zhang Dai, "The Dream of Taoan". Beijing: Zhong Hua Book Company, 2008. (in Chinese)
- [2] Chen Zhiyang, "New situation: Application of Composite Medium Material in Tin Ware", Tainan University of Art, 2004. (in Chinese)
- [3] Geng Xiaochen, "Research on the Art of Tin Products in China", Doctoral Dissertation of Suzhou University, 2013. (in Chinese)
- [4] "Hakka Xie Ying", edited by Li Shengbao. Beijing: Beijing Broadcasting Institute Press, 1996. (in Chinese)
- [5] "On Arts and Crafts" attached "Research on Patterns", written by Pang Xunqin, Light Industry Press, 1987. (in Chinese)
- [6] He Lirong, "Craftsman, Technique and Handcraft: A Study on the Development of Tin Beating Technology in Tainan", Master Thesis of Taipei University of Art. (in Chinese)

<sup>2</sup> [Ming] Zhang Dai, "the Dream of Taoan", Volume 2, "San Pot Tin Note". Beijing: Zhong Hua Book Company, 2008.