



Research on the theory system and method of tin process innovation development in China -- Taking Gejiu tin process as an example

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Abstract: In this paper, Professor Li Wuwei, a well-known domestic economist and vice chairman of the National Committee of the Chinese People's Political Consultative Conference, pointed out in his special report that under the serious background of the international financial crisis, high-tech alone is not enough to support the recovery of the economy, and the innovation of traditional industries has become an urgent and important project. With the innovation and development of Gejiu tin technology as the first importance, the theoretical system and methods suitable for the innovation and development of Chinese tin art are created. As Ouyang has stated in the General Theory of Cultural Industry, all the cultural forms that can be industrialized contain physical resources, which can be used for various purposes. (natural ecological scenery with distinctive features, historic sites with profound cultural deposits, handicrafts with distinctive national characteristics, food cultural resources), (including spiritual resources, spiritual resources, artistic and aesthetic resources, national resources, national cultural resources, intangible cultural heritage resources) and human resources.

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The development of a process comes from people's love and expectation for it. Gejiu tin process needs special attention today. Although Gejiu tin process has always been valued as a local characteristic process, the local attention is far from enough to support the development of this process in this era of globalization. This process must have its own characteristics, to be well-known everywhere, to have its broad and stable user group in order to better inheritance and development, all these must be supported by innovation. Professor Li Wuwei put forward in the Special report that to realize the industrialization of culture, we must fundamentally change the traditional economic model and make full use of the opportunities brought by the international financial crisis to achieve greater development goals. By investing more in traditional industries and promoting their innovation and upgrading, we can achieve real economic growth by implementing sustainable development strategies. "It can be seen that innovation has become an important way for Gejiu tin process to go forward.

Tin process protection and development practice

People have been thinking about how to make full use of Yunnan's rich ethnic and folk cultural resources and transform its potential into a sustainable cultural industry to meet the needs of current social

development. In history, ceramics, wine, tea, textile, printing and dyeing, furniture and other folk crafts formed a huge industry, promoting the economic, social and cultural development at that time, and are still vibrant today. The cultural resource characteristics of folk craft will bring it advantages to develop into an industry. At present, the construction of domestic cultural industry, the construction of national culture province, the construction of tourism culture and so on are inseparable from folk traditional cultural resources. With the change of economic development mode, cultural resources have gradually become the dominant resources of economic growth, and the connotation and distribution of resources have been expanded more deeply and widely.¹

Tin handicraft, as the characteristic cultural resources of Gejiu, contains the cultural connotation of Gejiu tin. It exists in the current situation of society and culture, and has far-reaching influence in all aspects of material and spiritual production. Therefore, the protection of tin culture and the inheritance of tin craft have become a topic of great concern to every old

¹ Li Wuwei, Journal of China University of Geosciences (Social Science Edition), Vol. 11, No. 2, March 2011.

person, and even the government, enterprises and universities are very concerned about it, and actively build a platform for this.

1. Government behavior

The protection, development and utilization of cultural resources cannot go far without government support and service. As the decision-maker of local economic and social development, the government has the supreme power and can influence the development of local economy and culture to a large extent. A far-sighted decision will often create a region's future glory. Historically, Gejiu tin craft really from private workshop to enterprise development is in the liberation of the government organization in the original "Chaoyang wood Factory" on the basis of the establishment of "Gejiu tin arts and crafts factory". In the future, the development and expansion of tin technology industry and even industrialization cannot be separated from the efforts of the government. In recent years, the government is taking a number of initiatives which are very beneficial to the development of the tin craft industry.

(1) The successful hosting of tin culture tourism festival

The establishment of Gejiu tin culture is the soil for the development of tin crafts. In recent years, in order to develop local characteristics, Gejiu City takes the establishment and development of tin culture as an important work to catch. Since 2005, three Tin Culture Tourism Festivals have been held, with the purpose of promoting tin culture and Gejiu through this activity, and promoting the development of industries related to tin culture. In 2005, the first Gejiu International Tin Culture Tourism Festival, during which a total of 12 projects were signed. Tin Culture Tourism Festival to the local economy direct pull effect is obvious. In addition, the Tin Culture Tourism Festival also organized the "Tin Culture Forum", 30 social science experts and related social personages from all over the country participated in the first Tin culture Forum, in the forum, 8 social science experts made a keynote speech and the participating experts spoke freely about the tin culture. In 2009, the second Tin Culture Tourism Festival was held, focusing on "international" and highlighting the characteristics of "tin culture", transforming cultural production into economic production and cultural advantages into huge economic advantages, making tin culture industry a platform for economic and social development and open development of the city. To make the tin culture industry in our city show a vivid situation of being driven by culture and improved comprehensively. This is the goal of tin culture development mentioned by Lei Jing and Wang Weimin from the old City Committee

Office of the Communist Party of China in their article entitled Tin Culture Inheritance and Bright Development. They believe that under the strong leadership and support of the government, Gejiu tin craft industry can also be able to take off.

(2) Set up a creative industry park with tin culture as the theme

Through the establishment of cultural industry cluster, it can promote the industrialization development of cultural resources and enhance its brand influence. This will promote the division of labor in the cultural industry and enhance its core competitiveness.² In addition, it can promote the sharing of cultural resources and enhance local advantages. Ultimately, this will support the establishment of a market for professional cultural products. In Hong Kong, the government will give corresponding rental years and rent concessions to enterprises in the park, so as to learn from the advanced experience of other local creative industry parks and lay a foundation for promoting the development of tin culture industry. On December 27, 2010, the construction leading group of Gejiu Science and Technology Industrial Park entrusted by the government signed the land use agreement with Honghe Jinyi Culture Industry Company. "Honghe • Gejiu Tin Cultural Creative Industry Park" After careful planning, Datun Town has built a 115 mu creative industry park, divided into two phases of development completed, will bring more development opportunities for the local.³ In the 12th Five-Year development plan of Honghe Prefecture, setting up a creative industrial park with tin culture as the theme is a measure to promote the Gejiu tin culture industrial cluster. "We will accelerate the research and development of a number of tourism products. We should adopt the mode of government guidance and market operation to introduce domestic and foreign enterprises to invest in the production, processing, management and sales of tourist commodities."⁴ This information indicates that in the plan of developing tourism economy, Honghe Prefecture actively promotes the research and development of tourism commodities, establishes the catalog database of Honghe tourism

² The Cluster Characteristics of Cultural Resources and the Path Selection of Cultural Industrialization. Journal of Zhongzhou, 2007, (6).

³ Honghe Daily "2011 Honghe Tourism Development Key words Inventory".

⁴ Gejiu Bainxi Arts and Crafts Co., LTD. "11th Five-Year Plan" Development and "12th Five-Year Plan" Outline.

commodities, holds the symposium of Honghe tourism commodity production enterprises, organizes tourism commodity production enterprises to participate in the National tourism commodity Expo and a series of work plans. The government will give corresponding rental years and rent concessions to enterprises in the park, so as to learn from the advanced experience of other local creative industry parks and lay a foundation for promoting the development of tin culture industry. On December 27, 2010, the construction leading group of Gejiu Science and Technology Industrial Park entrusted by the government signed the land use agreement with Honghe Jinyi Culture Industry Company.

2. The efforts of folk artists have accumulated

Gejiu tin technology protection and development in addition to the government support, more people from all walks of life to tin technology attention. Since tin technology took root in Gejiu until now, there are a lot of people who have made contributions to the development of Gejiu tin technology. Most of them live their "tin art life" without seeking fame or wealth. In the industrialization development of cultural resources, talents play a vital role, they are the first element. The early development of tin ware in Gejiu benefited from the pursuit of life and art by folk craftsmen. Some artists and art lovers used to be the leaders and witnesses of the rise of old tin craft; The development of Gejiu tin technology must rely on the comprehensive quality of talents who have a keen grasp of market and industry development, adhere to innovation and have a sense of social responsibility.

Here the author from the available information to find out some artists related to tin craft, from the understanding of their personality, career you can also get another landscape of tin craft. People with historical records include: Luo Ganyao in the late Qing Dynasty and early Republic of China in Gejiu Xihang Street opened "Qianyuan" tin shop, a famous old tin ware industry. Luo Yaofu was a famous tin craftsman in the Republic of China, who was good at making tin ware. Lin Shangying, Zhou Weihuan, Wu Xueming, Song Wenxing, Zhang Rulin, CAI Zongfa, Lu Chuanbai are the original tin street playing tin artists, after the liberation of the establishment of the old city tin craft factory when they continue to work in the factory. Veteran artists Luo Yaofu, Lin Shangying, Wu Xueming and Gejiu City Arts and Crafts Factory craftsman Li Zongze jointly created "lion top tin seat censer", "Songying Tu Wine set", once exhibited in Beijing and won praise. Zou Zenglin was born in 1948, the former deputy director of Gejiu Tin Arts and Crafts Factory, began to engage in the production of tin crafts in the 1970s, has more than 30 years of design and production experience, representative works are all handmade large tin image pair.

3. Construction of innovation practice platform

The cultural industry has strong inclusiveness and large industrial correlation. In the current era of rapid development of high and new technology, to form the cultural resources industry, we must pay attention to the transformation and promotion of traditional culture with high and new technology and innovative ideas. On the one hand, it is necessary to transform and enhance traditional cultural resources with high and new technology and advanced innovative ideas. At the same time, it is necessary to explore and innovate excellent traditional culture, gather excellent talents and make it have higher cultural connotation. Based on this consideration, since 2010, Gejiu tin craft enterprise has been cooperating with the Design College of Yunnan Arts University in the research of Yunnan characteristic folk craft, aiming to build a platform for tin craft innovation practice and provide solutions for tin craft innovation research and application talent training. And has become a characteristic brand of practical teaching of graduation design in our college, which has been emulated by many colleges and universities. Yunnan Provincial Ministry of Education awarded the "art design education model" reform pilot unit.

The excavation and development of Gejiu tin cultural resources is an urgent matter. Firstly, with the gradual scarcity of tin resources, Gejiu, an industrialized city born from tin, is facing the opportunity to transform into a modern and ecological city. Secondly, although the tin culture is unique to old times, however, as cultural resources are common, any kind of cultural resources belong to the country, but also to the whole human beings. Therefore, it is necessary to make an objective assessment of cultural resources, to have good creativity, to have high technology, to have a modern business model. "Under the modern production system, what we advocate is the inheritance of handicrafts, not to overthrow industrialization with traditional manual production methods, but to form a cultural adjustment mechanism through aesthetic practice of traditional manual production methods, to express the traditional Chinese culture and spirit."⁵ With the continuous growth of national economy and significant improvement of people's material living standards and cultural literacy, this point has become a reality. People begin to pay attention to the unique cultural value of handicrafts, so more people should pay attention to the traditional charm of Gejiu tin craft.

⁵ "Analysis on the Way of Chinese Traditional Handicraft Transmission" Xia Xia, Journal of Zhuhai City Vocational and Technical College, Vol. 16, No. 4, p57, December 2010

With the promotion of intangible cultural heritage protection in recent years, many folk handicrafts are trying to build a sound inheritance mechanism, such as providing guidance and training from masters, setting up special inheritance bases, and guiding and cultivating craftsmen through market mechanisms. Let the traditional craft infect and cultivate more excellent tin craft creation talents, and broaden people's understanding of tin craft, so that the social environment as a whole presents an atmosphere conducive to the protection of intangible culture.

In the development process of Yunnan's ethnic cultural creative industry, Yunnan Arts University has been a leader and practitioner in the fields of education, research and development, and creation. Since 2004, I have organized teachers and students of the School of Design of Yunnan Art University and the local governments of Yunnan ethnic areas to jointly carry out a series of creative activities of "school-local cooperation" on ethnic culture. By giving full play to the advantages of the school's art design specialty and strong strength, I have carried out design, creativity and development for the local areas in an all-round way, and successively completed the "Creative Surge in 2004". In 2009, "Creative Heqing" (with Heqing silver craft culture as the creative carrier) was held; in 2010, "Creative Ruili" (with Ruili jewelry craft culture as the creative carrier) was held; in 2011, "Creative Gejiu" (with Gejiu tin craft culture as the creative carrier) was held to explore a new path for the development of Yunnan ethnic culture industrialization. And has become a characteristic brand of practical teaching of graduation design in our college, which has been emulated by many colleges and universities.

During the construction of "Gejiu Tin Technology Innovation Platform", the school specially organized more than 400 teachers and students to conduct interviews and surveys in Gejiu for three times. From June 2008 to March 2011, a tin process research team was set up and conducted several research visits to various tin process plants in Gejiu. Before the investigation, I prepared carefully and had a general understanding of tin craft and Gejiu local culture through the Internet, publications, films and other materials. We mainly visited 5 tin craft enterprises, including Gejiu Banbian Tin Factory, Tin Rim Craft Factory, Yunxi Tin Craft Art Factory, Tengsheng Tin Craft Factory and Hesheng Tin Craft Factory. Famous people in tin craft industry visited: Xie Yugong, Lai Qingguo, Hai Shaohua, Wu Manrong, Xu Yunyong, Cheng Lin, Ouyang Baoyun, etc. Knowledgeable people in tin culture: Mr. Yang Xinmin, Mr. Tang Wenzhong, Mr. Yang Jianwei..... At the same time, I have investigated the distribution stores of various tin process factories in Kunming and learned about the tin process sales market in Jiangsu and Zhejiang such as

Shanghai and Hangzhou. The drawings, texts, sounds and movements of all aspects of Gejiu tin process were collected by digital technology, especially the process flow of representative products in tin process was recorded digitally.

The communication between various tin craft enterprises in Gejiu and the School of Design of Yunnan Arts University is gradually becoming more and more frequent. The school invites enterprises to teach the teachers and students the traditional craft, and then through their own understanding and gradual mastery of the traditional craft, integrate the innovative understanding and ideas of tin craft in the new era, so as to make creative efforts in the innovative development of tin craft.

Thinking on the innovation and development of Gejiu tin technology

The excavation and development of Gejiu tin cultural resources is an urgent matter. Firstly, with the gradual scarcity of tin resources, Gejiu, an industrialized city born from tin, is facing the opportunity to transform into a modern and ecological city. Secondly, although tin culture is unique to the past, some developed countries with limited cultural resources often develop and utilize other countries' cultural resources based on this, to form their own competitive advantages in cultural industry.⁶ If Gejiu itself does not have good ideas to transform this unique cultural resources into a new sustainable industrial pattern with modern technology and operation mode, it will gradually lose this cultural resources. Finally, from the perspective of intangible cultural heritage protection, the value of tin craft, as the best embodiment of tin culture, is beyond doubt. Inheritance and protection are not exactly copies of history, but should be more meaningful to give it a new life with different times.

The development and innovation process of Gejiu tin process is difficult. Some problems are the bad habits formed over the years, and some problems are forced by the contradiction of modern development. How to make this traditional craft inherited for hundreds of years continue and develop at present? This issue should receive the support and attention of the government, scientific research organizations and institutions, and the general public from all walks of life. In summary of the past development of Gejiu tin process, the future development of Gejiu tin process, we should think from the following points:

⁶ "Transforming the Advantage of Cultural Resources to Promote the Development of Cultural Industry" Journal of Jiangnan University (Social Science Edition), Vol. 27, No. 3, July 2010

(1) Product development and design ideas should be clear

Tin process product development after several years, find out a way to the enterprise's own product development and customer demand order combination. In the early tinsmith era, tinsmiths not only developed new products but also commissioned by customers to customize tin ware, but this kind of customization is based on the existing modeling on the basis of different needs of decorative patterns, such as wedding, birthday, people send gifts will choose a pair of traditional tin vases, please tinsmiths on the corresponding blessing speech. In modern times, a small number of tin crafts are created out of artists' artistic pursuit, such as Mr. Li Weiqing's "Green Ox, White Tiger", Mr. Lai Qingguo's "Peace Treasure Phase" and so on. Most of the topics and materials of tin crafts are customized, which can provide customers with a full range of customized designs from decorative patterns, shapes, sizes to materials. Some works with clear commemorative significance such as the celebration and award commemorations of some units, such as the tin simulation sculpture "29 Locomotive of Bishi Railway" commemorating the Gejiu Yunnan-Vietnam Railway. This makes the market clear and accurate. Instead of focusing on the promotion of a particular product, the focus can be on the branding of the whole product, through which the image of the product is established. However, if the production of handicrafts completely comes from the market aesthetic, it will undoubtedly lose its advantage in the artistic value of handicrafts, and its low artistic quality is also very unfavorable to the shaping of the brand. Therefore, we must also pay attention to the creative research and development of handicraft itself. Study the relationship between market demand, social and cultural background and art design, so as to make the creativity conform to the characteristics of the current era.

(2) To popularize excellent traditional crafts

Traditional handicraft skills are being lost, although Gejiu tin process manufacturers are trying to maintain the traditional handicraft handicraft as a feature of Gejiu tin process. But with the gradual opening and expansion of the market, we have found the disadvantages of traditional handmade production - low production efficiency. Therefore, in this competitive market society, it is necessary for individual and private enterprises to improve productivity. A variety of modern processing tools have entered the factory and are replacing the more essential parts of the traditional tin process. Take the traditional tin modeling of the most gold-content handmade stone carving technology, because its technology requires the quality of workers is more comprehensive, especially

for the art, modeling ability is relatively high, at present, there are only about 20 people in the whole Gejiu city. However, this traditional technique is indeed the most able to reflect its artistic value among tin crafts. In traditional tin crafts, the detailed molding parts need to be obtained by stone carving and casting process, such as the fine molding of the knobs, spouts and handles of some POTS. Now, due to the development of modern engraving technology, the decorative patterns and details on the surface of the objects can be carved by three-dimensional carving and pressed into steel molds. Such technology can not only increase the output of finished handicraft products, but also greatly reduce the problem of mold loss, personnel operation and other links. These seem to prove the inevitability of traditional skills today

As for the inheritance mentioned above, the transmission of tin craft has its limitations, and the immutable inheritance certainly cannot adapt to the development of The Times. Take tin as an example. In ancient times, most tin crafts were made by families. The teaching of handicraft was limited to a small range, and people with blood ties were not allowed to inherit it. But in the industrial age of extreme material abundance, it would struggle to maintain its original market and eventually fall into trouble. There are also some traditional mentoring systems, such as self-study, which can break through the shackles of blood, but it is a very difficult thing to face modern mechanized production.

The brain drain is serious. Modern enterprise development needs the mode of "mass" and "cooperation". Going it alone or being a lone hero is no longer the game mode of this era. Product innovation requires the constant updating of new technologies and process concepts. The research platform can independently conduct research and innovation outside the enterprise, and the results obtained can be transferred to the large-scale production of the enterprise. In this way, the enterprise avoids the cost of time and manpower invested in the early stage and the risk caused by the experiment, and can change the situation that it is difficult to cultivate relevant talents and continue the research of artistic creation.

(3) Establish the concept of "tin culture" to show local brand characteristics

Cultural background plays a great role in establishing the image of products. Only by establishing Gejiu local cultural characteristics and spreading the local cultural characteristics through tin crafts, the whole Gejiu tin craft industry can be the banner of foreign Gejiu tin craft brands. If only the existing 7 enterprises with weak financial strength compete with other competitors alone, it will be difficult for sustainable development.

Shaping the unique industry standard of Gejiu tin technology is also a means to establish the brand of "Gejiu tin technology". We can organize related competitions, festivals or activities to attract more free tin process enterprises to enter this standard, so as to establish influence surface. At the same time, it can also be used as the standard of evaluation between enterprises to promote each other. While setting up the standard, we should not only emphasize the unity, but also encourage the enterprises to find and give play to their originality in the standard, constantly innovate in the shape, craft, decoration, material and other aspects of the product, and emphasize the "let a hundred flowers bloom and a hundred schools of thought contend" for the tin handicraft enterprises. Only continuous innovation can have modern competitiveness. The innovation and iteration of science and the continuous breakthrough of media technology are changing the category of human cognition to the world.

Gejiu tin process is moving forward in the new era, and the old "tin street" has disappeared. However, as long as we make unremitting efforts, it is believed that Gejiu will usher in a new tin process industrial park and tin process distribution center in the near future, which is more suitable for the modern tin process. In the development of the craft itself will also be a new pattern of a hundred flowers bloom and bring forth the new. As long as we stay true to our traditions and forge ahead, there will always be a new chapter to greet us, and new hope for us.

Conclusion

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