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DESIGN-DRIVEN STRATEGY FOR THE SUSTAINABLE TEXTILE HERITAGE COMMUNITY IN CHINA

Yuxin Yang

PhD Candidate, Politecnico di Milano, Yuxin.yang@polimi.it

Eleonora Lupo

Associate Professor, Politecnico di Milano, Eleonora.lupo@polimi.it

ABSTRACT

The people who involved in the heritage community can represent the local identity and traditional knowhow is the key element for sustainable development in using the local resources and heritage knowledge (Faro convention, 2005). In this context, the design intervention is considered a strategy to empower the local people innovation processes connecting skills and knowledge and creative resource in order to build a sustainable social innovation and create new values for heritage communities. However, a research opportunity has emerged during the Ph.D. research in the field of Chinses textile heritage: even if people believe innovation is the way to revive traditional textile craftsmanship, there is no systematic activation model that can not only recognize the values of the textile crafts, but also sustain the craft community's capabilities and behaviors. In this scenario, based on design activation methods and a strategy with hypotheses of solutions, this paper describes a new approach applied to the sustainable textile heritage communities.

Key Words: Design activation method, Sustainable community, Textile heritage.

1. SUSTAINABLE DEVELOPMENT IN THE TEXTILE/FASHION SECTOR

The topic of sustainable development in the fashion sector has acquired an increasing relevance in the last decade: from one hand, it has become crucial for fashion brands to show a corporate social responsibility. Textile enterprise such as Euro Jersey¹ made lots of efforts on sustainability from environmental point of view to the economic and social responsibility. Luxury fashion brand like Gucci² are also following Kering's sustainability strategy³ for reducing environmental impacts, valuing the people who make products as well as supporting communities, and new solutions by applying technical innovation. In this respect, significant policies are promoted at national level on sustainable development in fashion and textile field for example, 'The Manifesto for the sustainability in Italian Fashion', by Camera Nazionale della Moda Italiana, "aims at designing an Italian way to a responsible and sustainable fashion as well as fostering the adoption of models of responsible management throughout the fashion value chain to the benefit of the economic system of the whole country"⁴ and fashion consultancies like Green Strategy are supporting companies with sustainable fashion strategies⁵ and talk about circular fashion⁶.

From the other hand, on the academic scientific research side, based on the analysis of Web of Science⁷, in the scientific topic related to "Fashion" and "Sustainability" a considerable increase occurred from 2014 till 2018, and simultaneously, the rate of the topic related to "Textile" and "Sustainability" was also sharply going up from 2014. It is also noticeable that the discussion of fashion and textile sustainability moved from more environmental friendly/eco-friendly production processes to the themes of long-lasting duration, recycling, responsible consumption, and economic growth, that is a cultural and social sustainability too. Therefore, approaches based on fair work, traceability, transparency, community development and so on have been adopted by many fashion brands⁸.

However, for some traditional fashion and textile craftsmanship is hard to survive in contemporary society and face those cultural and social sustainability issues. Given this, the research is concerning how to understand the current situation of textile heritage and practices within Chinese community, thus, towards a sustainable future of long-lasting textile craftsmanship innovative development, and a growing economy.

2. A DESIGN-DRIVEN FRAMEWORK OF SUSTAINABLE AND DISTRIBUTED SOCIAL INNOVATION FOR ACTIVATING HERITAGE COMMUNITIES

In order to support a cultural and social sustainable development for craftsmanship and heritage communities, the theoretical background provided by the "Design driven active-action strategies of typical knowledge" developed within the Design and Culture sector of the Design dept. of Politecnico di Milano, offer a sustainable approach that looks promisingly transferable to textile and fashion crafts communities in China. This approach is based on the fact that in order to be preserved, the typical knowledge needs to be continuously practiced, performed, taught and socialized, in other words, "activated" (Lupo, 2011) balancing the conservation of the original cultural values with contemporary interpretations in new design products and processes through identification/acquisition, conservation/documentation, and transmission/fruition (Lupo, 2008). While regarding the environmental impact of traditional textile crafts, most textile craftsmanship is often considered as eco-friendly because of the good use of natural material, the cultural sustainability is sometimes being neglected, because even if some textile heritage community and their traditional production and craftsmanship are the core spirit of a brand, they are not explicitly recognized and empowered by the collaboration. Though, there are some cases trying to empower the artisans' traditional skills and knowledge. For instance, the GuateMaya⁹ project launched by Pacunam Foundation recognised that "Preservation of culture is key to Guatemala's sustainable development", and "Artisanal craftsmanship represents one of our key assets, and an incredible development opportunity."

During the research of textile heritage in China, we found that even if from the top-down to the bottom-up, local government, scholars, entrepreneurs, designers, and craftspeople believe that innovation is the way to revive traditional textile craftsmanship, there is no systematic activation model that can not only recognize the values of the textile crafts, but more importantly, can also continue the related community's capabilities and behaviours.

The main purpose of applying this design-driven framework is considering the process of sustainable development of Chinese textile heritage from unveiling to activating. The Identification/Acquisition is the unveiling and visualising procedure for enabling the craftspeople and the masses' awareness of the importance of textile heritage. The conservation/documentation is documenting and re-using the absorbed knowledge from upper step. And final-

¹ <https://www.sensitivefabrics.it/sustainability/>

² <https://eco-age.com/news/gucci-president-ceo-marco-bizzarri-unveils-culture-purpose-sustainability-plan>

³ <https://www.kering.com/en/sustainability/our-strategy/>

⁴ https://www.cameramoda.it/media/pdf/manifesto_sostenibilita_en.pdf

⁵ <http://www.greenstrategy.se/sustainable-fashion/seven-forms-of-sustainable-fashion/>

⁶ <https://circularfashion.com>

⁷ "TS=Fashion" AND "TS=Sustainability" and "TS=Textile" AND "TS=Sustainability", http://apps.webofknowledge.com/CitationReport.do?product=WOS&search_mode=CitationReport&SID=C1QbhPSeXRr3kj1PWvf&page=1&cr_pqid=1&viewType=summary and http://apps.webofknowledge.com/CitationReport.do?product=WOS&search_mode=CitationReport&SID=C1QbhPSeXRr3kj1PWvf&page=1&cr_pqid=13&viewType=summary

⁸ <https://eco-age.com/eco-age-principles>

⁹ <https://eco-age.com/news/livia-firth-guatemala>

ly, transmission/fruition is important to create resilience and sustainable collaborative/participatory processes that interact with different stakeholders.

3. THE RESEARCH OF CHINESE TEXTILE HERITAGE

Back to the history, China's textile heritage had a flourishing time and impacted also the European textile culture through the old Silk Road. Textile arts and crafts in the past did not only represent the fashion or a typical knowledge in a period of Dynasty, but the aesthetic of textile craft can also picture a group of ethnic people, because it is the result of a specific culture and society. However, like many other traditional craftsmanship, textile heritage is endangered even if there are protection initiatives released by local government and UNESCO. In China, the official recognition of textile heritage starts from 2006, and the study about textile heritage and costume begins even earlier. But these actions cannot stop the situation that the traditional craft is hard inheriting to the young generation and also losing the meaning to crafts community.

An official list provided by China Textile Intangible Cultural Heritage Office illustrates that there are 86 traditional textile arts and crafts recognized as national textile heritage. In order to systematically unveil the situation of Chinese textile heritage and discover some solutions for sustainable development, during the research in the field of Chinese textile heritage we classified the 86 textile heritage:

- Based on four regions (Eastern, Central, Western, and Northeast China) for analysing the similar geographical conditions and cultural impacts.
- Based on textile fibre (Plant-based fibers and Animal-based fibers) for analysing the textile raw material resource based on the natural causes.
- Based on the types of textile heritage: 1) Weaving Technique such as Nanjing Yunjin brocade; 2) Embroidery Skill such as Xiang embroidery; 3) Printing and Dying Skill such as Nantong blue calico; 4) Primary Textile Material Making such as Ramie cloth making technique; and 5) Ethnic Costume such as Li ethnic costume, for analyzing the typical knowledge and skills.

We used eight parameters (Cultural, Social, Geographical, Temporal, Economic, Aesthetic, Technical, and Intellectual¹⁰) for deeper analysing the certain and uncertain value of the textile heritage.

We also identified stakeholders and innovators (Craftspeople, Government, Institute, Museum, Designer and Artist, Non-government-organization, Studio and Workroom, Industry, Tourism and Handicraft market) for analysing the knowledge owners and active-action participants.

After this phase of unveiling the textile heritage knowledge in China, we can understand which can be the factors supporting sustainable development, and which sustainable innovation strategy can activate the craft heritage and heritage community, from the next two phases of conservation/documentation and transmission/fruition.

3.1. Case study

We selected, from each one of the four areas, two cases that are most representative and/or uncertain.

1. Eastern China¹¹ is the most developed area in China in the field of textile heritage. This area includes the political centre Beijing and economic centre Shanghai. Most of the regions are the coastal or near coastal area: this localisation brings a massive opportunity for export and import which means an intense development of the textile industry and fashion manufacturing. To this areas belong also some historical skilled and developed textile craftsmanship like Li cotton textile technique and other textile-related crafts. The cases for this region are: Nanjing Yunjin Brocade and Li Textile techniques. Both of the heritage are not only famous in China but also well-known in the world.

- Silk-making has a significant history in Jiangsu and Zhejiang province¹², and Yunjin Brocade is one of the most brilliant representative form of silk product: it is highly considered by local government, it has been supported and promoted as a symbolic cultural and traditional craftsmanship abroad. Even fashion designers¹³ try to transform this heritage into modern form, but aesthetic stereotype still hesitates in an initial innovative step.
- Li textile techniques is defined as intangible cultural heritage by UNESCO¹⁴ and is a positive example of sustainable development by the good use of local natural condition but has been less supported from contemporary design practice. Therefore, even if its knowledge and skills represent Li ethnic group's culture and religion, the textile techniques is facing the issue of lack of inheritor. The main reason is because Li eth-

¹⁰ During the research of the unveiling, the valuing parameters are crucial for studying the challenge and opportunity for sustainable development. Cultural represents the value of the textile heritage's distinct cultural history and traditions; Social represents the specific community of craftspeople and the group of ethnic minority; Geographical represents the typical area, territory resource, and natural environment; Temporal represents the history duration from the origin; Economic represents economic benefit from raw fiber materials to the end market; Aesthetic represents the artistic value such as designs, colours, and compositions of the decorative patterns; Technical represents the technique of handicraft and the use of traditional instrument; Intellectual represents the possibility of applying the machine and digital technology.

¹¹ Including Beijing, Tianjin, Hebei Province, Shandong Province, Jiangsu Province, Shanghai, Zhejiang Province, Fujian Province, Guangdong Province, and Hainan Province

¹² Sericulture and silk craftsmanship of China, retrieved from <https://ich.unesco.org/en/RL/sericulture-and-silk-craftsmanship-of-china-00197>

¹³ 'Yunjin Brocade Fashion Show held in Milan', Retrieved 2015, from http://njweek.chinadaily.com.cn/2015-07/16/content_21311757.htm

¹⁴ Traditional Li textile techniques: spinning, dyeing, weaving and embroidering inscribed in 2009 (4.COM) on the List of Intangible Cultural Heritage in Need of Urgent Safeguarding, <https://ich.unesco.org/en/USL/traditional-li-textile-techniques-spinning-dyeing-weaving-and-embroidering-00302>

nic minority customs are assimilated by modern lifestyles, and the younger generation is looking for more promising job instead practicing the leftover textile technique (Luo, 2008).

2. Central China¹⁵ is inland plain, the environment condition is good for the textile plant-based fibres such as cotton and ramie. In ancient time, this area was the origin of Chinese civilization and stimulated the textile aesthetic development. The cases are: Xiang embroidery and Ramie cloth.

- Xiang embroidery is a general name for the embroidery products which arise from and are mostly produced at Changsha, Hunan Province, with distinct characteristics of Chu culture. Although it is regarded as one of the four most distinguished embroidery styles in China (together with Suzhou embroidery, Sichuan embroidery, and Cantonese embroidery), similar to Yunjin brocade the innovation level stays in the traditional style without many breakthroughs.
- As a promising ecological fibre, ramie has been grown in China for many centuries, and farmers in ancient China are known to have used the fibre to weave clothing. Now China still leads the production and exports of ramie in the world¹⁶, and Jiangxi and Hunan Province is one of the four major ramie producing areas in China. Especially the post-processing is mature in this area, but the newest design and making technique are imported from Korea and Japan. And the two countries had already successfully declared the traditional ramie making technique as ICH in the list of UNESCO¹⁷.

3. Western China¹⁸ is the largest area in China. Even though there are three megacities in this area, due to the big land area, the population density is the lowest compared to the other four areas. Animal husbandry source is rich in Inner Mongolia and Xinjiang, it indicates that this area is rich of animal-based fibres such as wool and cashmere. Except for animal-based fibres, Xinjiang also holds half of the total production of cotton in China. But still, there are many regions that are plateaus, desert, and underdeveloped because of the harsh natural environment. There is the most significant amount of the ethnic minority communities in this area, and it has the largest number of textile heritage with extraordinary textile crafts and ethnic costume arts. The case are: Uyghur textile heritage and Miao textile heritage. This two ethnic minority textile craftsmanship heritage contain several types of textile craftsmanship.

- Uyghur textile heritage includes Uyghur traditional costume, Uyghur embroidery, Uyghur felts, weaving and dyeing technique, Uyghur Etes Silk dyeing technique, and Uyghur Pala Zi weaving technique. All of these traditional crafts are the “fruits” of Xinjiang Uyghur ethnic people’s cultural history, ethnic habit, and use of territorial resource. Thanks to the natural condition, there are many advantages for textile industry and textile heritage’s development. However, lots of the rural districts and undereducated situations also cause these heritage stuck in an urgent protection position. Moreover, as the modernization influence of this area, the traditional craftsmanship is no longer the necessary living skill. Therefore, even there is traditional craftsmanship station¹⁹ towards embroidery, it is not considered by local people.
- Similar to Uyghur textile heritage, Miao textile heritage is also the result of ethnic culture and habit with good use of natural resource. Its contemporary practices are much more developed: not only redesigning the arts and crafts’ elements²⁰ but also reusing the traditional technique and costume structure principle (He & Li, 2018) bringing them to modern life.

4. Northeast China²¹ is a severe cold area especially in winter, and the bad natural condition is constraining the production of textile raw material of plant-based fibres and animal-based fibres. However, there are rich forests and mineral resource, and from ancient time to modern, this area had many immigration flows, and became China’s most significant industrial base after 1949. The cases are: Manchu embroidery and Hezhe traditional fish skin costume.

- Manchu embroidery can indicate the primitive art that retaining the Manchu original thinking structure and the original shape of Manchu culture. Inheritance of Manchu embroidery is mainly inherited within the family, which the elder generation hand-to-hand teach the next generation. It seems like the situation as Li textile heritage, however, the endangered status is much more than that, due to the lack of successors.
- Hezhen traditional fish skin costume is not included in the list of textile heritage but as a type of traditional craftsmanship, it is listed in the first batch of National intangible cultural heritage. Fish skin culture is one of the distinctive cultures within the region above 45 degrees latitude. Because the economy of Hezhe people living there was based on fishing (Jernakov, 1972), in China, only the Hezhe tribe (living in Heilongjiang Province) inherit the fish skin culture. Traditional fish skin craftsmanship includes a complex set of processes that were used by the Hezhe women in the past. Before the 1950s, most of the Hezhe people loved to wear garments made of fish skin. Later, due to the complicated production process, high cost, and other reasons, is gradually being replaced by other materials, and such conventional technology has gradually lost.

¹⁵ Including Shanxi Province, Henan Province, Anhui Province, Hubei Province, Hunan Province, and Jiangxi Province

¹⁶ Ramie, International year of natural fibers, retrieved from <http://www.naturalfibres2009.org/en/fibres/ramie.html>

¹⁷ Weaving of Mosi (fine ramie) in the Hansan region inscribed in 2011 (6.COM) on the Representative List of the Intangible Cultural Heritage of Humanity, <https://ich.unesco.org/en/RL/weaving-of-mosi-fine-ramie-in-the-hansan-region-00453>; and Ojiya-chijimi, Echigo-jofu: techniques of making ramie fabric in Uonuma region, Niigata Prefecture inscribed in 2009 (4.COM) on the Representative List of the Intangible Cultural Heritage of Humanity, retrieved from <https://ich.unesco.org/en/RL/ojiya-chijimi-echigo-jofu-techniques-of-making-ramie-fabric-in-uonuma-region-niigata-prefecture-00266>

¹⁸ Includes Inner Mongolia, Ningxia Hui Autonomous Region, Shaanxi Province, Chongqing, Sichuan Province, Guizhou Province, Guangxi Zhuang Autonomous Region, Yunnan Province, Gansu Province, Qinghai Province, Xinjiang Uygur Autonomous Region, and Tibet

¹⁹ The first traditional craftsmanship station launched in Hami, Xinjiang: <http://www.ihchina.cn/11/18669.html>

²⁰ ‘Miao’s creativity inspired haute couture designers’, <http://thefashionabletruth.com/miaos-creativity-inspired-haute-couture-designers/#.XGWL1s9KhPM>

²¹ This area is sometimes taking account the east part of Inner Mongolia due to the geographical location, but, in order to classify the textile heritage distribution based on similar living habits and natural conditions, here, Northeast China includes only the province of Heilongjiang, Jilin, and Liaoning.

4. THE SPECIFIC FRAMEWORK FOR ACTIVATING THE TEXTILE HERITAGE

Based on the area analysis and case study, the influencing factors that control Chinese textile heritage's development from ancient time to the present are: Cultural history; Living habit and ethnic characteristics; Geographical circumstances and resources; Economic basis; and Political policies and initiatives. All of these factors have a mutual influence and impact in a distinct textile heritage. These factors can also restrain the sustainable development of each textile heritage in the contemporary context, especially when considering the changing of the social and natural environment and the limit of the creative resource.

Hereby, by applying the design-driven framework, the research can answer the questions: How to keep the textile heritage alive when the knowledge is far away from the masses; How to empower the capability of craftspeople when traditional crafts are no longer the survival skills; and How to stimulate the heritage community when crafts and ethnic groups are losing inheritor.

4.1. The role of stakeholders and innovators

The stakeholders and innovators play different roles in each of the phases of the a sustainable innovation framework of unveiling-activating Chinese textile heritage (from identification/acquisition, conservation/documentation, to transmission/fruition).

In China, 'Revive the Traditional Craftsmanship' has been announced as a governmental initiative in 2017²², and the establishment of the official office of textile heritage and textile heritage station started two years before. But despite of the coordination of the whole textile heritage system, there are still many issues to be improved. The information of each heritage is not always easy to find online or even in the field.

Since there are the museums, design institutes, textile industries, and NGO research groups focusing on single textile heritage and/or textile-related craftsmanship, a digital archiving platform could be supported and co-created by several stakeholders and actors as the first step of identification/acquisition and second step conservation/documentation, in order to introduce each heritage as an open-end resource for public. A good example is KOGEI JAPAN²³ website provided by Japanese Ministry of Economy. The purpose of this website does not only identifies the authentic Japanese traditional craftsmanship but also provides a platform for contacting and collaborating opportunity for the crafts' communities.

In the step of transmission/fruition there is no doubt that designer plays an essential role in intermediate the craftspeople's know-how and his knowledge with innovative approaches to crafts through design practice in various aspects, for example by using the alternative materials and appropriate technologies or the definition of new product lines (Sethi, Duque, & Vencatachellum, 2005). However, the reduction of the craftspeople's role to that of a mere producer subservient to the designer's influence, won't be sustainable for the development of the crafts community. Therefore, designer and design practice should pay attention to empowering the craftspeople and related heritage community. A sustainable vision is craftsmen themselves designers and designers themselves craftsmen. In order to achieve this status of craftsman-designer and designer-craftsman, the design and art institute and design industry can communicate and co-design with textile craftspeople through craft learning in the workplace and collaborate workshop in design institute. For instance, Paola Besana²⁴ (an Italian weaver, designer and textile artist) is working on textile weaving technique's practice, research, and innovation (her studio can provide a system knowledge and skill learning from library collection, loom technique support, to design practice). Through workshop in the design school and co-design activation with museum and even industry, she presented the traditional weaving technique as a contemporary design activity that allows the craftsmanship to apply in a wider range of practices.

5. CONCLUSION

This paper presents the preliminary results of a research on analysing the sustainable development factors of textile heritage in China and proposing the design-driven framework for unveiling and activating the traditional knowledge and craftspeople's capability. The main contribution of this paper are: re-organize the research of Chinese textile heritage by the phase identification/acquisition; illustrate the role of related stakeholders in the activation procedure; and proposing the proper innovation actions example. The research expects that the active-action framework could be applied and impact on the sustainable development of textile heritage community in China. However, at this stage of the research, due to the limits of some of the case studies' desk and field analysis, the knowledge about design activation method for sustainable development might be not totally sufficient or adapt for all cases, and the future study should also structures life-long learning system for craftspeople by co-design methods. Therefore, other example and strategy of design intervention will be explored and tested in the field in further research.

²² Notice of the General Office of the State Council on Forwarding the Chinese Traditional Crafts Revitalization Plan of the Ministry of Culture and Other Departments, http://www.gov.cn/zhengce/content/2017-03/24/content_5180388.htm?gs_ws=weixin_636259716732157481&from=groupmessage&isappinstalled=0

²³ <https://kogeijapan.com>

²⁴ <http://www.paolabesana.it/e-index.html>

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