

# Craft and Sustainability: Reflections on Design Interventions in Craft Sector in China

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Current studies show that sustainability has evolved from a static goal to a more comprehensive and systematic understanding. Notably, in the implementation of sustainability, there is a need to shift focus onto locality, using local knowledge to solve local problems. Due to a focus on small scale hand-making and a common emphasis on local knowledge, making practices are essentially consistent with sustainability. In addition, self-transcendence values and conservation values are also embedded in these crafts, which reflects in their ecological wisdom, responsible making philosophy and their contributions to personal wellbeing and social stability. Therefore, strong connections between craft and sustainability, emerging from theoretical research, indicates that crafts can be as a modern way of thinking. However, nowadays, in China, due to the influence of globalization and modernization, some traditional heritage crafts have been marginalized. Facing this problem, a preliminary research has been conducted based on secondary data and research, in order to make sense of the current craft sector and related design practices in modern China. The contribution of this paper is to 1) reveal strong connections between craft and sustainability, 2) categorize craft revitalization practices happening in China, 3) identify design's contributions in crafts revival in China and 4) point out problems related to sustainability in design interventions in the Chinese craft sector.

***Keywords: craft; sustainability; design interventions; crafts revival in China***

## 1 Introduction

In China, crafts are positioned within cultural fields, primarily in the field of Intangible Cultural Heritage (ICH) (see ICH China <http://www.ihchina.cn/>). By December 2018, 40 Chinese folk arts and crafts had been included in the UNESCO Lists of Intangible Cultural Heritage, and 3152 examples with 10 categories are inscribed at the national level (UNESCO; ICH China). Although many traditional crafts have been listed into ICH, this does not necessarily mean that they are well-protected. In contrast, some of them, today, often seen as being out of step with modern society and disconnected from people's daily life (Jung et al, 2015). Consequently, many local craft makers cannot make a decent living, and thus there is a break with traditions in the community as fewer young people are willing to devote themselves to local craft production (Zhang, 2011).

As the Plan on Revitalizing Traditional Crafts was released by the Chinese State Council in 2017, there has been a wave of crafts revitalization practices in recent years. Notably, these craft practices are being influenced by modern market and being re-shaped by technology (Chinese State Council, 2017). However, led by such directions, some problems come out, such as: waste of nonrenewable materials (e.g. rare metals and jades) during the making processes; craft educational system with a strong emphasis on digital technology but less focus on traditional skills; and limited quality management, which leads to many craft products of poor quality (Zhang, 2011). Facing these problems, this current research of which this paper aims to understand the relationship between craft and sustainability and make sense of crafts revitalization practices happening in modern China. Analyses of the literature and related secondary data discuss here is the first part of a longer study that with exploring design's potential role in line with sustainability, in order to reviving traditional heritage crafts in China.

## 2 Understanding pathways to sustainability

In 1987, *Our Common Future* was published by the World Commission on Environment and Development, and sustainable development was introduced as a 'global objective', advocating the re-examination of development issues and seeking for international cooperation (WCED, 1987, p12). Since then, the notion of sustainability has been welcome for showing a way out of impending doom (Kuhlman & Farrington, 2010; Walker, 2006, p17), and it was widely seen as an appropriate model which would not sacrifice the possibility of future generations to meet their needs (WCED, 1987, p43; Ceschin & Gaziulusoy, 2016). Its popularity can be reflected in the United Nations Conference on Environment and Development (UNCED), which took place in Rio de Janeiro in 1992; political leaders from all around the world promised to support this goal (Dresner, 2008, p2).

In general terms, sustainability addresses three interrelated areas, including "environmental stewardship, social equity and justice, and economic issues" (Walker, 2006, p16). However, as a continuously growing concept, the idea of sustainability is still ideological, immature, and complex (Reubens, 2010; Faber, Jorna & Van Engelen, 2009). This means huge difficulties emerge in its operationalization. To narrow this gap between the theory and practice, many scholars have discussed different pathways to sustainability in the literature. According to different perspectives, the authors categorize them as four main pathways as bellow:

- **The pillar-based pathway** is an attempt to understand sustainability on a number of modern disciplinary categories, with an emphasis on their interconnected and interdependent relationships.
- **The technology-dependent pathway** focuses on eco-modernism, and it relays on technological and innovative approaches to improve eco-effectiveness/eco-efficiency.
- **The goals-based pathway** addresses global challenges in a more specific way, with an emphasis on transforming general sustainable goals into a local context.
- **The systematic pathway** considers unsustainability as a systematic problem, and it suggests a process seeking balances.

## **2.1 The pillar-based pathway**

The WCED sustainable goal and the Triple Bottom Line (TBL) (Elkington, 1999, p70) respectively reflect the two pillars version (ecological and socio-economic) and three pillars version (environmental, economic and social). And after this, there have been attempts to add more components which are more strongly related to the field of sustainability. For example, culture has been considered as the fourth pillar by the committee on culture of the world organization of United Cities and Local Government (UCLG) (2010). And a quintuple framework with the complement of cultural and political considerations was proposed by the Canadian International Development Agency in 1997 (cited in Gibson, 2006, p17). It is noticeable that, in the literature, these pillars sometimes are replaced by intersecting circles. Similar to pillars, the role of these circles is to identify areas in which damage must always be avoided and improvements always be sought, but in contrast to the pillars approach, the understanding of contributions to sustainability is asserted in the intersected area (Gibson, 2001, p11).

However, in the real world practicing this pathway, one pillar often needs to make compromises, and thus this approach raises competition between different components. one typical example is a common deeply entrenched debate between the economic pillar and the ecological pillar, which is re-presented as the fierce debate between “strong” and “weak” sustainability in academia (Nugraha, 2012, p48; Gibson, 2001, p11; Kuhlman & Farrington, 2010; Dresner, 2008, p81).

## **2.2 The technology-dependent pathway**

Ecology-based Modernism continues the most influential parts of the so-called Outlaw Designers - Jay Baldwin, Buckminster Fuller and Stewart Brand - from the 1960s to 1970s (Benson & Fine, 2010). Instead of a linear design process, modernism embraces nature's model of “waste equals food”, and regenerative technologies are used to “close the loop” (Braungart, McDonough, & Bollinger, 2007; R. Stahel, cited in Benson & Fine, 2010). Based on this, many concepts and visions have been developed, such as green design which follows the principles of reduce-reuse-recycle (Burall, 1991; Mackenzie, 1997), eco-design which focuses on the less use of energy and materials in the whole life-cycle of production (Ceschin & Gaziulusoy, 2016), Biomimicry which argues mimicking nature's forms, processes and ecosystems (Benyus, 1997).

However, although research on eco-efficiency has showed positive changes in far less use of energy and materials than those of them decades ago, the fact is that there is still an increase in overall consumption of environmental resources because aggregate consumption continues to grow (Manzini, 2010). Reflection on this, this direction chasing for “better, preferred, improvement and optimization” based on innovation and technology is not enough, because “doing so perpetuates the fallacious idea that ever more products, services and choices will automatically improve our lives and make us happier” is problematic (Walker, 2018, p272). Hence, a more comprehensive and systematic understanding is needed.

## **2.3 The goals-based pathway**

The most typical example of this pathway is the Sustainable Development Goals (SDGs) proposed by United Nations. Compared with previous understanding in three main dimensions (environmental, social and economic), SDGs address the global challenges in a

more specific way, including those related to “poverty, inequality, climate, environmental degradation, prosperity, peace and justice” (United Nations, 2015). However, in terms of implementation, achieving this blueprint requires an “effective translation between global and national aspirations” (Biermann, Leemans & Solecki, 2017). This requirement highlights, in the process of contextualizing SDGs into place-based settings, it is necessary to be selective according to local conditions, constraints and opportunities (Rootes, 2007). As “the experience of a particular location with some measure of groundedness..., sense of boundaries, and connection to everyday life”, place-based knowledge about “culture and environmental conditions” should be taken into account in the application of any potential development paradigm (Escobar, 2001; Walker, 2018, p270). Therefore, under the guideline of sustainability, like SDGs, there is a need of a place-based transformation in line with the contextual changes, otherwise, it can be “counter-productive” due to the lack of local knowledge and thus with the end of failure, such as “ill-conceived eco-city projects Masdar, Dongtan and Huangbaiyu” (Walker, 2018, p271).

#### **2.4 The systematic pathway**

The current understanding suggests that sustainability requires a process seeking balances. This imbalance now reflects in the contradiction between opposite components, such as needs versus wants (Henry, 1996; cited in Nugraha, 2012), localism versus globalism (Dresner, 2008, p170-172), the short versus the long term (Kuhlman & Farrington, 2010), and tradition versus modernity (Nugraha, 2012, p46-47). In the comparison between primitive and modern worlds, there was a balance between “what is produced and what is desired” in the past, which results in a remarkable stability (Henry, 1996; cited in Nugraha, 2012). But unlike a fixed bundle of wants in the primitive society, our contemporary dynamics is the lack of property ceiling, as a consequence, there is an increasing growth of consumerism accompanying with excessive energy use, resource use and waste (Walker, 2018, 270-271).

In this ongoing debate, often from opposite viewpoints, people keep questioning whether the end of sustainability is localism or globalism? if we should go back to traditional ways or keep embracing modernity? In this background, a more neutral voice with the emphasis of balances achieving sustainability appears. An example is the argument of community-based distributed systems in the globalized context; this concept emphasizes the power of the local and small communities as resilient social structures, and productive systems that rely on technology and global network (Manzini, 2014; Zhan & Walker, 2019). A similar approach seeking balance between traditionalism and modernism can be found in Walker’s argument, who suggests to re-discover the value of traditions, because these “traditional ways of thinking and behaving differ markedly from the modern sensibility”, since they tend to “embody a sense of duty and responsibility not just to others in their community but also to the teachings, knowledge, wisdom and practices of their cultural predecessors” (Walker, 2018, p273-274). Learning from these positive values embedded in enduring traditional practices can help us develop a “different, hopefully more balanced outlook”, and thus help us solve sustainable problems in modern society (Ibid).

In summary, current studies show that our theoretical understanding of sustainability has evolved from a view that perceived sustainability as a static goal to a more comprehensive and systematic view (Ceshin and Gaziulusoy, 2016). This evolution shows that there cannot be an “overarching all-encompassing specific sustainability target to strive for” (Hjorth & Bagheri, cited in Ceshin and Gaziulusoy, 2016). This means, at the practical level, there is a

need to shift the focus onto “locality” (Manzini, 2010), using local knowledge to solve local problems (Van der Rym & Cowan, 2007, p83-85).

### 3 The value of craft and its relationship with sustainability

Craft, as an integration of theoretical knowledge, practice skills, tacit knowledge and experience (McCullough, 2010, p311; Metcalf, 1997, p69-75; Shiner, 2012, p236; Sennett, 2008, p95; Dormer, 1997). It requires a long-term cycle of accumulation with systematic learning and repeated practices. Meanwhile, belief, behavior and customs are handed down from generations to generations by traditional making practices, which ensures the continuity of symbolic cultural meaning or special significance with origins in the past. As discussed before, due to a focus on small scale hand-making and a common emphasis on local knowledge, crafts are essentially in line with principles of sustainability; and therefore, craft objects are valued due to their “longevity, timelessness and high quality” (Woolley, 2010).

In addition, in the literature on crafts, the term “value” is frequently mentioned by researchers. Therefore, a literature review on value and craft was also conducted, in order to better understand the nature of craft.

Rokeach’s book *The Nature of Human Values* was published in 1973 and showed that the value systems are large and dynamic. According to Schwartz’s work (1992), values work together in a circular form, or “circumplex”. And these values can be divided as four categories, namely, openness to change, self-enhancement, conservation and self-transcendence. The cluster of openness to change values and self-enhancement values are related to external approval and rewards, like “financial success (money), social recognition (fame) and financial success (money)” (Kasser & Ryan; 1996). In contrast, the cluster of self-transcendence values and conservation values are associated with intrinsic character, like community, family, religiosity, self-regard, religiosity, caring for others and affiliation (Kasser & Ryan, 1996; Kasser, 2016). In general, intrinsic values and extrinsic values are correlated, but to some extent, they are also conflict with each other. Substantial evidence has shown that extrinsic values are negatively associated with ecological attitudes and behaviors (Brown & Kasser, 2005; Richins & Dawson, 1992; Sheldon & McGregor, 2000; Hurst et al., 2013), personal well-being (Richins & Dawson, 1992; Kasser, 2002; Dittmar et al., 2014) and socially responsible behaviors (such as helping others and volunteering, Briggs et al. 2007, Sheldon & Kasser, 1995).

To explore the value of craft, we can place craft into this value context. The following analysis shows that craft falls mainly within the cluster of self-transcendence values and conservation values:

- **Universalism:** ecological wisdom is inherent in craft practices, reflecting in craft’s low impact on environment. As “the application of skills and material-based knowledge to relatively small-scale production” (Adamson, 2010, p3), locally natural materials are selected, and obviously, most of these materials, like bamboo, wood, cotton or glass, are renewable. On the other hand, a handmade process and a locally appropriate small scale of production also contribute to its less energy consumption.
- **Benevolence:** different from mass-produced products, good quality and long lifespan can be seen in craft objects. Making good is much important than making quick. This making philosophy convey makers’ belief and virtue, such as responsibility, persistence and love. And because of positive feeling aroused after making a craft

artefact, such as “self-actualization, fulfillment and happiness”, craft practices are regarded as an important way contributing to spiritual wellbeing (Ferraro, et al., 2011).

- **Tradition and conformity:** craft knowledge is accumulated through “a steady process of cultural accretion”, and such traditional designs and craftsmanship have achieved longevity by honing over generations (Van der Ryn & Cowan, 2007, p83). For craft products, they are “timeless, unique and original” with “historical significance” (Woolley, 2010, p141).
- **Security:** as local-based practices, crafts are made for a relatively firm local demand. Thus, there is a “congruence or complementarity between what is produced and what is desired” (Henry, 1996; cited in Nugraha, 2012). Such a traditional and relatively stable relationship between production and material needs can help local communities establish “remarkable stability” (Ibid). At a personal level, this stability is reflected in crafts people’s psychological satisfaction. Figure 1 shows the values of crafts in line with sustainability.

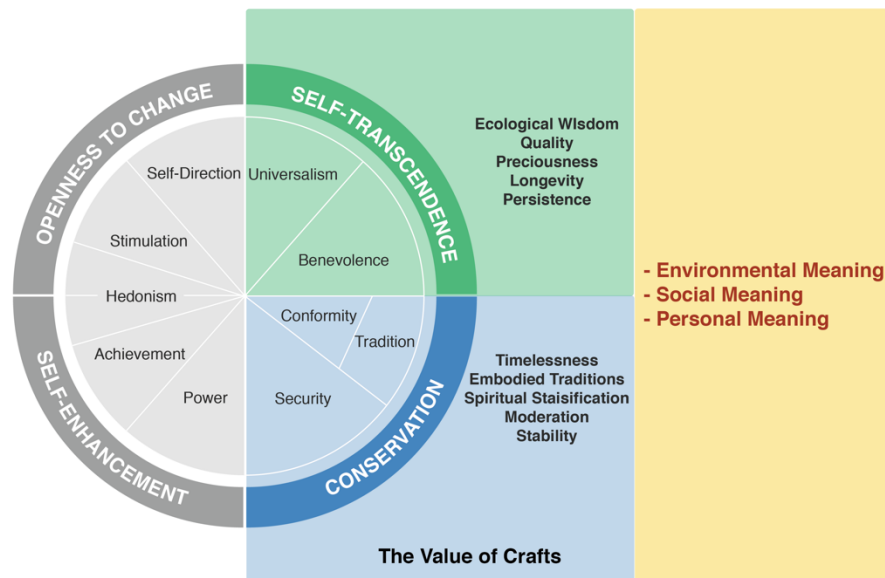


Figure 1. Values of Craft in Relationship with Sustainability. Source: developed by the authors from Schwartz’s theory (1992) and Hormes, et al. (2011)

As local-based practices, craft objects are made by local materials for local needs. Environmental integration is rooted in craft making. Meanwhile, flexible craft practices and small-scale craft production, to some extent, can contribute local communities to become more “interdependent, self-organized, nested, participatory and diversified” (Kossoff, 2015). With these distributed communities interconnected (Ibid), an “authentic holism”, opposite to “a globalized but fragmented homogeneity” world today, (Bortoft, 1996; Kossoff, 2015) can be realized. As a “catalyst”, craft practices provide us opportunities to reassess the relationship with “natural environment and with each other” (Ferraro, et al., 2011). Therefore, it is meaningful to consider craft as “a modern way of thinking”, re-learning its ecological wisdom, its responsible making philosophy and its contributions to personal welling and social stability.

#### 4 Crafts Revival and Current Design Interventions in Crafts in China

The craft resurgence is supported by Chinese governments today, and this leads to an increasing interest in craft revitalization at a practical level. In order to have an overall understanding of current craft practices happening in China, a preliminary investigation has been conducted. Due to limited academic resources, this investigation is mainly based on online secondary materials. A keyword, i.e. “crafts revival”, were used on Chinese largest search engine Baidu. According to search results, except for government documents, related crafts revival information was normally shown on the website of big companies, in reports by academic intuitions or universities, in news about historic old brand craft enterprises, and documentary films about design-makers. For each category, 1-4 typical examples were further analyzed, and their characteristics can be identified as bellow:

- **Projects supported by big companies:** some influential crafts revival projects are launched in big companies, which aims to achieve the corporate social responsibility (CSR) and maximize their “positive impacts on society” (Jamali & Mirshak, 2007). For example, in BMW’s CSR project called Journey of Chinese Culture (<http://www.bmw-brilliance.cn/cn/zh/csr/cultural.html>), since 2017, its project team has conducted field research in 22 provinces with visits to 337 intangible cultural heritage in 6 national-recognized Eco-Cultural Preservation Areas. To date, more than 16,000,000 yuan (about £1,799,775) has been paid to support academic research and projects on 90 endangered crafts.
- **Research projects oriented by academic intuitions or universities:** these projects emphasis on how to solve problems and challenges in specific contexts, such as the Shouyi Nongcun project in Shandong University of Art and Design (Pan, 2011), how to attract more people to be involved in the craft sector, e.g. by in-depth craft experience activities in Hexu training programme (Kunming Government, 2011), and how to facilitate innovative collaborations in different fields, e.g. in Yicun Yipin project (Zhang, 2015).
- **Design projects led by historic old brand enterprises or design-makers:** for some historic old brand enterprises and products, like Yue ware and Celadon potteries in Cixi City, Zhejiang Province (Zhang, 2015), they integrate contemporary design elements into traditional crafts, in order to expand market. In addition, there are many modern designs based on traditional/heritage crafts, and most of them are popular in the market, like Rong project (<http://www.handmadeinhangzhou.com/>) and brand Wuyong (<http://www.wuyonguseless.com/Default.aspx>). For these designers, they get inspirations from traditional crafts, like ethnic patterns and unique place-based materials. And a collaborative model is normally adopted by them to practice new ideas. For example, designer Li collaborate with experienced weavers to make round fans (The Great Channel, 2016, 04:25).

In these examples, it is worth noting that designers, design researchers and design institutions have been involved in these examinations and revivals, which ‘update’ the aesthetics while also accentuating the contemporary relevance, value and contribution of the traditions and the artefacts. To understand design’s role in these practices, another round of online research using another search keyword - “craft and design” was employed. Based on the analysis of search results, design’s main contributions are identified as below:

- **Digital Platforms Design:** Dongjia (<http://www.idongjia.cn/>), Laozihao (<http://www.lzhplus.com/#xiazai>) and Huaxia Jiangren (<http://www.ihxjr.com/start/index.html>) are three influential applications and websites in selling craft products and gathering craft-related stakeholders in China. These “intermediation platforms” create a closer interaction between producers (craftspeople) and consumers/users (Jegou et al., 2004; cited in Saikaly & Krucken, 2011). Information about stories behind craft products are offered, including makers’ stories, their personal inspirations, production techniques and materials, culture and territory of origin. And some innovative marketing methods like live video streaming, customized service and crowdfunding are adopted to attractive users. In addition, there are many crafts-themed accounts on Chinese social media platforms. These social media platforms have made contributions in sharing crafts-related information as well as connecting different craft communities and individuals. For example, up to 5 July 2019, 317,000 people follow the public page called Craft Revival on the biggest microblogging platform Weibo ([https://www.weibo.com/u/3163937325?is\\_hot=1](https://www.weibo.com/u/3163937325?is_hot=1)). And mini-documentary films the Great Shokunin 2 telling crafts people’s stories have been watched more than 130 million times on Chinese video sharing platform Youku (China Daily, 2017).
- **Product and Packaging Design:** As one of ten most typical projects promoted by Chinese government (MEPRC, 2017), New Channel design project (<http://newchannel.design-engine.org/>), launched by Hunan University in Central China, aims to unearthing new opportunities based on local culture and traditions. A co-creation approach is adopted to facilitate the knowledge exchange between the outside designers and local craftspeople (Zhang & Ji, 2016). And many design outcomes with local unique genes have been developed in this collaborative way. For example, in the ethnic group called Huayao in southern China, a series of packaging designs for local specialties and traditional food are developed, and local bamboo, grass and cloth with locally traditional weaving and dyeing skills are used as materials of these new designs (Wang, 2018). Similarly, in southern China, there is an ethnic minority called Dong, and its Dong weaving skill has been recognized as ICH at the national level. A scarf brand combining this traditional Dong weaving skills has been developed (Guo & Ji, 2018). And in Sichuan province in southwestern China, locally traditional stapling skills and lacquer technique are re-used in modern ceramic design (Zhang, et al., 2017).
- **Brand Design:** Norlha is a high-end brand of Yak wool scarves, clothing and other treasures handwoven by nomad on the Tibetan Plateau (<https://www.norlha.com/>). Sustainability can be seen in many respects. As a “vertical company” with a control of the entire chain, its environmental sustainability is primarily related to the extraction of local raw materials from Tibetan Yaks and its production process with few energy consumption (Yi Xi, 2017, 11:14). Meanwhile, as some local nomads give up herding animals but turn to Yak wool making, to some extent, this change alleviates overgrazing on the Tibetan Plateau (Yi Xi, 2017, 13:14). In addition, social responsibility is correlated with its story-telling way, conveying makers’ stories, Tibetan culture and traditions behind the products. For local people, they now “have a steady source of income” in their hometown, so they do not need to work far away



from their family as before. This change is positively associated with locally cultural sustainability, social stability and personal wellbeing (Yi Xi, 2017, 10:49).

## **5 Discussions and conclusions**

As discussed above, craft revival activities and craft-design collaborations in China have made significant contributions to spreading crafts-related information, selling craft products and unearthing new opportunities by inter-disciplinary collaborations. However, in these design interventions, some existing and potential problems which related to sustainability, should be seriously considered. For example, designers normally collaborate with craftspeople to develop new craft products, but there is an imbalanced relationship between them. According to Zhang's research (2016), she critiques that outside designers normally dominate the collaboration, while local craftspeople just act the role of 'manual worker' to achieve their concepts. As a result, in new craft products, local traditions and place-based knowledge which are valued by craftspeople cannot be well conveyed. And for craft e-commerce platforms, economic values are given the first priority, and therefore many mass-produced crafts with affordable prices are recommended on the homepage. In contrast, some culturally significant crafts cannot be well known by online consumers. Obviously, such content designs are used to attractive attentions and stimulate purchases, but in a long term, this design direction may diminish cultural values of crafts. In addition, in the example of Norlha brand, its Yak wool products have been positioned in the "modern luxury market". But as Kapferer and Michaut-Denizeau worry about (2014), "many luxury brands are growing by expanding their operations to low-cost factories, while licensed operators pursue volume and sell fashionable, high margin accessories". This luxury, fashionable and profitable trend may cause big changes in local communities, some potential social changes should be also seriously considered.

It is notable that a common trend in global craft sector is being influenced by modern market and being re-shaped by technology, which is similar to it in Chinses craft sector. Self-enhancement values and openness to change values are encouraged by consumer capitalism and modernism. Luxury and fashionable products, which emphasize on social status, wealth and personal image, have gained considerable traction. Influenced by this, there is a trend that craft objects as fine arts has become popular (Crafts Council, et al. 2012, p47). "Expressive values", like originality and self-expression, are conveyed by many contemporary crafts. And meanwhile, with a continued emphasis on technology, innovation and breaking new ground, there are plenty of technology-dependent craft designs happening today. According to Yair's research (2011), innovations in five terms, including biotechnology, manufacturing, engineering, material, and digital and communication technology are influencing and reshaping the craft sector. However, these trends tend to be dominated by extrinsic values. Opposite to this, self-transcendence values and conservation values embedded in traditional crafts, as discussed above, seem to be largely neglected.

Substantial evidence has shown that extrinsic values are negatively associated with ecological attitudes and behaviors, personal well-being and social responsibility. Due to these ills, this study questions current design interventions which focus on consumption, rather superficial innovation and profit. In contrast, we argue for a more comprehensive sustainable direction with the respect of local culture, indigenous knowledge, and self-transcendence/intrinsic values.

This paper has contributed to the theoretical understanding between craft and sustainability, categorized current design practices happening in China, identified design's contributions in Chinese traditional crafts revival, and pointed out problems related to sustainability in current design practices in Chinese craft sector. These findings shape a theoretical framework and will inform the next in-depth field research in this study area.

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