

# **Materialising the Immaterial: the Crafting of Taiwanese Bamboo Design**

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Thesis submitted for the degree of Ph.D

2016

I, Chih-I Lai confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

## **Abstract**

A common and affordable material such as Bamboo can be mundane, but may be remarkable in many ways for Taiwanese people. Investigating the ways Taiwanese people see, treat, apply and work with bamboo in their everyday lives reveals its significance in Taiwanese culture, and also its role in crafting and reinventing Taiwanese tradition as represented in the new bamboo designs of recent years.

Design is seen here as a hinge between the intangible human domain of creativity and the tangible materials that allow the efficacious techniques to be practiced in order to transform concepts into real objects. This research is a material culture study which scrutinises the mutual relations among ‘cultural techniques,’ ‘self-making,’ and ‘creativity’ focusing on the domain of contemporary bamboo design in Taiwan. It is not only a research of the designs made with bamboo but a study of how bamboo shapes and displays people in the society.

I would argue that the cultural significance embodied in its materiality transforms bamboo from a worthless, cheap, and alternative material into a priceless one. Moreover, the technical knowledge developed through the history of making can be a bond into creative design to be built upon, but can also act as a barrier for creativity. Being able to do original design requires various techniques, especially the skills to conceptualise ideas; the ability to draw and to read a drawing are evidently influential. Making is not only a physical act and the exercise of internalities but also the practice of efficacious techniques that allow the process of making an object to transform the people who make it.

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## **Acknowledgments**

I would like to express my sincerest gratitude to my two supervisors Michael Rowlands and Adam Drazin at UCL for their incredible support, critical feedback, and encouragement throughout my PhD studies. Mike led me to understand the true human value in Anthropology as a superior scholar and my mentor. Adam helped me to locate my floating research ideas within current studies of Design Anthropology and guided me toward the destination of this writing journey. I am especially thankful for to their immense generosity and patience over the years.

This research would never have been possible and completed without several funding sources: the Taiwan Ministry of Education for the three years' full funding for my tuition fees and living allowance, the Chiang Ching-kuo Foundation for the one-year writing up scholarship, the Academia Sinica Bursary, and the research funds from the National Taiwan Craft Research and Development Institute (NTCRDI).

My special thanks is owed to Ludovic Coupaye for his insightful support regarding the techniques of making and guidance when I was his teaching assistant for the undergraduate course in the department. I am also grateful to our dean of the department Susanne K uchler for supporting my progress and bringing Adam on board as my supervisor. I am equally indebted to the following people and seminar participants for the valuable advice and comments:

I thank Chia-yu Hu at the National Taiwan University for all the valuable discussions we have had from the earliest stages of this research project and the organisation of a workshop at NTU with Michael Rowlands, and the fact that they made a special effort to visit my field site during my fieldwork in Taiwan. She also

introduced me personally to the works of Yuko Kikuchi. Her books about Japanese and Taiwanese crafts and design inspired me to initiate this research. I am very grateful to Michael Herzfeld, Stephan Feuchtwang, and Geoffrey Gowlland for their kindness and generosity in sharing to share their fieldwork research and references. I would also like to thank Andrew J. Strathern at the University of Pittsburgh, who gave me the opportunity to learn many fieldwork skills from the real 'participant observation' when I observe his ethnographic fieldwork at the very beginning of my fieldwork.

My research would not have been possible without the help of people in the field, in particular, Jin-duang Chiu and her families, Yeh Chi-hsiang and his families, Master Lee Jung-lea, Master Huang Tu-shan, Liu Chao-ming, Larry Liu, Chen Kao-ming, Su Su-jen, Chen Pei-ze, and Lin Chun-han; the staff and friends at the NTCRDI, Lin Jeng-yi, Lai Illy, Lai Xiu-feng, Rob Roy, Yu Huie-chia, Hsiao Yi-shan, Lin Ya-huie, Ariel Chen, Hsu Cui-jin, Lin Xiu-feng and the resident craftspeople: Laio Sheng-wei, Tang Wen-chun, Tang Chi-wei, the Chao brothers, Huang An-fu, Huang Yi-liang, and Lai Hong-chun; the designers at the Yii project: Kevin Chou, Rock Wang, Judy Lo, Sally Lin, and Gina Hsu, and project director Gijs Barkker; and staff at the Taiwan Design Center, DC Han and CY Shih. I sincerely thank the many senior experts and scholars who helped me with the fieldwork about bamboo design in Taiwan, in particular Hwang Shyh-Huei at National Yunlin University of Science and Technology, Wang Wen-xiong at Southern Taiwan University of Technology, and Hu Yu-Tsung at NCKU and NDD Design.

Warm thanks to all my friends and saviours in academia, in particular those who brightened up my office life at UCL: especially the amazingly helpful office team

Paul Carter-Bowman, Chris Russell, Chris Hagsavva, and Keiko Homewood; as well as my colleagues Kuo Yang-yi, Simon Mangal, Pascale Searle, Wang Shu-li, Alesya Krit, Inge Mascher Brizuela, Janine Su, Matan Shapiro, Chen Meixuan, Timothy Carroll, Aaron Parkhurst, Alexandra S. Antohin, Sumiko Sarashima, Cathryn Townsend, Alice Elliot, Tom McDonald, and Rodney Reynolds, Rafael Schacter, Brian Wyse, and Jane Dickson; and my research mates Charles Shih-hsiang Sung (U of Pitts), Cho Yen-ting (RCA), Chuang Chih-chao (MIT), Rita Chien (TNNUA). In addition I would like to thank Daniel Mojahedi (SOAS), Marilou Polymeropoulou (Oxford), Sheri Labenski (SOAS), Tom Ue (UCL), Lucy Lilly (UCL), Morgan Leichter-Saxby (Leeds), and Brian Fan (U of Waterloo) for proofreading the final version. Finally, I would like to thank Facebook and the Internet that continuously distracted me but also supplied me with love and support wherever I am.

The last very special thanks goes to my family: my parents K.P. and Weiwei, my grandmother Syran, and my sister Yun without whom I would never ever have accomplished this piece of writing. I am so grateful for all the love, care, support, and guidance I received from all of you, even though the process of writing was painful much of the time, although it became a joyful and inspirational experience in the last stages of the completion.

Many thanks to all of you.

**There is Hope in Honest Error;  
None in The Icy Perfections of The Mere Stylist.**

A quotation from the architect J.D. Sedding by Charles Rennie Mackintosh, Glasgow,  
1901.

## Chapter 0 Introduction

All men [sic] are designers. All that we do, almost all the time, is design, for design is basic to all human activity. The planning and patterning of any act toward a desired, foreseeable end constitutes the design process. Any attempt to separate design to make it a thing by itself, works counter to the fact that design is the primary underlying matrix of life.

*Design for the Real World*

When I returned to Taiwan to begin pilot research for my PhD thesis in 2008, I accidentally found a sidewall of a house covered by piles of bamboo stalks of various sizes. I discovered it as I searched for the source of a strange smell I encountered, similar to the scent of wet grass or plant fibres while the ground is still slightly wet after it rains. There was a faded sign by the house that read, ‘Dahe Bamboo Shop’ (translated as *The Great Japan Bamboo Shop*). A ray of light from the setting sun shined into the main entrance of the house, inviting me to look inside. The space behind the door, which would ordinarily serve as a sitting room, was filled with numerous objects, making the area appear more like a warehouse.



**Figure 0-1** The exterior of a bamboo shop in Taiwan (Yilan, 2008)  
(All photos by Chih-I Lai unless otherwise indicated)

Suddenly, I saw there was a person sitting in the room. She raised her head and looked at me. I was embarrassed to be caught peeking inside her house, so I waved my hand to greet her. She called me into her house and gestured with her hands that she could not hear me properly. All the childhood warnings of not talking to strangers or entering dark houses had been cast away following my decision to become an anthropologist.

I entered the house and found the items filling the room were all sorts of bamboo objects, mostly bamboo tubular furniture and utensils. At the end of a narrow corridor, the old woman was weaving something with bamboo strips by the light from a window. For a moment, I thought I was looking at a scene in a Vermeer, painting with a female working in a household in the dim light. I asked her if she made all the objects filling the house. She nodded. I asked her how she learned to make so many different things. She replied, *'I make whatever customers want me to do for them.'* Seeking clarification, I asked, *'Do you mean your customers tell you their needs and you design something to make for their needs?'* She did not understand my question, but just stated again, *'I make whatever the customer wants: a cradle, a sieve, or a stool. I make whatever they ask for.'* After we chatted for a while I said goodbye and left her house. However, I later began wondering why she could not tell me if she designed the objects she made. Was it too difficult a question or was *design* too difficult a term for her to understand?

Bamboo is frequently used to create objects for practical use in Taiwan and is at the centre of my research, namely the practice of crafting it. In order to further understand this craft, I visited the National Taiwan Craft Research and Development Institute (NTCRDI) a few days later. I met Master Lee Jung-lea<sup>1</sup>, a recipient of the National Craft Award, at the NTCRDI craft education centre. He was a former employee of the NTCRDI and was trained by Japanese teachers in 1938. He was one of the few graduates of the Jhushan Township Bamboo Craft Training School who could still demonstrate bamboo craft skills, and would be presenting for the public

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<sup>1</sup> All the Taiwanese names in this thesis are written according to the Taiwanese custom: the last name comes before the first name.

education centre the following day. After Japan surrendered Taiwan to China in 1945, he worked as a craft technician in the factories for the craft export business, later leaving the private sector and working for the craft research institute in Taipei. He also volunteered to go to Madagascar and teach bamboo craft skills to the local people for a diplomatic support project.

When I introduced myself to Master Lee, I noticed the roughness of the skin of his palms and fingers as we shook hands, as well as his hunched back. He had retired from the NTCRDI several years ago, but still volunteered at the education centre three days a week to teach and demonstrate bamboo craft skills. Bamboo had been his entire life. He worked closely with Professor Yen Shui-long, an important Taiwanese Mingei movement advocate and designer, much of whose furniture, according to him, was actually made by Master Lee.



**Figure 0-2 Lee's hand is rough and full of the scratches he got from bamboo. (Nantou, 2008)**

When I asked Master Lee how he designs his work, I received a most surprising answer: *“I don't know about design, I am not a designer,”* he said. I couldn't believe a bamboo craft master would say he didn't know about design, so I asked again: *“didn't you just tell me you made all these objects here? You must know something about design, otherwise how can you make all these pieces?”* I am confused.

*“I made these objects according to what I had learned and my experience. They [NTCRDI] want me to make some objects to display here for the education centre, so I made some. I don’t know about design, Professor Yen knows design, I don’t,”* he insisted.

*“So, how do you work with Professor Yen? You must have discussed the designs, how can you say you don’t know about design?”*

*“He draws it, I make it. It’s very simple.”* He didn’t understand why I looked so confused.



**Figure 0-3 Bamboo craft in the Bamboo Museum in Nantou County Hall made by Li Jung-lea. (Nantou City, 2008)**

I could not stop wondering why an elderly man with such talent would not take credit for the creativity of his achievements. His works seemed so beautiful and well-crafted, he must have spent hours and days creating them. From the way he taught his students to solve their problems, strengthen their edges, and apply different patterns when weaving baskets, there was no doubt he must have known something about

design, but he would not admit to it. Why? I considered his words and tried to understand if he was just a very humble man who did not want to show off his achievements, or if there might be some other reason. From an anthropological perspective, my primary interest was not to judge the degree of aesthetics or functionality of the crafts made by Master Lee or the woman I met in her cluttered home. However, my curiosity was provoked by the apparent mismatch between the quality of their work and how they themselves felt about the difficulties of creating such works. Master Lee implicitly denied that there was a separation between cultural techniques and design, because he could not see the difference between what he did and what I saw. He received the design from Professor Yen and acted as a dutiful technician to make the things as accurately as possible according to Professor Yen's design, but when Master Lee is making something for himself, he thinks of design and the technique of doing it at the same time. There is no separation.

This separation of design and execution skills did not exist in Master Lee's point of view; he did not understand that there was a difference between the acts of techniques and design. In Master Lee's mind, he simply used his hands and technical skills to craft the materials into an object. This sets up the paradox in the relationship between technique and design, and it is that paradox which initially triggered this thesis. In addition to this paradox, I noticed another intriguing mismatch about the value of things. Two pieces of craftwork made by the same maker with the same materials, and flawlessly made with similar amounts of labour time and attention, could end up with very different appreciations and market prices. Sometimes, the lower-priced item might require more efficacious techniques, and take more time to make, contradicting the Marxist argument that the value of a commodity is produced by labour and productive force. When I pointed this out to the retail manager at the shop, she replied to me: "*the higher priced one is more popular because it is more modern and simple, and it has been designed. People prefer its design than another with traditional style.*"

This paradoxical relationship between technique and design as reflected in the value of things is what this thesis is concerned with. The relationships between the maker and the object regarding the maker's awareness of, attachment to, and

authorship of creating craftwork, especially for a new design, were the things I tried to elucidate during my fieldwork. In this research, design is seen as a hinge between the intangible human domain of creativity and the tangible materials which allows skilled and effective techniques to be practiced in order to transform concepts into real objects. It is a technique of planning and realisation (i.e. the makers are capable of performing the actual making techniques or understanding how things were made so one can source the design to the manufacturer). It is also the right and power to be able to claim authorship of the object.

This research aims to facilitate a better understanding of the interactive relationships of people and things through ‘making’, which includes the actual techniques, labours, and materials applied in processes as well as the conceptualisation and developments of its design. It focuses on the issues of tradition and innovation, knowledge production, transmission, and practice of culture by viewing the *craft-scapes*<sup>2</sup> through the itineraries, biographies, and cartographies of Taiwanese bamboo crafts. Malinowski once said of conducting fieldwork on crafting, ‘the ethnographic reality of a canoe would not be brought home to a student in this country even by placing a perfect specimen before him. To understand the canoe fully the student would need to know the rules concerning its ownership, how and by what people it was sailed, the ceremonies associated with its construction and use, and particularly the emotional attitude of the native to his craft, which he surrounds with an atmosphere of romance, built up of tradition and of personal experience’ (Sayce 1933: 2).

A complete study of these things would involve an acquaintance with the teachings of philosophy, aesthetics, and history, as Sayce (1993) suggests. This research is a material culture study which will firstly lay out the biological and cultural aspects of the materiality of bamboo, then investigate the technology and skills of crafting bamboo and the different modes of knowledge transmission in different workshops, so that it can offer an understanding of cultures of making and

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<sup>2</sup> I was inspired by and borrowed the word ‘craft-scapes’ from a workshop by the International Institute for Asian Studies (IIAS) Summer School 2014 themed ‘Reading Craft: Itineraries of Culture, Knowledge and Power in the Global Ecumene.’

making knowledge, focusing on the domain of contemporary bamboo design in Taiwan. It is not only a study of the designs made with bamboo, but of how bamboo both shapes and displays the Taiwanese culture.

I would argue that the cultural significances embodied in its materiality transforms bamboo from a worthless, cheap, and alternative material into a priceless one. Making is not only a physical act and an exercise of intentionality but also the practice of efficacious techniques that allow the process of making an object to transform the people who make it. In this research, I adopt the method of *chaîne opératoire* (proposed by the French archaeologists (e.g. Haudricourt 1987; Lemonnier 1993; Leroi-Gourhan 1993) and to document my observation of techniques of craft and design, but have adapted it by dividing *chaîne opératoire* into the *etic* and the *emic*. The *etic chaîne opératoire* is the documentation of my observation on how my fieldwork subjects do things as craftspeople or designers or describe how the other group creates things. The *emic chaîne opératoire* is used to collect information about how people are conscious of doing, or the self-awareness of how things are done, in their own words. The result of the data of how people make things and how things are made can later be analysed to find out the different technical patterns of these two groups of people.

It is worth noting that there are already several books and multimedia learning materials which provide very rich resources for studying detailed operational sequences, such as the Taiwan Craft Series published by the National Taiwan Research and Development Institute and cultural bureaus of different cities (e.g. Taichung, Penghu, and Hsinchu); these resources include numerous photographs, illustrations, step-by-step guidance, as well as video and animation footage. Therefore, the main research task will not be documenting the *chaîne opératoire* of these bamboo crafting techniques but to scrutinise how making accumulate the dynamics between people (i.e. craftspeople and designers) to create new things and new designs.

For me, the *chaîne opératoire* does not have to be a complete linear interlocked sequence; it can be cut, pasted, and duplicated (as we do on the digital word processors instead of analogue typewriters) during the process of making. It can also

be juxtaposed for research as well as for finding new possibilities and creativities. In order to situate our understanding of how this paradox came to exist, and to start seeking answers, we also need to go through the background literature regarding the anthropology of cultural techniques and the literature on design, which stimulated my initial thoughts for this research.

## **1. Returning to the Anthropology of Technique**

Material culture research in anthropology used to focus much attention on the study of making based on archaeological perspectives, and the material culture studies of the late 90s to the turn of the 21<sup>st</sup> century emphasised the relationship between people and objects in modern society, focusing especially on consumption and the intimacy between people and their possessions. The focus was on ‘social lives’ (Appadurai 1986) or ‘cultural biographies’ (Kopytoff 1987) through records of the journeys of things, such as exchanges, consumption, and possession, which often ‘pay no attention to the materiality of things’ (Lemonnier 2012: 17).

The research preferences of the past two decades may be the result of how mass production impacts upon people’s relationship with things. Makers have become anonymous because mass production has separated them from users. In response, anthropologists (e.g. Appadurai 1986; Miller 1987; Miller 1995; Dant 1999; Dant 2005; Miller 2005; Miller 2006; Miller and Woodward 2011) have created ways to study modern material culture, and have developed a vital discourse for the study of consumption and possession using anthropological and sociological approaches, rather than those derived from economics, business and marketing. Artifacts, especially those highly involved human objects involving high levels of creativity, are not isolated phenomena and are no doubt mutually dependent on other cultural activities of predominantly social, political, moral, religious, and scientific characters. Anthropologists have mostly agreed that things can make us just as much as we make things even though they argue from different approaches and various perspectives (e.g. Miller 2010; Ingold 2013; Malafouris 2013). Anthropological research has made rich contributions in the above areas and perspectives but has yet to amply address the techniques, especially within Anglo-American literature. The techniques of making that transform raw materials deserve more attention when discussing materiality, and

this thesis takes such an approach to understand and investigate the materiality of bamboo and the techniques of making through empirical apprenticeships and participating in several craft and design projects.

The ‘making’ of the material world has drawn attention from the French Anthropology of Techniques (e.g. Lemonnier 1986; Haudricourt 1987; Leroi-Gourhan 1993; Lemonnier 2012), which views technology as a universal and distinctive category of material activities though with some various takes to see technology. Francophone literature (e.g. Leroi-Gourhan 1943; Leroi-Gourhan 1964; Lemonnier 1983) raised awareness of research on cultural technology several decades in advance of the Anglophone tradition (e.g. Ingold 2000; Hallam and Ingold 2007; Ingold 2013; Malafouris 2013). The discussion on ‘making’ is widespread with the recent trend of Maker’s culture globally. Ludovic Coupaye (2013) suggests that the position of technology in anthropology should be a powerful complement to the current mainstream anthropology, which emphasises the consumption, agency and biography of things. Anthropologists may be able to understand the matters to local interpretations. Therefore, the notion of operational sequences, or ‘*chaînes opératoires*’ (Lemonnier 1992; Lemonnier 1993), proves very useful for unravelling the interlacing of practices and discourses that steers the ‘coming-into-being’ of things through materiality and the process of objectification (Ingold 2010). Malafouris (2013) also takes a similar Heideggerian perspective and investigated how things can shape the mind. He found, ‘[t]he extraordinary plasticity of human mind and its reciprocal openness to creative evolution by way of learning and material engagement is one of the distinctive features of our species’ (Jones and Skinner 2014: 17).

To understand the way materiality envelops our everyday life and thinking, Malafouris (2013) coined the term ‘*thinging*’ to denote the act of thinking with, through, and about the ontological messiness of things. He used various archaeological and anthropological examples to attempt to create his material engagement theory (MET) from a passive observation of the ‘ontology of mind-stuff’ in cognition, but his theory was lacking the active exploration of the embodiment of *thinging* and rarely mentioned the word ‘design’ which is crucial in the process of

*thinging*. Focusing on how things are made can offer a renewed opportunity to investigate technical activities not only as fundamental forms of engagement with the world, but also as a powerful way to understand why and how certain artefacts are made consumable.

The conceptualisation of a design in the process of *thinging* can be seen as a magical moment. If we go back to the practice of technology in making and incorporate the concept and practice of design into *thinging*, it reminds us of *magic*, that is, a traditional practice of technology with a long history of practice. Magic in Anthropology was traditionally focussed on primitive society on which there is a rich literature (e.g. Malinowski 1935, Mauss 1972). In *Coral Gardens and Their Magic*, Malinowski argues that magic is where the technique and technical efficacy are manifested in-situ. He concludes that there is no separate thing called technology, there is only technical action, that people describe as magical (Malinowski 1935). Marcel Mauss's *A General Theory of Magic* critically denied the existence of magic and asserted that magic was just technical efficacy appearing as the supernatural. However, in understanding magic and culture, magic rituals have also been seen as 'directed to the naturalizing of the culture and the recognition that cultural production ultimately depended on, and was inseparable from, the production of nature' (Rowlands and Warnier 1996: 512). To Gell (1988), magical actions are 'a symbolic commentary on the technical strategies in production, reproduction and psychological manipulation' (Gell 1988: 8), whereas Rowlands and Warnier (1996) argue that magic 'allows us to proceed instead with understanding how, in our case, people believed they were participating in a nature process of the transformation of matter from one state into another' (Rowlands and Warnier 1996: 513).

Taking magic as a performance of technical efficacy may give us a chance to parallel it with design. In Taiwan, people always describe the ability to design as a technique to 'turn stone into gold' which is certainly an analogy of magic. In this regard, this research extends Levi-Strauss' (1966: 220) definition of magic as: 'the belief that man can intervene in nature determinism to complete or modify its course,' and see design as a 'modern magical' technique which is intended to wittingly

practice efficacious techniques so as to transform nature and materials through human actions.

The technical knowledge of making is always “deeply interpenetrated with cosmological, sociological, and ritual assumptions that are likely to be widely shared,” such that through in-depth research into ways of making it is possible to understand the cosmology, sociology and ritual of a certain culture (Appadurai 1986). In Lemonnier’s recent book *Mundane Objects* (2012), he wrote about the gigantic garden fence of the Baruya people in Papua New Guinea, which is far larger than is necessary to protect the crop. He documented the fully operational sequence of the making of a garden fence and compared the scale and techniques of the Baruya fence with another group across the valley. He found out this scale and design is a conscious technological choice beyond the actual functional usages but for the purpose of its efficacy to protect them from bad spirits, and present the various domains of social life which are locally interrelated (Lemonnier 2012). In other words, one has to understand the total social context in order to realise what links exist between form, design, and technical efficacy.

‘It does appear that technology has its own impetus and logic and that various new ways of manufacturing or organising our institutions or our lives are imposed upon us in ways that we did not choose’ (Dormer 1997:7). However, a common phenomenon in today’s industrial world, the production culture of the Original Equipment Manufacturer<sup>3</sup> (OEM), does not fall in with this anthropological exposition of the “technical knowledge of making.” This OEM pattern of today’s capitalist manufacturing models divorces things from their actual makers, and this production mode is perfectly set in what Marx had argued as the alienation of labour. As a result, the real maker’s identity is absent within the item.

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<sup>3</sup> **Original Equipment Manufacturer** (OEM) refers to companies that make products to be marketed and sold under another company's brand name. Many factories in the developing world are producing everyday necessities from clothes and shoes to kitchen utensils and computers for multinational corporations (MNCs) like H&M, Nike, Habitat, Dell and many others. These MNCs give *orders* to the manufacturers in developing countries from their head offices in developed countries, and request these foreign factories to produce *their design* at the lowest possible price, thus fuelling competition between these Original Equipment Manufacturers.

OEM is a sign of what I would like to argue is the actual maker withdrawing their right to produce their own design and express their own creativity and identity. Since there is always a debate among sociologists regarding how much technology shaped people and how much people shaped technology, it would be worthwhile to see the struggles in making originals under this special industrial and cultural setting of OEM culture. Therefore, this research will focus on mapping out the active meshwork of making in order to understand how an original design can be developed within it, and how people and things are connected through the innovation of new designs. In order to be able to analyse this process and the organic threads of the events of innovation, this research applies Actor-Network-Theory (ANT; originally created by Callon 1991 and Latour 1992) as a systematic way to consider the infrastructure surrounding technological achievement. Latour is one of the well-known scholars who has investigated the network of technological innovations. He preferred to develop a 'sociology of associations', rather than seeing a singular event happening as an independent incident alone, as if in a social vacuum.

This research tries to see craft, especially focusing on bamboo craft, as an interwoven network, rather than being the still object to be examined individually in historical, technical, and visual aesthetic in detail. For this purpose, this research has not specifically followed any particular craftspeople or demonstrated in-depth biography of individuals, but rather tried to demolish these distinctions and place each of these entities on a level plane, moving from the hierarchical ontology proposed by Durkheim, to a 'flat ontology'<sup>4</sup> named by Da Landa (2002) where a macro actor is seen as no more important than a micro actor and a human is seen as having no more agency than an object. By this approach, this research intends to understand how a society, formerly shaped in the OEM culture of making, has tried to regenerate and establish a sense of 'authored' originality through making. Through this approach, it is also possible to see how individual people and a different culture of making are

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<sup>4</sup> Manuel De Landa introduced the concept of 'flat ontology' in his work *Intensive Science & Virtual Philosophy*. He endorsed Latour's ANT and suggested that '[...]while an ontology based on relations between general types and particular instances is hierarchical, each level representing a different ontological category (organism, species, genera), an approach in terms of interacting parts and emergent wholes leads to a flat ontology, one made exclusively of unique, singular individuals, differing in spatio-temporal scale but not in ontological status' (De Landa 2002: 47).

shaped through crafting different new designs. In order to ‘reassemble’ (Latour 2005) the different actors in crafting, the next section gives a brief and fundamental review of several key elements and qualities of craft to frame the issues for investigation in the following chapters.

## **2. Craft: the Thing and the Ability**

Craft has ‘always been a super messy word,’ and it was for centuries normally used in contexts not related to creative artistic practice; in the context of art, ‘its multifarious nomenclatic heritage has rendered it so ambivalent that many who are associated with it consider it a drawback’ (Greenhalgh 2002: 1). Greenhalgh (2002) has considered that craft can arguably be seen in many ways: as art (or not), as design (or not), as technophobia, as an anthropological signifier, as a protector of apparent traditions, as an old (or new) age of lifestyle, as patriarchy, as airport trinket, as ethnic iconography, as communist Utopia, as eco-protest, as redundant technology, as aromatherapy and, most empathetically, as the victim of an unloving world. Dormer (1997) asserted that it is not possible to find a general definition of *art*, *craft*, *technology* or *design*, nor to find a clear cut distinction of them. The word *craft* originated from *cræft* in the Old English that means ‘strength and skill’. According to the Oxford English Dictionary, it has Germanic origins and is related to the Dutch *kracht*, German *Kraft*, and Swedish *kraft*, all meaning ‘strength’. The contemporary explanation of *craft* as a verb means the exercise of skills in making something, and this word as a noun means a work or object made by hand, which is similar to the definition of handicraft as activity involving the making of domestic or other objects by hand. However, the word *craft* as a noun also means skills used in deceiving others. Anna-Marja Ihatsu (2002) claimed that the dictionary definitions are ambiguous and too broad, ranging from referring a notion of ‘skill’ mostly associated with manual dexterity or the practice of skill, to a ‘union of makers’ or ‘trade’ by this skilful ‘union of makers’ (Ihatsu 2002). Greenhalgh (1997) also noted how the slippery meaning of the word *craft* has changed in the past three centuries, based on whatever is convenient for the moment. In the eighteenth century, the word *craft* was used to ‘describe political acumen and shrewdness’ and it was not related to ‘a particular way of making things, but a way of doing things’ (Dormer 1997: 5). Only in some applications with the Freemasons did the word *craft* have the meaning of

power and secret knowledge (Greenhalgh 1997: 21-23). The category of ‘decorative art’ brought a more common currency of this word with the beginning of the Art and Craft Movement in the last quarter of the nineteenth century. By the 1920s, *craft* as a term had divorced from design, whereupon it became ‘isolated from both the pursuit of beauty (art) and purpose (design)’ (Dormer 1997: 6). The word *craft* has recently developed and expanded its meaning with its increased usage throughout the media, advertising, and the trend of the Makers in providing knowledge of making and information exchange through more accessible technology on the Internet. It might be as complicated as the word *culture* can be nowadays.

Craft studies have also reflected this shift of focus. There are recently more different trajectories within craft studies. Greenhalgh (1997, 2002), Racz (2009), Halper and Douglas (2009), and Adamson (2007; 2010; 2013) have demonstrated how craft can think through and beyond its visual aesthetic. Greenhalgh, as a British craft scholar and art and craft gallery director, gave a seminal review on the history of craft published in 1997, and depicted the changes and developments in craft communities in his inclusive anthology *The Persistence of Craft*, published in 2002. Racz (2009), using a wide range of case studies throughout England, the United States, and Europe, noted that craft is arguably more significant now than at any time since the industrial revolution. People are not only enjoying the result of crafting in food, clothes, furniture, and all sorts of contemporary craft objects that fulfil traditional roles in society and everyday life, but also remaining ‘true to its roots in its manifestations, and yet a vibrant part of the contemporary arts’ (Racz 2009:1). Racz illustrated the post-2000s booming interests in craft exhibitions and museum collection as well as the active cutting-edge designer-makers community, and also suggested several influential literatures, although many of these writings were linked to specific types of craft discipline, history, or makers (e.g. Herman and Kangas 1993; Johnson 1998; Harrod 1999; Greenhalgh 2002). Based on the research material in England and the United States, Racz discussed the current crafts making community and the social environment in both rural and urban setting. These observations opened up new perspectives and avenues of discussion in terms of seeing craft as a phenomenon interacting with the urban narratives (US) and feelings of the *urban flâneur* (England) rather than the practice of nostalgic tradition revival. However,

there was more objective external observation on the specific craftwork and its maker rather than on the discussion about how the maker's internal conceptualisation manifested itself when he or she is *about to* make the craftwork. This research will also hope to make some contribution to the craft studies, focusing on the internal conceptualisation for making from an anthropological point of view.

Another influential recent publication of the craft studies is *Choosing Craft: The Artist's Viewpoint* edited by Vicki Halper and Diane Douglas. This work explores the history and practice of American craft through the words of influential artists instead of taking the craft objects only as the subject, as many other studies have done. Halper and Douglas (2009) examine the post-World War II development of modern craft in North America, with an abundance of artists' published writings, letters, journal entries, exhibition statements, lecture notes, and oral histories. These texts, which revealed influential craft makers' lives, work, and ideas, have shaped the field at an age when crafts making is influenced by modernist painting and sculpture and greatly adapted industrial practices alongside the traditional practices. Halper and Douglas (2009) investigate a social history of craft through four categories that ground a professional life in craft: inspiration, training, economics, and philosophy. Instead of dividing craft objects into sub-categories according to the material, or by techniques as individual disciplines, crafts could be considered in loose terms and be re-examined contextually for their 'original utilitarian function, making, material, and form[, and yet] were inextricably bound together' (Racz 2009:2). That is to say, craft studies have extended their focus from the technique and aesthetic of the object to the social life of things, and historians, culture studies scholars and practitioners are paying more attention to weaving the individual craft maker's biography into a broader context, and generating different perspectives on the contemporary theory of craft. On the other side of the argument that makes craft the 'salon de refuse' (Dormer 1997), is the argument that traditional integration with society gave craft a special status for questioning society, the environment, and everyday life.

### ***More than Handicraft***

In order to further discuss the concept of craft making and the debates about it, it is important to look at the idea of 'handmade', which is usually an important

characterisation of crafts for many craft practitioners, such as the American Jeweller and critic Bruce Metcalf, who once said that all craft objects should be substantially made by hand (Racz 2009:3). Craft has had its tradition rooted in the haptic quality for centuries. One of the earliest English publications about craft was Joseph Moxon's instructional guide *Mechanick Exercise* published in 1677, which used the word *handy-craft* more often than the single word *craft*. Moxon wrote: 'Handy-craft signifies Cunning, or Sleight, or Craft of the hand, which cannot be taught by words, but is only gained by Practice and Exercise' (Adamson 2010). Moxon asserted that craft is 'something beyond words: something learned with the body rather than the mind' (Adamson 2010: 1). It is inevitable that the nonverbal knowledge transmission and the techniques in our bodies are the important issues to be understood about craft. Haptic senses, and memories evoked during the haptic exercise of craft making, are crucial for learning any craft skills. These assertions about learning and mastering craft skills were once again proven to me during my participant observation fieldwork when, as the apprentice in several workshops, I learned the bamboo weaving skills personally. There was no longer the dichotomy between body and mind, but an intertwined co-function relationship where one sometimes led another, and this is a technique of controlling which every craft maker needs to learn and master.

### ***Making with Hands***

The importance of the hand is inevitable in crafting. Tallis (2003) asserted that the anatomical character of human hands, such as the free movement of the thumbs and the interphalangeal joints structure and rotatable fingers, allows us to do more complicated and delicate hand movements, as compared to apes. Whilst there are subtle differences between human hand and ape hand, which permit for greater deftness, there is not so much difference to anatomically explain the gap between what humans can craft, and what apes can craft. The ability to make is much of the real difference (Tallis 2003: 33). The functions of hand can variously be 'manipulative, exploratory, and communicative' because it 'acts, knows, and speaks' (Tallis 2003: 22). He divided sensory information into 'the knowledge of hand and the knowing acquired by hand' and he took J. R. Napier's (1956) account of the knowing hand as 'the Chief organ of the fifth sense – touch' (Tallis 2003: 28-29). As Napier asserted, 'the hand has advantages over the eye because it is a motor and

sensory organ in one. It can observe the environment by means of touch and having observed it, it can immediately proceed to do something about it,' so it can 'see' in the dark (Napier 1971: 176-177). The haptic knowledge seems more direct and straightforward than vision or hearing because it is unmediated (Tallis 2003: 30). Our hand is more than a limb of the body which allows us to grab and to hold things, it is an organ of cognition, which recognises, assigns, sorts, classifies something other than itself. According to Tallis (2003), 'to touch is to awaken to awareness; it is to be awoken to awareness; it is to touch and be touched in the multiple sense actually of being affected: that which touches us in the physical sense actually or potentially touches us in those other senses' (Tallis 2003: 31).

Hands are crucial to craft not only for making but also for appreciating the object. Greenhalgh (2002) also started his definition of the genre of craft with its traditional roots, material, and touch. The *touch* on a piece of craft is crucial in both the process of making as well as the appreciation of the object. As many writers had noted, *touch* is frequently implied in communication (Racz 2009: 2-4). However, *touch* had historically been regarded as a museum and gallery taboo in which 'please do not touch' signs are commonly installed and a civilised visitor should only appreciate the object visually (Pye 2007: 13-17). The importance of *touch* has been recently emphasised in museology, along with other senses, to enhance the museum experience. The haptic experience, recent museology suggests, can be as important for audiences as for craft makers.

Today, the key to success in crafting has been found in the 'willingness to collaborate' as Greenhalgh (2002) suggested. He wrote, 'facilitated by high technology, co-operatives and companies are changing the way radical material culture is produced. [...] If the previous twenty years had been fraught with anxiety about the status of craft in relation to the Fine Arts, the last ten years have witnessed the beginning of a promising fusion of craft with the everything else' (Greenhalgh 2002: 3). On the one hand, bodily skills are embodied in computer controlled systems rather than our physical body; on the other hand, many firms are driven by concepts, not process, and operate across media. Examples might include design companies such as Droog Design (whose director Gijs Bakker was involved in the Yii design

project during my fieldwork), as well as other firms such as Jam (UK), Tomato (UK), and Nessing (Germany). Such people are called designer craftsmen, and produce prototypes for batch- production. Craft making is not limited to the ‘handicraft’ in the current practice, the inevitable haptic senses and body memories during the haptic exercise of crafting handicrafts may need to be reconsidered if we looked at how things were done by those 3D printers’ *arms*. Some may wonder if this would threaten the status of making with hands, since this anthropomorphic name for a part of a robot that is able to make things indicates how robotic devices have been able to do what many things that human hands can do, and reveals the concern and anxiety that the hand might someday be replaced, become invisible, or become absent in new ways of crafting. However, it also truthfully pointed out the importance of how one can deliver one’s thought in making.

### ***Making with Skills vs. Making with Thoughts***

From the lexicon definition of craft, skill is always a crucial ingredient. The leading craft studies scholars Christopher Frayling and Helen Snowdon (1982) categorised three different definitions of ‘skill’, as outlined by Kikuchi (2004):

*The first definition given by the makers working in the tradition of the Arts and Crafts movement is that skill is the essence of craft socially and aesthetically, and so challenges automated industry which brings about the degradation of work by deskilling and compartmentalisation of the wholeness of human beings. The second definition by designer craftspeople is that skill is an essential component of the design process. The third definition by artist craftspeople is that skill is nothing to do with ‘pure creative potential’ and is a secondary element.*

This is to say, skill can be the standard and tradition (type 1), the inspiration and add-ons (type 2), and the method (type 3) of making the ‘thing’. Kikuchi (2004) argued that the ‘first and second definitions of “skill” involve quality coming from inseparable mind and body (or hand), whereas the third definition solely involves the body (hand) quality’ (Kikuchi 2004: 236). She firmly pointed out that the aura for craft brought by the Art and Craft Movement is a ‘thought-preventor’ creating anachronism and myth while neglecting ‘the consensus of makers’ because the skills

involved in craft as well as crafting are not easily observable, describable and articulated. Skill involves an understanding of materials and an ability to work with them to make something. This ability to work with materials is grounded in *technical knowledge* -- knowledge of the properties of the materials, of techniques, and of the nature of the tools. (Rowley 1997: xiv-xv). This knowledge of making was sometimes documented in written text, manuscripts containing notes, sketches, etc. or generally believed that rituals and religious nature, or mnemonic rhymes and rhythm, were used in addition to the tangible documentation and must be perhaps passed on from parent to child or master to apprentice (Eyferth 2010). These tangible and intangible records and documentation of techniques of making in itself 'cannot encode an entire technique in such a way that it may be decoded by people who have no previous knowledge of it' (Eyferth 2010: 199). These instructions of making and design 'were not self-contained instructions; they needed to be explicated, emended, and enacted by a skilled person who had already absorbed their meaning' (Eyferth 2010: 203). Sometimes, the knowledge of making is passed from one to another by processing these documents or the template of designs. The standardisation and the systems of measurement was extremely important for the knowledge transmission and documentation but it required certain pre-existed fundamental knowledge to be able to adjust accordingly, and successfully reconstruct the desired result of making.

Crafting, as a way of *thinging*, is more than the skills and techniques involved in making. It's a series of chained haptic operations and cognitive decisions that 'one set of ideas leads 'naturally' to another set and this natural growth happens not in the place at one time but is going on all the time and everywhere that the technology is used' (Dormer 1997: 8). It is too often and casually noted that these subtle technological choices and creative designs are the product of experience and are described by arbitrary sentimental phrases or as folk-wisdom. It is difficult to accept the idea of 'theory' or 'reasoning' in craft or give credit to an intellectual assessment in the critical thinking towards it.

Craft began to suffer an irreversible decline as a result of the industrial revolution in the late eighteenth century due to crafts not being able to maintain their economic value. In response, reformers and preservationists, especially those

associated with the Art and Craft Movement, emerged to rescue it. Instead of maintaining the economic value of craft, 'they did however raise awareness of its aesthetic importance and thus paved the way towards its rebirth as a distinct art form' (Adamson 2010:2). There is also a myth of happy artisans which was fabricated during the craft revival in the 1970s in England which Frayling and Snowdon describes as the 'nostalgia masquerading as history.' People have the assumption that 'when you are in danger of losing something, it becomes specially precious to you' (Frayling 2011: 9). The assumption that ever-improving technology can and will replace craft has now been proved a fallacy, as people became devoted to the craftsmanship more than ever when the rapid evolution in technology tired consumers' appetite. Technology is still important, even something people want to be involved in, but it has to be craftily assembled and integrated instead of being a roughly put together functional device. Ways of making things have rapidly developed and accelerated from the old ways. Neal French (1997) described the time when a set of designs may have taken two years to bring to the market, to the point when it only took twelve weeks using CAD/CAM (computer-aided design and computer-aided manufacturing) in the late 90s (Dormer 1997: 10). As the speed and accuracy of making by human hands may not be able to compete with the machine, the variation and fineness of crafting is more crucial in crafting than ever. In addition, evolving technological methods enriched the skills of making, regardless of whether it is making by hand or by machine. This focus on speed and making has not reduced the import of the concept, rather the concept, the thoughts behind the object in making and inside the object, are more valuable than ever.

Considering all of these recent phenomena, there is certainly a slippage in craft studies. Whilst traditionally focussing upon the categorisation of craft by style, or sourcing the original template and pattern designs, craft studies should now pay more heed to the concept of making. This is to say, the attention and critical thinking given to craft designs as a collection of objects needs also to be applied to the conceptualisation of design by individual craft people.

## *Design in Crafting*

Artists and art critics today distinguish the move of art away from craft as a shift from the sensual to the intellectual (Heslop 1997). Craft had been regarded as ‘the salon de refuse’ with a lower status than art and design, as Dormer (1997) pointed out in the phenomenon of studio crafts in the post-Second-World-War era. However, the boundary has been blurring post-2000. In the anniversary issue of *Craft* in 2003, David Revere McFadden, the chief curator of the former American Craft Museum, explained the need for them to rename the museum The Museum of Art and Design. He asserted that craft was now linked to craftsmanship, but ‘art, craft, and design exist in a circular arrangement with each field supporting, nourishing, informing, and challenging the others’ (quoted by Racz 2009: 2).

Design in traditional craft studies may normally focus on the techniques, object styles, decorative patterns, and source of templates of making for reproductions, as well as chasing the lineage of how the ideas and knowledge of making of a particular craft practice was transmitted. Design was very often seen as the optional add-on in decorative arts. An ‘authentic’ piece of traditional art would be recognised by its ‘legitimated’ design and production context, such as the techniques, the materials, the patterns and motifs, the makers, or even the areas of production, etc. However, when the mobility of people, material, and information are more prevalent than ever before, making a specific design of the crafts is less attached to a certain group of specific people in a specific place. Helen Rees made a distinction between design and craft; she argued that ‘[t]he difference is that innovation in design is often, but not always, market-led, whereas innovation in the craft is likely to be maker-led’ (Dormer 1997:117). She believed that craft objects were made according to more personal choices, self-expression, or an experiment with the material and techniques. However, in the craft making community in the Original Equipment Manufacture (OEM) production model which will be further explained in the third section of this introduction, the crafts labours did not have the privilege to elaborate their personal expression nor the freedom of choice in making. On the other hand, the active community of *designer-makers* revealed how these designer-makers had passionately

expressed their personal statement and experimented with the possibilities of techniques and materials.

Moreover, new technology such as the Internet, rapid prototyping, and CAD/CAM (computer-aided design and computer-aided manufacturing) all challenged the artisan's place in culture and changed the traditional master-apprentice knowledge transmission relationship and hierarchy. However, there are some institutions and individuals who have 'been able to maintain a viable position for craft, partly by building new bridges to the world of contemporary art and design' (Adamson 2010: 2). Therefore, this thesis does not try to define whether one object is design or not, nor distinguish if it is craft or design based on its market value or sentimental value as a thing. It is this intriguing intertwined relationships in crafting a new design where design in crafting is no longer a sub-topic to look at, but a stage for craft to shine.

### **The Techniques of Planning and Realisation**

In one sense, understood as when making is intentional and planned, design is everywhere and has a great impact on human beings (Ingold 2013). In another sense, considered as a set of techniques and professions with their own history, it is a technique we use to define and control our surroundings as well as create new possibilities in our physical world to facilitate our needs (Clark and Brody 2009). Design as a professional field has grown from the making professions at the time of the industrial revolution in the late eighteenth century. Its development accompanied a process of deskilling and workplace alienation in making (Adamson 2010:2). Design is one of the few professions in the industrialised world which had grown both in terms of technology development, economic presence, and cultural significances in the past century. Design, as a discipline which incorporates architecture and spatial design, industrial design, graphic design, fashion design, and now even communication and web design, is assumed and expected to represent 'identifiable cultural, socioeconomic, and aesthetic aspirations and predictable patterns of lifestyle' (Ghose 1989: 31). As a term, *design* has so many levels of meaning that it is generally understood differently from one individual to the next. It is both a noun and a verb; it is a plan, a drawing, a process, an arrangement, and also a result of human intellectual activities. In the world of mass-production, design is the key that unlocks

the door to modern production processes. It is a practice of aesthetics and an individualised expression of creativity and identity at the same time as being a collective invention of cultural convention. Designers devote their intelligence, time and effort to improving efficiency and assemble indulgence through their works. Different designs carry different ideologies; they could represent pragmatic solutions, hedonistic or epicurean consuming or user experience. The innovations of design are usually closely connected with new technological developments, social and economic needs, and all kinds of problems that we face in our everyday lives.

Unlike other professions, such as law, architecture or accounting, which have their norms and systems of conduct both established and recognised by the state and their professional institutions; design does not have a solid normative system such as educational and professional bodies. There are no minimal standards of attainment of training that require individuals to certify themselves as designers and that limit them from commercial practice (Julier 2008). John Heskett takes a utopian perspective, arguing that design is, ‘in all its detail, shaped and constructed for the betterment and delight of all’ (Heskett 2005: 1). He further suggests that design is the ‘human capacity to shape and make our environment in ways without precedent in nature, to serve our needs and give meaning to our life’ (Heskett 2005: 5). However, design can stand beyond the human capacity that Heskett suggested, design is not restricted with the technology, it can only be realised with appropriate and adequate technology development and act as a driven force to technology, but design can exist prior to the necessary technology available. It can stand as an idea without the actual object being made. Design is a technique and a sequence of decision-making and experimentation on how to plan and realise the thoughts in one’s mind into practical operational sequences. It’s an active way of materialising a concept into a thing, whether it may be an object, a system, a method of doing things, or merely the decorative pattern on the craftworks. This quality and capacity in design set up a debate and conflicts between designers and craftspeople; the fundamental struggle for them, to borrow the phrase from David Pye, is ‘the workmanship of certainty and the workmanship of risk’ (Adamson 2010: 341). These struggling moments in crafting a new design, which haven’t been seen and are yet accustomed to be made, became the most important focus of the ethnographic fieldwork this research would like to observe and discuss.

### **Besides Giving a New and Better Look**

When we mention the word ‘design’, it generally brings to mind (though not necessarily instantaneously) notions of good and bad design (Latour 2008). For Terence Conran, the giant of British design, good design is ‘98 per cent common sense and 2 per cent of a mysterious component which we might as well call art or aesthetics’ (Bayley and Conran 2007). The designer’s job is ‘not to repeat the history, but to make it’ (Conran 2007: 10-11). As a businessman and a designer himself, Conran strongly believes that good design should be promoted and introduced to the masses in order to ‘improve people’s life’ through their living aesthetic. There are uncountable books and texts occupying the art and design sections in bookshops that praise ‘good design’ across the world. Bad design, however, receives little attention in books but is often discussed on the internet via forums and various cynical ‘worst-of’ competitions. Donald A. Norman has written one of the few books that casts a critical eye on designs, explaining how many designers ignore the psychology of design and the warnings from past failures in the field. He argues that some attractive but ‘incomprehensible’ designs cause frustration in people’s lives (Norman 1998: 2-8). This is exemplified by the prize-winning clock that is unreadable and the prize-winning can opener that mystifies its user, but that nonetheless, feature in top-tens for many design historians and critics. It is apparent that the line separating good design from bad is not clearly defined.

Bruno Latour has queried this dualistic distinction between good and bad design, suggesting that design historians should coalesce the materiality and morality of design in their research. He questioned the old French interpretation of design as ‘giving a new and better “look” or shape to something,’ instead considering design as ‘a way to redress the efficient but somewhat boring capacities of engineers and commercial staff by adding to the stuff a veneer form, some superficial feature that could make a difference in taste and fashion’ (Latour 2008). He specifies the connotation of design beyond its visual appearance and that it should be analysed by its *meaning* which is symbolic, commercial, or otherwise. This new focus on the connotations of design (as opposed to its aesthetics) has greatly expanded discourse on the subject.

Much of the early literature on design either celebrated individual inventions or the designers themselves. Classical approaches, such as Nikolaus Pevsner's designer-centred interpretation, *Pioneers of the Modern Movement: From William Morris to Walter Gropius* (1936), are a good example of this type of design discourse. Pevsner provided a selective, linear approach to design history, especially on architecture which was considered as the 'leading edge' in the development of design (Julier 2008:47). Other texts, such as Sigfried Gideon's *Mechanization Takes Command: A Contribution to Anonymous History* (1948) or Reyner Banham's *Theory and Design in the First Machine Age* (1960), give similar views of design history. These have been widely criticised in modern times, with authorities arguing that 'the account of design has been progressively separated from the reality of its practice' (Julier 2008: 48).

Walker questions why design historians limit the objects they study to 'the canon of design' instead of everyday design (Walker and Walker 1989). Their discourses do not explain that the highly praised Morris and Bauhaus designer objects often do not fit the public's taste. Moreover, this 'canon of design' usually credits only the individual's achievement and ignores the social, political and technological context. In a similar vein to these critiques about design history, Judith Attfield's (2000) acclaimed book *Wild Things* queries the classical approach and provides new perspectives on design studies; she foregrounds the role of consumers in the biography of objects (e.g. her research on the coffee table) and discusses the social context of things and not just their appearance.

Discussions on design are more interdisciplinary now than ever. Academics from backgrounds outside of design and fine art history, such as economics, the social sciences, geography, culture studies, anthropology, psychology, engineering and so on, all contribute rich theoretical frameworks for the investigation of design. The interrelationships of society, culture, politics and technological innovation should all be accounted for design studies. Economists and some sociologists regard designs as 'cultural goods' which are active in the creative industry in a wider global economic context (e.g. Lash and Urry 1994; Molotch 2003). Scholars from cultural studies (e.g. Slater 1997), anthropology (e.g. Miller 1987), and geography (e.g. Pile and Thrift

1995) discuss how people's consumption behaviours are impacted by design. Many other texts provide design history with new interdisciplinary ingredients. Campbell (1999) discusses the psychological and medical influences behind the design of the *chaise lounge*. Forty (1995) attacks design history for having suffered 'a form of cultural lobotomy which has left design connected only to the eye, and severed its connections to the brain and to the pocket' (1995: 6), so he tries to unveil the force behind how these things were created for the market. Though nearly every object we use in our everyday life has been designed, there is always the 'hidden frustration behind everyday things' (Norman 1998: 5-7). Norman illustrates how a good design should include human engineering and points out the designer's common but usually ignored psychological fallacy when they design. As Norman (1998) urges the designers and design historians to study people's needs and interests, so too the designers should be studied and understood as members of a society rather than as isolated individuals.

It is difficult to discuss design without mentioning creativity because design is a creative activity of humans. As Rolly May (1976) asserted, 'Creativity is a necessary sequel to being' that gives one the courage to assert oneself and produces a commitment to make being and becoming possible (May 1976:2-5). People require the courage to be and the courage to create in order to attain worth and dignity by the multitude of decisions they make day to day. The long-standing research interests of anthropology in processes of social and cultural change, human creativity, and innovation provide the groundwork for the comparative study of societies and cultures (Barnett 1953; Liep 2001; Hallam and Ingold 2007; Gunn, Otto et al. 2013). Design has the potential to take an important place in anthropological efforts to understand people and their culture. However, it was not until recent decades that Design Anthropology became a specific area of research. Anthropologists have been incorporating design projects into their research for several decades, but not until recently did a new field of inquiry emerge which aims to integrate the strengths of design thinking and anthropological research. One recent publication, *Design Anthropology: Theory and the Practice*, sketches out the contours of this new field, from the early use of ethnography in the design industry, starting in the late 1970s, to present. Design anthropology came to age as a 'separate (sub)discipline with its own

concepts, methods, research practices, and practitioners' and 'its own distinct style and practice of knowledge production' (Gunn, Otto et al. 2013: 2). The innovation and change which modern society put their emphasis upon are often considered as intrinsic values (Suchman 2011). Design has arguably become one of the major areas of cultural production and change in contemporary society, on par with science, technology and art. Therefore design has been considered recently as 'a model for anthropology's future' (Suchman 2011).

Besides raising awareness and the new literature about design anthropology, the earlier concepts raised by former seminal anthropologists are still vivid and applicable. P. Louridas (1999) has extended the French anthropologist Claude Levi-Strauss's analysis of bricolage in *The Savage Mind (La Pensée Sauvage)* to illustrate how design can be considered as bricolage, the creation of structure out of events, by comparing the concept, process and logic among art, science and design (Louridas 1999). Louridas asserts that the contingency of design is unavoidable, and that it serves to distinguish design from manufacturing (Louridas 1999: 18). Both the unselfconscious designers (i.e., those craftspeople who follow tradition in their work) and the self-conscious ones (those professional and institutionally-educated designers) are bricoleur because both are limited by their inventory and social contexts. Additionally, design is something more than the solution of a problem (Louridas 1999: 19). When an object is designed, the whole life experience surrounding the designer/bricoleur is his or her collection; the bricoleur will find inspiration and answers among his or her collection, much as the engineer or scientist seeks answers from the universe (Louridas 1999: 4). Therefore, design is not merely a pleasant visual achievement or an innovative functional solution; it must be understood as something with a social life as well as its own techniques. The concept of the maker, both the designers and the craftspeople as bricoleur, will be further investigated in later chapters.

### 3. The Different Dynamics of Design in Taiwan

Design is often a strategic element of national cultural and economic policies. Making a representable 'good' Taiwanese design as the *canon*, if we borrowed the term from Patricia Waugh (1995), is like 'an ideological formation bound up with the relations of power within those institutions which are seen to regulate cultural value and notions of taste: the academy, the publishing industry, arts councils, schools, ministries for the arts' (Cooper 1992: 59; Rowley 1997: xvii). During the period of Japanese rule, people in Taiwan learned and made things from Japanese designs and traditions, as a matter of policy. The colonial government hired Japanese supervisors to teach the Taiwanese how to make goods, grow crops, and farm products for military supplies, satisfying the Japanese domestic market in all aspects of production. After the KMT took the governorship of Taiwan, Chinese high arts such as calligraphy, Chinese traditional painting (*guó huà* which means "the painting of the nation"), and Chinese opera were promoted (and as a rule deeply appreciated) in cultural policies, and within the education syllabus, while Taiwanese local crafts and local dramas were considered as 'rural' taste and not modern enough to be presented officially, especially at international events. The KMT government has invited experts from the U.S., Japan, and Europe since the 1960s to supervise and develop design as a new professional field in Taiwan, and kept modernising the production capability and efficacies in local industry in order to increase profits from MIT (made in Taiwan) export goods (Yang and Hasumi 2009).

When the Democratic Development Party (DDP) won the presidential election over the Chinese Nationalist Party (Kuomintang, KMT) in 2000, they introduced the localisation/indigenisation policy, *Bentuhua*. Grassroots cultural values and customs were promoted and praised in government festivals and events. Taiwanese started to recognise how the aesthetics and craftsmanship of aboriginal Taiwanese, Chinese and Japanese cultures had emerged in their everyday material culture. This background of importing and adapting foreign designs throughout history provided a rich and multi-layered context for this research to discover and observe how design was conceptualised, processed, and realised.

Heskett (2005) has defined three contextual influences that are relevant to design practice: the professional organisation of design, or the way the designers view themselves; the business context in which the majority of design practice is located; and the level of government policy, which varies between different countries, but which in many cases can exert a significant influence on the design industry (Heskett 2005: 112). In the wider national context, design policy impacts upon the ideology of 'good design' and promotes the politically correct consumption choices vis-à-vis goods in the market. In the U.K., for example, the Design Council, which is the government-funded body which has replaced the Council of Industrial Design (CoID), was established for promoting design for economic, political, and cultural purposes. The Utility Furniture Advisory Committee was set up in 1942 under the structure of CoID and introduced a number of approved designs and published the *Utility Furniture Catalogue* which actually shaped the post-war design culture and framed the choices of design for consumption (Attfield 2000). The role of design policy varied from ensuring that the limited resources were sensibly used during a difficult time of shortage, to incorporating 'design culture' into urban life so that people can see a more active, more beautiful, and more energetic atmosphere in cities. At the national level, design culture can both increase economic profits and export a nation's cultural and aesthetic values. Governments of countries which were once famous for their local Original Equipment Manufacturer (OEM) industries, such as Thailand and Taiwan, place particular emphasis on integrating traditional craft skills into contemporary designs. Such artistic trends are actually the result of those countries' cultural and economic policies.

In Asia, many designers are aware that they must distinguish their designs from those of western designers. Asian designers are encouraged to design new products which are inspired by traditional, craft-based skills, materials and customs in order to reflect national identity, but which are, at the same time, thoroughly modern. These hybrid versions of local, modern designs are then promoted in international markets for global consumption. This promotion of original design could be seen as an attempt to alter the perception (in the West) of Asian manufacturers as 'brand pirates', but it is also an attempt to generate national pride.

My research explores this phenomenon. I was particularly interested in understanding how the local industry in Taiwan transformed from a mind set of “OEM— produce for others” to one that was eager for its own designs and how *creating things* became synonymous with *creating selves*.

Design is no longer a ‘value-added’ extra applied to a restricted range of domestic objects; rather it extends, for example, to the planning and shaping of digital interfaces in computer games and websites, to large-scale leisure and retail spaces and even the creation of a country’s public image (Julier 2008). (Julier 2008). I examined this hypothesis in my fieldwork, observing how design as creating things could provide the agency for the Taiwanese to imagine and create their Taiwanese-ness.

Cultural display is not new and it is necessary to the formation of citizenry. It is a display of political and cultural order forming part of the ‘*civilizing* discourse of colonialism’ (Dicks 2003). Putting culture on display in museums and exhibitions also fosters nationalist movements and the authority to display the cultural patrimony of fledgling nations to their public who, for the first time, are encouraged to recognise themselves as unified communities (Anderson 2006).

Taiwan, a small island at the edge of the Pacific Ocean, fits into these two discourses of cultural display in the past century. Taiwan was first exhibited in the Japan-British Exhibition in London in 1910 as the model Japanese colony, and then displayed to local Taiwanese, Japanese and international visitors in the celebrative Taiwan Expo in Taipei in 1935. The Japanese selected the exhibition’s content. The Taiwanese people had no part or right in choosing how their culture was presented. When the Nationalist KMT government came to power, they taught the Taiwanese people ‘how to be a Chinese’ (as a result of the War, the KMT was fiercely opposed to Japanese culture, so sought to install a new, Chinese version of Taiwanese-ness). Until recently, there has been a trend in Taiwan of rediscovering and exhibiting Taiwanese-ness in literature, art and design, and folk material culture, which, as such, has evolved into a cultural localisation movement since 1990.

### *The Conceptualisation of Design in Early Taiwan*

Taiwan was strategically developed as manufacturers for the overseas markets since the Japanese ruled era. The Japanese government had conducted anthropological researche (i.e. Kano Tadao, Kanaseki Takeo, and Kokubu Naoichi) as well as planned and implemented the variety of statistical investigations including the environmental resources investigations which was to explore the quantity and quality of people and substance in order to understand the utilisation of the whole of Japanese empire (Lin 2012). These investigations left out indelible achievement and records in Taiwan and the bamboo resources and the bamboo industry was part of the ‘planned’ economy by the Taiwan Governor-General Office from 1929 to 1942. During this period of time, the indigenous Taiwanese bamboo crafts were documented and the Japanese style and designs were introduced and taught in Taiwan in order to fit the export requirement to the Japanese mainland. Two of the major informants, Master Huang and Master Lee were trained in this period of time and their learning experience will be further discussed in the following chapters. At this period of time, design is an imported ‘modern’ idea as well as a foreign guideline for making. The concept of industrial design does not promoted at this period of time.

The foundation of industrial design in Taiwan may be introduced from the 1960s and firstly promoted by the China Productivity and Trade Center (CPTC) (Yang and Hasumi 2009; Yang 2010). At the beginning, the CPTC hired an American designer Girardy as the first consultant, he then recommend the Japanese consultant, Shinji Koike to be invited in 1962. After Koike investigated the condition of developing industrial design in Taiwan and initiate ‘Proposal for industrial Design Promotion in Taiwan’ according to the result of his investigation. The general director of CPTC also later published a modified version of Koike’s original proposal as ‘A Proposal on the promotion of Industrial Design Development and Training’ and executed several design promotion activities such as short term summer schools held by Japanese, American, and German experts, provided consultancy for industries, set up scholarships for sending students abroad for studying in design related areas, and established local design courses in the colleges for preparing the design manpower for the OEM export oriented industry in Taiwan during the 1960s.

The American Aid also played an important role in this promotion of design in this period of time, American design expert, Russel Wright, was invited to supervise several design projects in Taiwan and one of his supervision project is for taking the advantages of cheap and available labour of local craftspeople and boosted with designs that is suitable for exporting to the Euro-American markets (Lin 2004). Yen Shui-long, one of the significant figure in design history of Taiwan, was the local coordinator for this project (Yang 2010). However, the concept of design is still mainly to serve the OEM market rather than serving the local market. Most design training people received such as drafting, computer graphic skills, automatic production control program design are all for serving the production line in the OEM culture. As a result, personal identity, innovation, and originality are second to the 'skills' suitable for the industrial production line. Original design at this stage is own by the foreign clients who is the remote authority legally had the licensed and patented power toward those who were subcontracted to do the actual production work.

### ***OEM: a Making Culture of the Invisible Makers***

Design is assumed and expected to represent identifiable cultural, socioeconomic and aesthetic aspirations and predictable patterns of lifestyle (Dziersk 2014). However, these general assumptions are questionable when they are applied to the Original Equipment Manufacture (OEM) culture, a common phenomenon in today's industrial world. The OEM production model is the unavoidable result of capitalism, in which heads of industry pursue lower priced mass-produced products to generate more profits for their investment. However, this production model further alienates the manufacturers from the things they make; it is the foreign orders that the manufacturers receive, as opposed to their lifestyle or culture, that dictate their production patterns. In other words, the real maker's identity is absent within the thing. Therefore, OEM is a sign of what I would like to argue is the actual maker withdrawing their right to produce their own design and express their own creativity and identity.

Most of the time, these OEM manufacturers are silent during the production process, and the only thing they can talk about is how to offer lower, more competitive prices to their foreign buyers to secure their continued business. For

many OEM factory owners, creating their original design is a time- and finance-consuming activity; they would rather replicate foreign designs than develop their own. As a result, they have no choice but to fall into price competition between each other, which consequently reduce the manufacturers' profits and shortens the lifecycle for the OEM industry. The industrial migration in Asia is an example of this OEM flow. In the case of Taiwan, many labour-intensive manufacturing industries moved to China and then from China to Vietnam in order to keep their prices competitive in the global market. It is only recently that many Asian countries, which are famous for their OEM industries, have started to promote local design instead of merely focusing on production. They have sought to find their 'blue ocean strategy'<sup>5</sup> to improve their national economic climate instead of going to the dead end of price-cut competition; Thailand, Korea, Malaysia, India, China and Taiwan have all set up national design centres to promote the local design industry and to introduce international design projects to local markets in order to educate local designers and consumers.

It is not that easy to 'create' a design culture under the OEM tradition; it takes time and a sizeable budget to research and develop good design; there is, after all, no formula or 'regulation'. However, Ghose (1989) questioned these general assumptions by examining the developments of design and design education in India. He criticised the 'imported design curriculum' for harming the tradition, originality, and quality of Indian design. Ghose reveals the damage of adopting exogenous western design education in India by comparing the quality of objects selected to display in the Industrial Arts Exhibition in London in 1851 and in the 1871 exhibition. The Indian objects displayed in 1851 are original and accurately represent the skill of local artisans, but those displayed in 1871 revealed that the craft tradition had slowly withered away due to the exogenous factors. He suggested that local designers should document and understand their ethnicity and regional culture, and that this is the essential first step to restoring local confidence and constructing the foundation for

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<sup>5</sup> The blue ocean strategy is introduced by W. Chan Kim and Renée Mauborgne in their book: *Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant*. They use the metaphor of the 'red ocean' which is a well explored and competitive crowded market, and the "blue oceans" stands for the "untapped market space" and the "opportunity for highly profitable growth" with a strategy of 'winning not by competing'.

incubating new designs in India. The later success of local design industries established in other Asian countries, such as Japan, Taiwan and South Korea has actually paralleled Ghose's comments to the Indian design industry.

Japan was the first Asian country able to jump from the swamp of cheap copies of foreign design and foster their local design industry at a time, shortly after WWII, when most industries in Japan were heavily wounded. Like the U.S., Japan saw design as a business tool whilst being heavily influenced by a European artistic or craft-based concept, and they successfully broke away from the imitations market under the 'design policy' supervised by the Imperial Ministry of Commerce and Industry which would be reformed after 1949 as the Ministry of International Trade and Industry (MITI, 通産省)<sup>6</sup>. In 1929, Charlotte Perriand was invited as the consultant in industrial design. Her duty at the department of Trade and Promotion of the Imperial Ministry of Commerce and Industry was to supervise the thinking of industrial designers toward the production of furniture and household items to be exported to the West. The German architect Bruno Taut had occupied this post between 1933 and 1935 (Chevroulet and Zenno 2007). By introducing the latest foreign technology and protecting the domestic market, MITI tried to reconstruct Japan from the profits generated from export. MITI invited prominent designers from abroad to serve as advisors and sent out talented young students to the U.S. and Europe to learn design. The MITI also held national 'Good Design' competitions and issued the 'G-Mark' to the best Japanese design. Japan's successful experience of developing a local design industry became a model for other Asian countries to follow.

In Taiwan, the Ministry of Economic Affairs (MEA) has also consistently promoted design and development of technology in order to enhance the intrinsic value of its products in the export market. Much of MEA's work is concerned with raising the profile of Taiwanese products, for many years stigmatised as cheap

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<sup>6</sup> The Ministry of International Trade and Industry (MITI, 通産省) was formerly the Ministry of Commerce and Industry (商工省) before May 25, 1949. The Ministry of Commerce and Industry was a cabinet-level ministry on the government of the Empire of Japan from 1925-1947.

imitations of foreign goods. The design policy in Taiwan aims to keep the Taiwanese economy in stable growth from exports since the domestic market is too small to support the whole economy. The Taiwanese are more confident in their products now; not only have they established the Taiwan Design Centre in the capital, Taipei City, they have also established Design Promotion Centres in cities such as Düsseldorf, Milan, San Francisco, Tokyo and Osaka, an ambitious announcement of their arrival on the design world stage.

The South Korean government also set out a similar pattern of policies in the 1960s to emulate the Japanese model of industrialisation. Designers are hired as companies' assets to raise the reputation and quality of their products. Meanwhile, design education and promotion of design are also fostered through governmental funds. Like Japan and Taiwan, most industrial products made in South Korea were traditionally replicas of foreign design. Since the 1980s, however, South Korea has gradually established a reputation for original local design.

Other Asian countries such as Singapore, Malaysia, Thailand and recently even China are now all promoting their local design culture as a strategy to boost their export market. They have tried to move away from their role in the global production line as OEM producers and to branch out into the design industry or to provide services like Original Design Manufacturer (ODM). Eventually, many of them would like to be involved in Original Brand Manufacturing (OBM), establishing their own brands and producing from their own designs. I am keen to see this transition in the Asian production pattern and design industry, and am especially interested in the cultural transmission and invention of self that is embodied in these local, original designs. This trend, which can be seen throughout Asia, merits further exploration, particularly in the case of Taiwan, where design policy is framed not only by economic aims but also by ideas about cultural and national identity. As will be shown in the following section, the unique and difficult political circumstances of Taiwan make the issue of presenting one's originality and identity in design especially relevant.

In this setting of production, many factories in Asian countries play the role of anonymous OEM service providers in the global economic market. The OEM pattern

contributes benefits to the MNCs for paying less money for the goods. Children who labour in shoe factories are paid extremely low wages in South-east Asia, producing expensive trainers which they will never be able to afford in their lives. Moreover, the manufacturers do not have any voice or opinion about the design of the goods they make, they are silent during the production process and the only thing they can talk about is how to offer lower, competitive prices to their foreign buyers to secure continued custom. It is only recently that many Asian countries which are famous for their OEM industry have started to promote their local design industry instead of merely focusing on production. Thailand, Korea, Malaysia, India, China and Taiwan have all set up national design centres promoting the local design industry and introducing international design projects to local markets in order to educate local designers and consumers. The formal objectives of these Asian design centres all mention business and benefits to national economics except for those in Japan.<sup>7</sup> For Japanese design guru Kenya Hara, also the creative director of MUJI, the phenomenon behind the ‘fever of design in Asia’, this is a trend which might be able to free these OEM-based industries from their competitive and uncertain markets (Hara 2007). Japanese economic scholar Fujimoto Takahiro of Tokyo University echoes Hara’s observations, announcing that this is now a century of *creating things* (造物) not manufacturing things (Fujimoto 2007).

A most interesting finding from a comparison of the objectives of these design centres is that Taiwan Design Centre (TDC) shows its ambition by elevating “Taiwan’s standing in the world of design” and “Creation: Display Taiwan to the World” (quotes from TDC). These messages from TDC reflect the anxiety for international recognition and the search for identity by the Taiwanese government as well as for many Taiwanese people. Because the design culture is located within the network of society and is ‘part of the flows of global culture, a value and a desire to improve things’ (White and Wright 2002), it is embodied in the social, cultural, technological and even global-economic changes. This whole setting of the OEM

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<sup>7</sup> Relatively speaking, Japan as a country with more advance and developed design industry set up the Japan Design Foundation (JDF) and all other local and commercial design organisations are all own by private sectors. The JDF is now encapsulating its commercial motivation with the slogan “Design for everyday being,” a far cry from their post-World War II national economic aims.

industrial tradition and the developments in the design industry since the 1990s give us a great opportunity to observe a contemporary reinvention of national identity and transformation of a post-colonial society through the study of design and production of material culture in contemporary Taiwan.

### ***Crafting Taiwan through Material Culture***

Taiwan was known as a country that produced abundant objects. Many people might not have a clear idea about its geographical location, or its culture. However, they might be familiar with the tag of ‘Made in Taiwan (MIT)’ on many cheap everyday goods they bought in the 1980s. The Taiwanese’s ability to ‘make things’ set up the economic growth of this ‘boss island’, where many medium- and small-scale companies compete with each other for overseas orders (Shieh 1992). Even so, global attitudes to MIT goods are comparable to modern views of ‘Made in China’ items; MIT was once a synonym for low quality cheap products. Under these shadows of the perception of poor quality cheap MIT products, the Taiwanese government began promoting “design” for local industry in the 1980s, when the local industry faced great competition and challenges. From the 80s to the 90s there was a labour shortage in Taiwan due to the export promotion policy, which caused an unavoidable increase in costs for labour-intensive industries. Moreover, the dramatic increase in the exchange rate between New Taiwan Dollars (NTD) and U.S. dollars (USD) resulting from the high trade surplus also caused a sharp increase in the cost of production. All these conditions weakened Taiwan’s competitiveness in its labour-intensive export industries, such as shoe manufacturing (Simon 2005), furniture and craft making and clothes manufacture. Taiwanese manufacturers had to adapt to these problems in order to secure their business, and as a result many of these companies sought new locations with cheaper labour, such as the new, purposely-developed industrial sites in China and Southeast Asia. Those labour-intensive consumer goods which were once the most important export product saw their share of the export market diminish from 35.6% in 1986 to just 18.1% in 1993 (Schive 1995:16, quote by Simon 2005: 27). At the same time, there was also a shift away from labour-intensive production towards more capital-intensive, high value-added production. In this

economic context in the 80s, the Taiwan External Trade Development Council (TAITRA)<sup>8</sup> was one of the most important governmental institutions. It is responsible for promoting Taiwanese export, and also serves as the platform for international buyers and companies to find potential products and cooperative Taiwanese manufacturers.

In the past two decades, as Chang and Yu (2001) discussed how Taiwan had stepped into high-tech industry, they had pointed out that Taiwan had become the third largest production centre in the world for integrated circuits (IC) and personal computers (PCs), next to the United States and Japan. Taiwan has not only succeeded in high-tech production, it also has leading status for high-tech innovations. The Taiwanese government's goal in the last decade has been to spur greater product innovation capabilities especially on Research and Develop (R&D). Judging by the number of international patents that have been issued, which can be seen as one of the most reliable proxies for industrial innovation, Taiwan has come on leaps and bounds, from issuing just one patent in 1973 to issuing 3,693 in 1999.<sup>9</sup> Taiwanese companies received a total of 5,991 patents from the US Patent Trade Office in 2005, the fourth highest in the world (Central Daily News, Taipei Times November 20, 2006). The old MIT image is being replaced by pride in things which are 'Made by Taiwan (MBT)' (Chang and Yu 2001). This changing attitude toward MIT products is not only limited to high technology, but also is apparent in many other realms of Taiwanese material culture such as packaging design for local food and handmade crafts. It is unusual in OEM culture that people would try to exhibit their identity from the things they make, because the fundamental concept of OEM is a name brand out sourced the actual process of making to another anonymous manufacturer which cannot and should not be identified by the customers.

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<sup>8</sup> TAITRA founded the Product Design Division, which introduced the concept of product design and research and development (R&D) to a local industry in the hope of transforming the labour-intensive industries of Taiwan. The Division was later expanded and renamed as the 'Design Promotion Center' in 1990. In 2004, 'Taiwan Design Center' was established under the 'Challenge 2008: National Development Plan' proposed by the Executive Yuan, and it is now a legal person institution that fosters creative industry and design in Taiwan.

<sup>9</sup> Indeed, by 1997 Taiwan had reached a rate of international patents per capita that is higher than most of the G7 countries except Japan and the United States (Hall et al. 2001; Trajtenberg 2001).

Besides the economic and manufacturing aspects, the Taiwanese government has put a lot of effort into reforming Taiwanese-ness too. The Taiwanese government later promoted design with a cultural approach, with the Council of Cultural Affairs (CCA) establishing the Cultural Creative Industry Developing Plan (CCIDP)<sup>10</sup> to encourage local craft producers to upgrade their traditional craft skills to meet contemporary tastes. In this master plan, indigo dyeing, bamboo art and lacquer art are considered the core areas for development. Several workshops have been held annually, along with other seminars and conferences, to transfer knowledge and skills to the next generation of artists and designers. The National Taiwan Craft Research Institute, which is supervised under CCA, is the main institution responsible for organising these craft-skills workshops and education programmes. Also, these governmental institutions help and encourage craft artists and designers to transform their work into products with higher market value as well as the artists' personal aesthetics.

Since 2000, the Taiwanese government has started to consciously mould and reinforce people's awareness of their national identity by organising many design competitions to 'rediscover' and reinvent the 'authentic Taiwanese taste (台灣味 Taiwan wei)'. Meanwhile, there have also been many national and international exhibitions focusing on Taiwanese art, literature, folk culture and of course design.<sup>11</sup> In 2011, Taipei City, the Taiwanese capital, had beaten Melbourne for the right to host the international congress of IDA2011. As well as being a notable achievement for Taiwan's local design industry, hosting the first IDA congress will showcase Taiwan's national ambitions for design. Recently, Taipei was announced as the World Design Capital of 2016.

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<sup>10</sup> The Cultural Creative Industry Developing Plan is a nine-year plan with two stages, running from 2003 to 2011. The first stage, which ran from 2003 to 2007, focused on understanding the cultural roots of Taiwan and promoting aesthetics in everyday life; the second stage, running from 2008 to 2011, places emphasis on creating a platform for artists, craftsmen, designers and entrepreneurs to work together.

<sup>11</sup> The Taiwan Design Centre (TDC) took the responsibility for supervising and supporting the local industry to develop their original brands. TDC also organises the annual Taiwan International Cultural and Creative Industries Exhibition, while the National Taiwan Craft Research Institute organises the annual "Focusing on Natives of Taiwan" Design Project Contest and the National Craft Master Awards.

Expressing the *Taiwanese identity* was a popular requirement for many governmental design competitions in Taiwan since post 2000 the political change after the presidential election. There was a real drive in this industrial society to demonstrate personal innovation as well as cultural identity through the things it makes. At the state level, the government not only encourages local designers to join international design communities by attending international design competitions but also sponsors them to display their work in foreign design exhibitions. For these Taiwanese award-winning design objects and designers emphasis is usually placed upon their origin and component of authentic Taiwanese-ness. Meanwhile, under the governmental design policy, designers are encouraged to rediscover their 'Taiwanese-ness' through vernacular Taiwanese culture and to collaborate with traditional craft-makers in order to reinvent as well as invent 'taste of Taiwan (台灣味 *Taiwan wei*)'. The Taiwanese design culture seeks characteristics of both innovation and tradition; the newness and oldness of Taiwanese design are not contradictory to each other, but interrelated. Besides supporting Taiwanese designers to attend various design exhibitions internationally, the government has hatched a plan for a 'Taiwan Design Museum' in Taipei. The opening of Taiwan Design Museum will be one of the core events at the 2011 International Design Congress in Taipei. All these investments in marketing MIT products as high-quality authentic goods show that design policy is actually a tool for re-creating distinctive cultural identity and heritage. This is not a new technique for inventing tradition in the modern world. Scholars like Eric Hobsbawm and Terenc Ranger (1983) demonstrated in *The Invention of Tradition* how some so-called British 'traditions' have been found to be modern inventions. This is also true in Japan. Stephen Vlastos (1998) indicated the notions of the 'village' and 'folk' were 'manipulated politically to support colonial and imperial ideology' against the other Asian countries in the Pacific Theatre prior to and during World War II (Vlastos 1998; cite in Kikuchi 2007). As Kikuchi (2007) asserts, 'native' is indeed a discursive product of tradition, though it is difficult for even the Taiwanese people themselves to identify what is 'native' due to the term's rapid political shifts over the past one hundred years. The term 'native' has been manipulated in order to influence people's understanding of what their native culture really is, including their ideas regarding their traditional and native language. The 'Taiwanese consciousness'

(Taiwan ishi), which is a presentation of the awakening Taiwanese-ness and has been evident since the 1980s, ‘stems from “Japanese legacies” that had been constructed on the cumulative cultural experiences of the old Chinese culture and the Japanese culture’ (Kikuchi 2007: 13). Coupled with the KMT-led Resinicize Chinese Culture Movement in the 1970s and the influential ‘nativist’ (xiang-tu) movement, the definition of Taiwanese-ness has become a continuously reconstructed mixture or a page of palimpsestic. Therefore, Taiwanese identity has been an exciting, widely discussed topic in Taiwanese social studies for the last decade and has generated several notable studies (Kikuchi 2007: 12-13). For a multi-colonial society like Taiwan, the purpose of *creating* so-called ‘authentic Taiwanese design’ as a national design may be to reinvent its (new) heritage.

The complexity of these Taiwanese identity issues encountered another twist after 2008, when the nationalist KMT party presidential candidate Ma Ying-jeou stepped up as the leader of Taiwan. After 8 years out of the government office, the KMT had ‘moved away from its use of Chinese nationalist symbols such as Chiang Kai-shek and Sun Yat-sen and instead tried to steal the DPP’s (Democratic Progressive Party) ownership of the Love Taiwan Appeal’ (Fell 2012: 138-139). Moreover, the KMT candidates and members often avoided using the full title ‘Chinese KMT’ and ‘dropped’ the word ‘Chinese’, only referring to KMT in their propaganda. As Fell (2012) observed, this act is the best presentation of Lee Teng-hui’s promotion of the inclusive ‘New Taiwanese’ concept, which he defined as:

*‘No matter if you came 400 or 500 years ago, or 40 or 50 years ago from the mainland, or if you are aboriginal, we are all Taiwanese, so long as we work hard for Taiwan and the Republic of China (ROC), then we are New Taiwanese.’*

*(United Daily News, 3 December 1998, 5)*

The recent design policy gradually diverted from pursuing the ‘authentic Taiwanese design’ to a more futuristic and individual tendency, similar to Lee’s ‘New Taiwanese’ concept. Instead of promoting the vernacular craft culture as the grassroots authentic local culture, or reverting to the pre-1985 Sinicisation policies, there were ‘mixed identity messages and then polarizations from 2002-08’ as Fell

(2012) concluded from his observation and analysis of the election survey and campaign strategies, as well as his observations of the ideology behind new policies following the 2000 election when pro-democratic and 'local' DPP stepped down (Fell 2012: 139). The research in this thesis initiated in the beginning of 2008, with the pilot study, when the DPP still ran the government, with major fieldwork commencing in November 2008, and running until October 2011, thus spanning the changing period of time while the mixed identity messages were penetrating the Taiwanese society in various aspects, including the innovations of craft and design.

The creation of new designs, as a result of changing government policy, opened up an opportunity for anthropologists to observe the process of making something new and previously unseen. Making a new design must involve many technological choices which deals with the adoption or rejection by a society of certain technological innovations. Pierre Lemonnier (1993) had demonstrated that these choices in making were the result of cultural values and social relations, rather than inherent benefits in the technology itself. As a point of departure for this study, I tried to find an industry that was well established in Taiwan prior to the OEM tradition, and which still exists today; these criteria were neatly matched by the bamboo crafts industry. Taiwanese bamboo crafts have been a consistent export since the Japanese ruled period and are sold in both local stores and in souvenir shops as examples of traditional Taiwanese material culture. Bamboo crafts are a means to explore the way in which people rediscover and reinforce their cultural identity through design in an era of mass-produced material culture. My purpose is to describe this material, to place it in its regional, historical, cultural, and economic context and question the efficacy of design within technical performance of making and the conceptualising process.

#### 4. Bamboo: A Material Woven with/in Contradictory Values



Figure 0-4 Map of the distribution of original bamboo species

Bamboo, is a traditional material that had recently gained increasing global popularity worldwide, is more than being merely a green material but it also has added cultural material specificity for Taiwanese designers and craft makers. Bamboo is a common grass plant that its originated species are widely distributed in most of the continents except Europe. Even so, Europeans have had a long history of appreciating its visual aesthetics and associated it with the Oriental according to the mimicry bamboo designs and motifs on the European antique furniture. The famous British designer Tom Dixon spoke at Haute GREEN, a 2007 exhibition of the best in sustainable design for the contemporary home, showcasing furniture, lighting, and accessories that are both aesthetically pleasing and eco-friendly. He said,

*‘I don’t think is a brand new material will be the answer, and I think it is finding in the existing, new ways of using the material. One of the 21<sup>st</sup> century materials, which got potentially engineering term, is bamboo. In some uses giving it stronger than steel. It can grow more than one meter overnight. It is really a miracle material ...’*

While in one forum bamboo is seen as a miracle material that can act as the sustainable alternative material in the design world, on the other corner of the world, a

female Chinese bamboo weaver looks at this material pessimistically. William N. Brown (2007) recorded his conversation with a bamboo weaver Ms. He in 2007 in Xiamen. Ms. He complained:

*“I’m probably the last generation to do this. It’s hard work, it’s hard on the fingers, and we don’t make much money at it.”*

*“But your bamboo products are so beautiful,”* I said.

*“Doesn’t matter,”* she said. ***“Nowadays everyone wants modern plastic and shiny metal, even though bamboo is natural, more durable, and costs about the same.”***

Brown (2007), echoes Ms. He’s complaints. According to his observation in China, he agreed that: “while bamboo articles are still common in the countryside, the only city people who use bamboo furniture and utensils are those who can’t yet afford the modern but soulless alternatives. No wonder it’s getting harder to find craftsmen who take pride in producing bamboo articles so practical they have changed but little over the past 2,000 years.” This beloved material throughout history in the Chinese culture appears in abundant painting, calligraphy, poetry, and decorations. Yet many contemporary bamboo items are now considered as out of date for the urban consumers in China. Bamboo furniture has failed to satisfy the Chinese urban consumer’s taste and it is not a material that one would be proud to possess. The objects made by this material are relatively cheap when compared to wood or even rattan. It has been a paradoxical material that has been highly valued as a plant or a concept but has been looked down on due to its easily disposable and cheap nature. However, recently different people across different cultures have begun to appreciate bamboo as a green material. Even, so I observed a contradictory response to this material in Taiwan which shares many Chinese Han culture with China.

Bamboo is historically a significant material for Taiwan, the historical context laid out in Chapter One illustrates how the trade and exchanges between Taiwan’s original Chinese settlers and its indigenous population, and between these settlers and Chinese traders, had blended and transformed the different styles and designs of bamboo crafts in Taiwan. In addition to the infusion of material culture through trade and exchange, the Japanese bamboo craft training school of the 1930s and post-World

War II export-oriented handicraft productions imported new techniques and knowledge about bamboo crafting into Taiwan. Kikuchi (2007) propounded that ‘Bamboo represented the “simple,” “plain,” “healthy,” “thrifty” lifestyle that was appropriate for a nation at war, and it is became a focus of national interest as the national icon of Taiwan’ in her book *Refracted Colonial Modernity* (Kikuchi 2007: 233). She concluded with this statement based on the solid evidences across Japanese ruled period to current period of time such as the political and historical literatures as well as the material craft examples she demonstrated in her research. Even nowadays, this humble plant still takes an important place representing Taiwanese culture. For instance, the blue-green glass tower Taipei 101<sup>12</sup> is no doubt the iconic image of contemporary Taiwan. When the architect of the Taipei 101 C.Y. Lee explained his design concept to the investors and the public, he claimed the design concept is actually came from the bamboo which grows vertically into the sky section by section, so it was the metaphor of non-stop economic growth and the city’s development (Brown 2007). Also, bamboo had played an important role in the design of the Taiwan Pavilion at the 2010 Shanghai World Exposition as well as in the 2011 Taipei International Flora Exposition (more detail in Chapter 1.4). Therefore, bamboo is not an accident choice of the material to present Taiwaneseness, this plant as well as material is deeply rooted in the Taiwanese material culture. As such, bamboo, a significant material for Taiwanese culture historically and presently, it is a material with the animistic notion of it which worth to be explored its materiality materially, culturally, and socially to discover and release a kind of live force in it when a skilled craftsperson manipulate and release the potential of it. Howard Risatti (1998) once said that a fundamental characteristic of craft is its traditional link to human beings. As Eric Hobsbawn (1983) had pointed out how tradition can be invented, the objects made today are ‘a continuation of an invented tradition’ (Racz 2009:35). Bamboo is the material transforming itself through its nature and the efficacious act of human’s hand. Its use allows us to ‘read’ craft from a material perspective against the palimpsestic historic backdrop in order to understand the issues of the technology of

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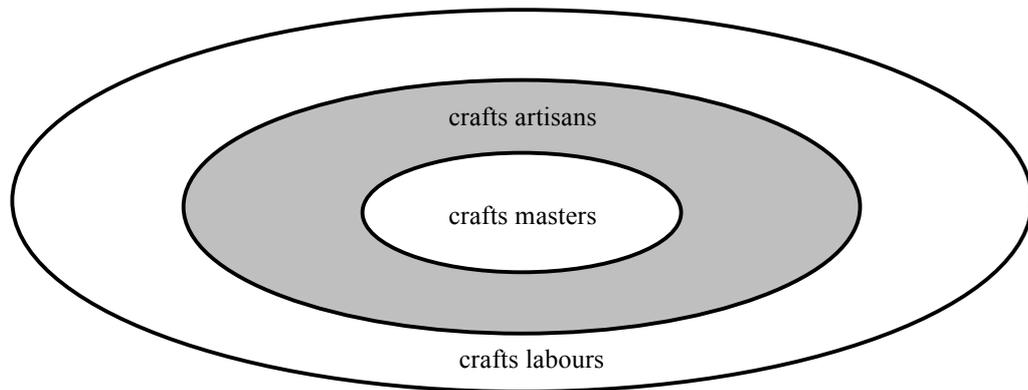
<sup>12</sup> Taipei 101 is the landmark of Taiwan which reined for six years as the world’s tallest building; its image appears on advertisements, magazine covers, brochures, guidebooks, and billboards. This skyscraper is visible from everywhere in Taipei City.

making as well as the making of one's identity through the conception of new craft designs.

Bamboo craft studies and exhibition catalogues are either focused on learning the technique (e.g. Sato 1974; Sato 1993; Lin 2006; Lin 2009; Chiu 2010; Sasaki 2013) or the aesthetics of the craft's beautiful styles and designs (Kudo and Saganuma 1980; Oster 1996; Lee 2000; Chiang 2007; Moroyama, Oguchi et al. 2007; Rinne 2007; Earle 2008). Research about Taiwanese bamboo was usually focused on its botanical nature and the economic applications of the material (e.g. Lin 1996; Guan 2003; Chung and Chang 2007; Lu 2010). Recently, there have been more publications about Taiwanese bamboo crafts focusing on historical (e.g. Huang 1998; Lee 2000) and cultural aspects (Lin 1999; Wang 2004). These studies were mainly about the historical development, the inherited craft designs and techniques, and particular influential craft figures, such as Master Huang Tu-shan, Master Chang Xian-ping, and Master Lee Jung-lea, among others. The former of these publications paved a foreground for conducting research about bamboo crafts in Taiwan, but also left a gap for this research to understand how makers (including designers and craftspeople) initiate a new design and how crafting had the impact on the makers beyond shaping the tangible object of craft.

## 5. Word Definition

In treating this present piece of research' there are several important terms that must first be explained and clarified: the three types of *craftspeople*, the distinction between *Chinese* and *China*, and the co-existed Romanisation throughout this thesis.



**Figure 0-5 The three different types of craftspeople**

There are three different groups of craftspeople to be discussed: the *crafts masters*, the *crafts artisans*, and the *crafts labours*. These three types are not a straight hierarchy, but are stated in terms of the numbers of people in each type. The figure below illustrates that the crafts labours are the majority of craftspeople, followed by craft artisans, and the final few are the crafts masters; who although are the smallest group, are perhaps the most significant to achieve both national or international recognition.

The *crafts masters* usually had very consistent ways of making, including operational sequences and with handling materials. *Crafts Masters* often insisted upon a certain 'so called' tradition, but each usually also development a significant personal character in the things they made. The *craft artisan*, the second type of craftspeople played a major participant informant role during this research process. They are well-trained and highly skilful professionals, capable of offering technical suggestions for the designers they collaborate with, and are also highly skilled in problem solving while crafting the designs. The third type is the *crafts labours*; they are the largest group among the whole populous of craftspeople that I examined. They are more like labours with particular skill sets of making, and they usually

repetitively made duplicative objects for sale. They may work for some workshops, craft factory, or at home as a contracted production labour. Each type has their own contributions to the society, and in throughout my research I understood them as three types of people performing the act of making, rather than as set in hierarchical relationships.



Figure 0-6 A unification propaganda poster printed by PRC of the 'Rich Natural Resource in Taiwan' and noted 'Taiwan is part of China throughout the history'.

As Michael Rowlands has pointed out, “China is a concept of civilisation, not a nation.” The term ‘Chinese culture’ for instance in the following chapter will refer to *Huwa wen-huwà*, which means the broader concept of Chinese, including overseas Chinese and Taiwanese, not exclusively the culture of the People’s Republic of China (PRC). Also, and as noted in a recent Guardian<sup>13</sup> article about the 318 Sunflower Protest in 2014, it is important to clarify ‘China still considers Taiwan as part of its territory awaiting reunification – by force if necessary.’ This constant threat from China and the tension between these two political bodies, if not two nations under the ‘one China policy’ is a constant presence for the Taiwanese in their day-to-day life. Hence, this thesis, instead of making explicit commentaries on the legal or political issues between China and Taiwan, makes an effort throughout to try to investigate the residual national and cultural identity issues implicit in recent creations of new designs and crafts. In the following section I will now focus my discussion on the craftspeople of Taiwan to illustrate this point.

Besides the definitions explained above, it is also worth noting that there are some inconsistencies of the Romanised naming system regarding the names of informants, the geographic locations, and institutions. As for informants, their names are referenced by how they have signed their works, or how they were referred to in their exhibition catalogues, or how their names appear in their passports. These names may appear in various spelling systems, including *hanyu pinyin*, *tongyong pinyin*, and an older, lingering third system known as *Wade-Giles*. The preference of the Romanised systems reflected the political domination in the local authority as well as the individual's preference.

The Economist (Economist 2014) recently published an article on the problems of Romanisation in Taiwan and the political ramifications. Fears of future reunification or the Chinese cultural invasion, which would both push the island’s ‘rowdy democracy into Beijing’s political embrace’, causes some Taiwanese cities to reject *hanyu pinyin*, the official system for Romanising Chinese words in both China

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<sup>13</sup> <http://www.theguardian.com/world/2014/mar/21/taiwan-youth-protests-china-trade-deal>

and Taiwan, in favour of other spelling systems. One of the preferred systems for some Taiwanese is *tongyong pinyin*, which was introduced in 2002 and is unique to Taiwan. *Tongyong pinyin* is closely associated with the former president of Taiwan, Chen Shui-bian, a passionate advocate of independence. The ramifications of Romanisation in Taiwan are far-reaching. Not only does Romanisation confuse visitors, expatriate newcomers, and also troubled scholars in their research writing and referencing, but, as the author of the aforementioned article concluded, 'even in language, Taiwan remains divided.' This research keeps all of the original choices of Romanisation as part of the raw fieldwork data, representing this diverse and controversial topic. However, the names of institutions are referred to in *hanyu pinyin* where no official Romanisation translation exists, so it can be more easily connected and cross-referenced to the wider non-Chinese existing literature.

## 6. The Ethnographic Fieldwork Setting and Fieldwork Outcome

This research focused specifically on the technology of creating through bamboo designs in Taiwan. This includes discussing relative knowledge practices, particularly the materiality of bamboo and the ontological technology of making. ‘Making’ is understood here as the process of creating, instead of merely to produce or mechanically manufacturing things. The opportunity to conduct research about the process of defining and crafting creativity with cultural memory as well as innovations has been provided by the explosive growth of the design industry in Taiwan in recent years, which has also allowed for a means of surviving international price competition among other OEM providers.

In order to have a closer view about how things were made, Nantou was chosen as my main research site. I spent most of my time at the NTCRDI in Caotun, in a town called Jhushan, where the bamboo industry once clustered, but has recently been revived after a decline in the 1980s. I also conducted studies in several locations in various cities and towns in order to explore and develop my research questions throughout. The fieldwork for this research emerged from the following fieldwork visits: a 3-week pilot fieldwork study in December 2007 around Taiwan, a major 23-month fieldwork period (Oct. 17 2008~Aug. 12<sup>th</sup> 2010), a 10-day fieldwork trip to Paris in 2011, four interviews with my informants during the London design festival from 2010-2013, and finally a 2-week fieldwork visit to China. In total, there are 140GB images and 300 GB video footages, and approximately 322 hours voice recording (10 GB) had been collected.

This research unfolded following Actor Network Theory, to locate and connect each actant, in order to trace the path and network of bamboo making instead of the focusing on a single village or particular local bamboo craft community (as shown in Figure 0-7 and Figure 0-8). Therefore, it was a multi-sited fieldwork and the fieldwork expanded through the 20 month period, including observations and personal apprenticeships in different workshops.

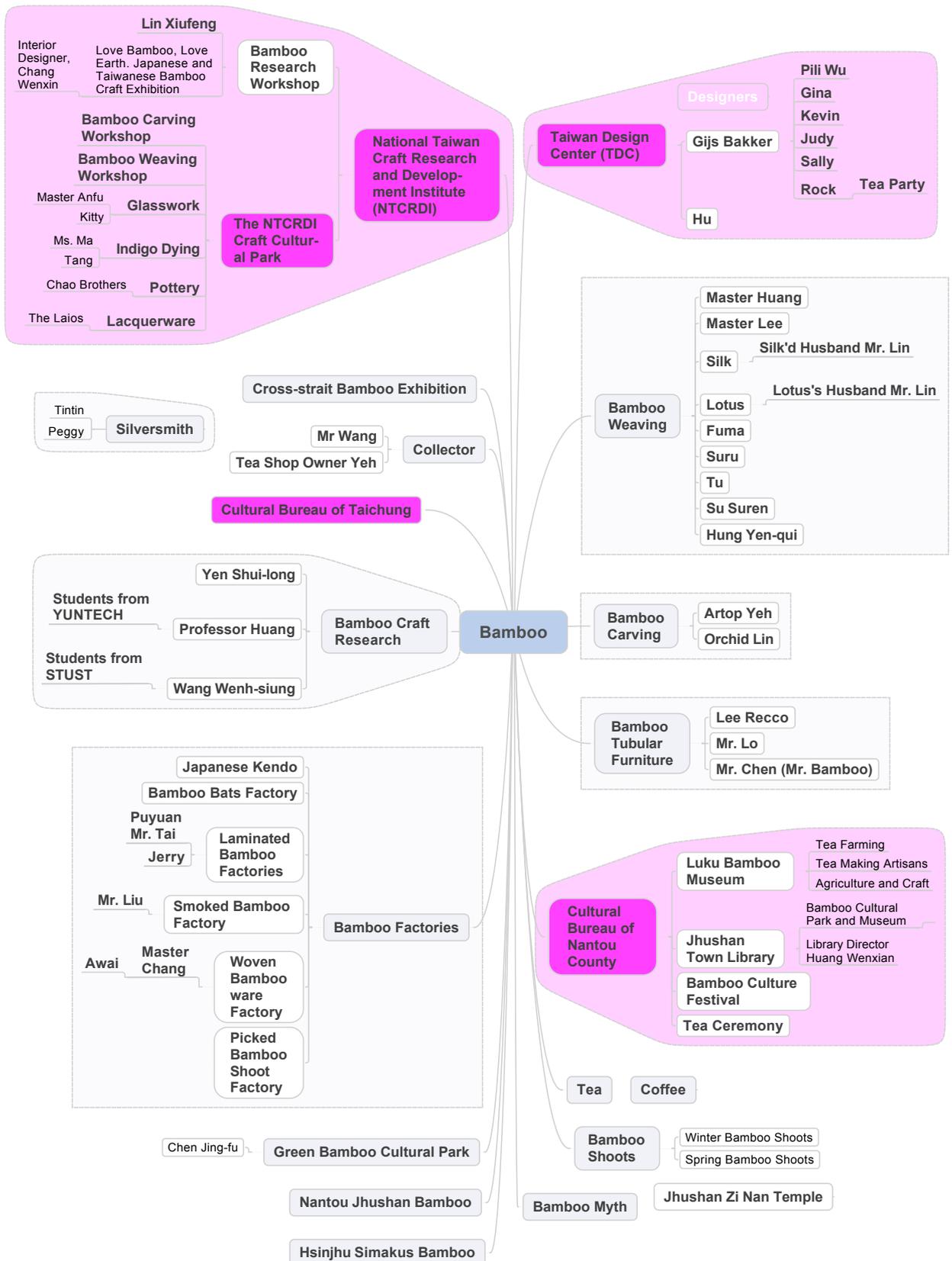
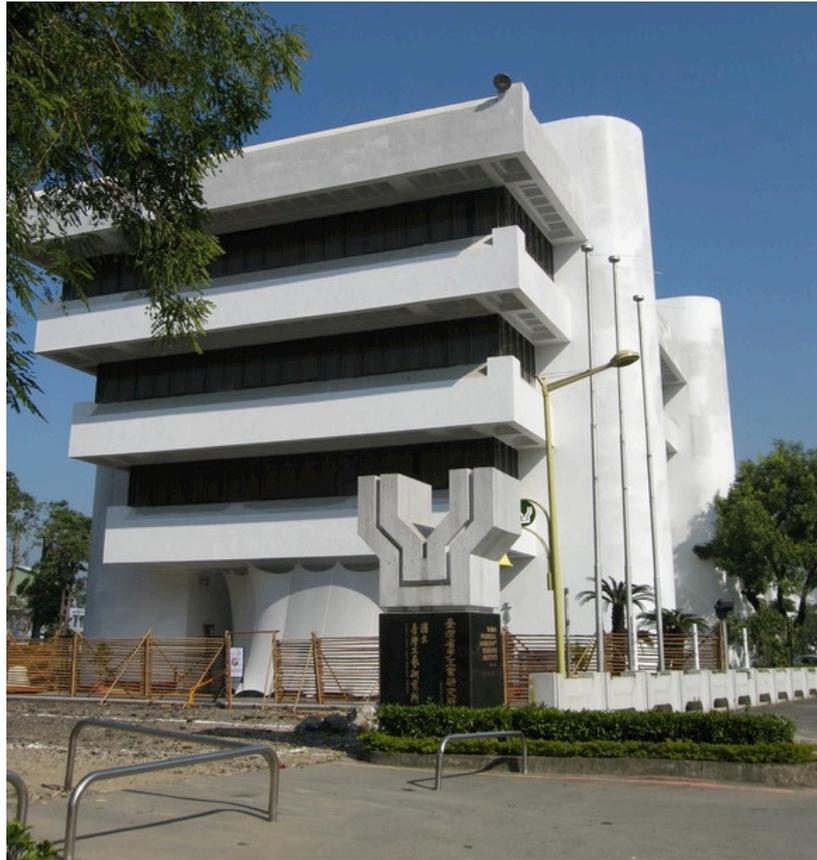


Figure 0-7 People, Events, Institute, Subjects, Objects, and Techniques in the Fieldwork





**Figure 0-8 the exterior of NTCRDI in Nantou County**

In order to integrate into the design and craft society in Taiwan I decided to start my fieldwork at the National Taiwan Craft Research and Development Institute (NTCRDI) in 2008. With regards to the question of how to meet individual designers and craft makers, I was fortunate to have been selected and sponsored to attend the ‘2008 Training Program of Cultural and Creative Industries Workshop’ in Taipei in late October. This was an eleven-day workshop where I would have the opportunity to make myself known to some of the most important and famous Taiwanese design firms and designers. I met some key informants such as Mr. Hu (who was the director of former craft and design project before the launch of Yii project in 2007) and built up more contacts at the Taiwan Design Center (TDC). After the workshops, I attended the 2008 Taiwan International Cultural and Creative Industries Exhibition in Taipei in order to collect the most current data about design in Taiwan and meet many Taiwanese designers. After December 2008, I settled at NTCRDI in Nantou and started visiting local bamboo makers while attending many craft-related

seminars at the NTCRDI in order to meet more craftspeople. The libraries of the NTCRDI provided me with rich resources of historical archival data about the bamboo industry and the technical exchanges between the bamboo industry and other countries.

Since design Anthropology had moved from passive observation and interpretation to active collaboration, intervention and co-creation, and the techniques of making played such an important part in this research, I decided not only to participate in the Yii project, but also conduct my own collaborative design work with designers and craftspeople in addition to my apprenticeship with several bamboo weaving tutors. I first joined the Yii project as an observer but soon felt awkward about my role as an extra person in the room. During the brain storming craft and design workshop for the following year's Yii collection, I discovered that many craftspeople were not able to actively participate in the discussion because they didn't understand much English and could not express themselves properly with the Dutch design director Bakker, or understand his words. I volunteered to serve as their interpreter and this was acted as the turning point for my relationships with the craftspeople. I was not just a student from a UK university who spoke Mandarin with a city accent or poor Taiwanese, I am someone who listened to them and tried to speak for them. I was invited to visit their studios and attend their family outing so I had more opportunities to understand their ways of living, their work and thinking.

In addition to the data collection, my fieldwork included assisting two bamboo exhibitions, contributing two bamboo related publications, and one craft and design project with my major informant Silk which was funded by the NTCRDI (approximately equivalent to £10,000 in 2010). I then moved to Jhushan to stay with Silk, and I felt I was kind of adopted by her household because she introduced me to others as her daughter and her son called me sister. Overall, the outcome of our project was successful, although we did have some difficulties during the mid-term presentation because the funding body was expecting something more elaborative and splendid, rather than something fitting into everyday life. However, we managed to successfully carry out the outcome and received compliments and good feedback at the final presentation and at the following exhibitions. Silk also benefited from our

project outcome and some of the accessories we made became the popular top sale item in her studio shop.

Meanwhile, I also attended three different bamboo-weaving courses to empirically experience myself the ways in which people learn, and learn making. The first weaving course was provided by the NTCRDI from March 2009 to May 2009, taught by Master Li. It was a ten-week training course, and we came to the workshop to receive two full days' training every weekend. The weaving course at the National Yunlin University of Science and Technology (NYUST) was from September 2009 to June 2010. It was a selective practical module of the Cultural Heritage Preservation Department at the university. The NYUST hires Master Huang as an associate professor, an equivalent level to professional instructor, to teach university students how to weave. Master Huang is also Silk and Master Li's teacher. The third course was the Jhushan Town Weaving Class taught by Silk from February 2010 to June 2010. Attendants gathered together every Saturday night at the basement of the Jhushan Town hall Library to practice. I learned the techniques of weaving from these classes and also had a better understanding of the nature, culture, and the philosophy of living through bamboo in these routine encounters with different peoples in the field.

### *Interim Summery*

In William Morris' zealous lecture *Useful Work vs. Useless Toil* given in the Hampstead Liberal Club (London) in 1884, he made his position unequivocal as to the problems of making in mass production following the industrial revolution. The welfare, happiness, and subjectivity of the makers, who he referred as the real workers, those who actually produced, had to be considered and improved. The Arts and Crafts Movement was certainly not just benevolence through aestheticism, a movement devoted to a backward-looking idealism. As Adamson (2010) has articulated, the Arts and Crafts Movement included more invention than preservation, and it was a cultural force which could sometimes be corrosive and distorting. The problems Morris raised in the nineteenth century mirror the current problems in OEM society, such as my field site in Taiwan. Workers, and even factory owners, were still struggling in the twentieth century due to imbalanced power relationships and the ambiguous authorship in making.

From those empirical learning experience and participation in many different design workshops and meetings I realised the technical knowledge developed through the history of making can be a bond into creative design to be built upon, but can also act as a barrier for creativity. Being able to do original design requires various techniques, especially the skills to conceptualise ideas. The technical abilities i.e. to draw and to read a drawing are evidently influential in the process of making. Bamboo is a flexible and common material actively produced the knowledge of crafting, and this is not a passive expression of what Taiwanese bamboo is but what did bamboo act on people and create the social categories as well. Making is not only a physical act and the exercise of internationalities, but also the practice of efficacious techniques that allow the process of making an object to transform the people who make it. The next chapter will begin with the knowledge of botanical facts of bamboo in Taiwan and discuss the materiality of bamboo in cultural, social, and material perspectives.



**Figure 0-9 I try to catch up my progress of the weaving class at home because I spent much class time observing and talking to the instructor and students.**



**Figure 0-10 I acted as interpreter and participated in the Yii project meeting with designers and craftspeople. (Photo courtesy by Kevin Chou)**

## **Chapter 1 Beyond Being Green**

Bamboo belongs to a species of green hollow grass that grows rapidly, and holds a very special status in Taiwan with deep influences in the Taiwanese culture. It possesses a significant status in the Taiwanese material culture for its wide applications on everyday objects in the areas of agriculture, fisheries, culinary, household furniture and utensils, rituals and ceremonials, decorative, and artwork. In addition, the cultivation of this plant and the botanical characters of the bamboo also influence the social-economic structure and the governance of Nantou County. This chapter will begin by discussing the botanic character of bamboo and the special quality of the Taiwanese bamboos. It is then followed by an illustration of the material associations and the cultural resonance of bamboo in the Taiwanese culture. Finally, the chapter will conclude by the changes of value of bamboo; its value increases due to the creativity and originality in its abundant applications, the material transformations, and the visual mimicry of bamboo.

### **1.1 The Botanical Character of Bamboo**

Bamboo is a natural material that has been used in the world widely from ancient China, India, to Africa and Austronesia. Native bamboo species can be found all over the world except for the European continent. Bamboo is often used as the substitute material for wood due to its straight, strong, and durable characteristic. Since both bamboo and wood share these qualities, the ancient Indian referred to bamboo as the “wood for the poor” (Farrelly 1984: 3). However, bamboo is botanically a type of grass rather than timber wood and it has several major botanical differences compared with forest timber plants.

#### ***The life cycle of bamboo***

Bamboo belongs to the Bambusoideae subfamily of the Gramineae family in Monocotyledoneae. As a material, bamboo is relatively cheap thanks to its rapid growing speed and strong fertility. Some botanist have clocked bamboo can ‘surging

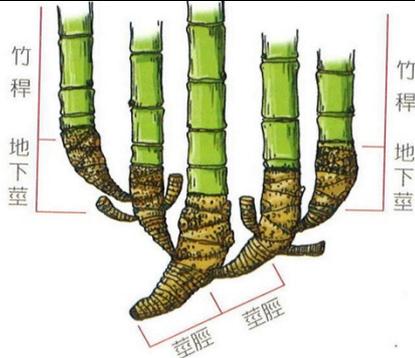
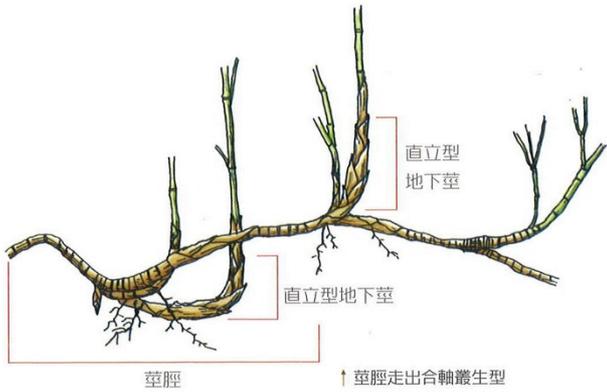
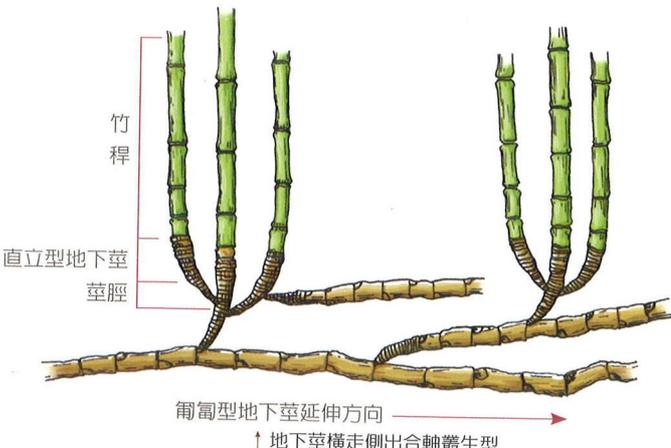
skyward as fast as 47.6 inches in 24 hours' ("Preface," Farrelly 1984). It is a natural plant and it does not require much skill to acquire this material in most of the cases since it can be used right after one cut it from its root.

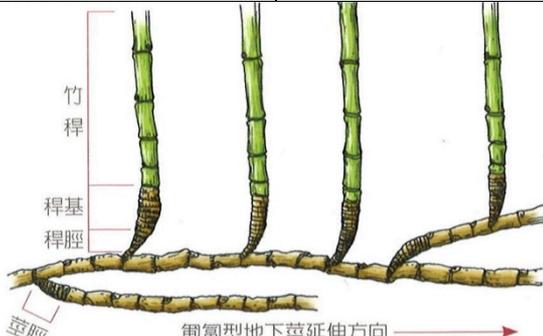
Unlike the timber, which will grow in both height and diameter through time, bamboo only grows in the height but not the diameter through time; the diameter of each bamboo was determined when its shoot sprout just above the earth. Also, bamboo usually propagates through its rhizomes rather through its seeds even though they do produce seeds in their life cycle. All the bamboo species can be roughly divided into two types: the *running rhizomes* and the *clumping bamboos*. The *running rhizomes* are the bamboos have the creeping (horizontal) rhizomes extending underground. Some may misunderstand them as the 'root' of bamboo, but they are actually the rhizomes of the bamboos that allow the bamboo to asexual reproduce nearby. The *clumping bamboos* are those with mainly the upright rhizomes (vertical rhizomes); the mother stalk is connect with the later generations with the rhizome neck so all the bamboo from the same mother bamboo will grow all together in one spot.

As previously mentioned, bamboos are either '*running rhizomes*' or '*clumping bamboos*' depending on their type of root systems, they could also be further categorised into four major categories<sup>14</sup> according to the way it usually propagates: 1. Pachymorph-rhizome (sympodial rhizome), 2. Running rhizome neck with sympodial culms, 3. Amphipodial rhizome, and 4. Leptomorph-rhizome. (Lin 1996: 33-180) The following table shows the botanical characters of the four different kinds of bamboos. The drawings of these four types of bamboo were originally published in the Encyclopaedia of Taiwanese Bamboo (Lu 2010).

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<sup>14</sup> The names of bamboo categories are referencing the naming custom in research by W.C. Lin.

Rhizomes Type	Bamboo Types	Type Description	Culm Style
Vertical rhizomes (Upright rhizome)	Pachymorph-rhizome (sympodial rhizome):	Different steams of bamboo grow together in a clump connected to each other.	Clumping Bamboo (Sympodial Culms)
			
Metamorph II; or Running rhizome neck with sympodial culms		Sympodial rhizome with long neck and spreading.	
			
Metamorph I; or Amphipodial rhizome		Horizontal rhizome with This type grows along its horizontal running rhizomes but have random vertical rhizomes clumps along the horizontal rhizomes.	
			

Rhizomes Type	Bamboo Types	Type Description	Culm Style
Horizontal rhizomes (Creeping Bamboo)	Leptomorph Rhizome	Horizontal rhizome with lateral monopodial culms. Only obtains the horizontal rhizomes that creep under earth and expend its overage in the forest individually.	Running Bamboo (Monopodial Culm)
			

**Table 1-1 The Basic Bamboo Types**  
the botanical drawings of these four types of bamboo was sourced from the Encyclopaedia Of Taiwanese Bamboo. Image courtesy by Lu (2010)

Both running and clumping bamboo will invasively spread over time. The running rhizomes bamboo will occupy and invade the original environment when it extend its territory, while the clumping bamboo will get over populated in certain site and result a messy and crowded environment. Therefore, it is vital to control its spread manually in a well-managed bamboo forest, since over populated bamboo forest cannot grow good quality bamboo or its shoots. Moreover, due to the fact that all the bamboo stalks in the same location could possibly be grown from the same mother bamboo, the botanical character of this bamboo group should be seen as one single plant. Therefore, the bamboo farmer needs to cut off the older ‘branches’ in order to keep the whole bamboo forest in a ‘young’ condition, which will sustain the bamboo forest and delay its ageing. Once the whole bamboo group come from the same mother bamboo are aged, they will blossom at the time and die as a group leaving the ‘seeds’ of the bamboo. As a result, there is an aphorism among the people in the bamboo community, which says ‘keep the three, get rid of the four, and never leave any seven (存三去四沒留七),’ which means that the bamboo farmer should keep the young bamboo under three years old to grow matured and harder, and start cutting those bamboos are over four years old. A well-managed bamboo forest should not have any over

seven years old bamboo stalks left in the garden otherwise they will increase the ageing of the whole group. Therefore, one needs to cut (sacrifice) the older bamboo in order to sustain the whole group. Although bamboo forest can grow naturally, there is a difference in terms of the quality of bamboo and bamboo shoot grown in a well maintained bamboo forest when compared with naturally grown but unmanaged bamboo forest. Due to these characters, a well maintained bamboo forest is not as natural as it looks. It requires a lot of efforts, management skills, and knowledge for its upkeeps.

### ***The bamboos in Taiwan***

The bamboos in Taiwan were first documented and classified by the Japanese botanist B. Hayata in his illustrated botanic cyclopaedia ‘Icons Plantarum Formosananarum Vol. 6’ dated in 1916. Hayata defined the Taiwanese bamboo into eighteen different species belonging to three genera. From the archival research done by the important Taiwanese bamboo specialist Wei-chih Lin, there are many other botanists continued working on this field such as R. Kanehira, S. Sasaki, O. Odashima, Gamble, and McClure. These researchers had categorized the Taiwanese bamboos into twenty species and two varieties of seven genera based on their vegetative characters (Lin 1996). According to the publication from the Taiwan Forestry Research Institute, Council of Agriculture (COA), there are hundreds of bamboo species can be found in Taiwan<sup>15</sup>; among them only six species are used widely and beneficial to the economic production; these economic bamboo species are the Moso Bamboo (孟宗竹 mon zon chu, *Phyllostachys pubescens* Mazel ex H. de Lehaie), Makinoi Bamboo (桂竹 kuai chu, *Phyllostachys Makinoi* Hayata), Oldham’s Bamboo (綠竹 lu chu, Green bamboo, *Bambusa oldhamii* Munro), Taiwan Giant Bamboo (麻竹 ma chu, *Dendrocalamus latiflorus* Munro), Thorny Bamboo (薊竹 zi chu, *Bambusa stenostachya* Hackel), and Long branch Bamboo (長枝竹 chang chi chu,

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<sup>15</sup> There is some overlapping of the name of bamboos due to China, Taiwan, and Japan all share some characters but name the plants differently.

Bambusa dolichoclada Hayata). These species of bamboo forest are the only ones which bamboo farmers will take care of their growing conditions due to its economic incentive. Although there are four botanical types of bamboo categories due to its different rhizomes types underground and clumping styles aboveground. Regardless bamboos should be divided according to its above ground appearance more accurately as the Sympodial Bamboo (SB) and Monopodial Bamboo (MB) (Farrelly 1984: 137), this thesis would adopt the more common two categorised according to its aboveground culm styles as: Clumping Bamboo (CB) and Running Bamboo (RR) which is more common in many research and gardening books published in English (ie. Wells 1993; Grounds 2002). This thesis would use CB and RR instead of the more accurate SB and MB categories to differentiate bamboos because CB/RR types fit the visual character of bamboo above the ground better, and they are also more closed to the differentiations in the local language (Manderian Chinese) as *cóngsheng* (叢生) and *sànshēng* (散生) which the first literally means growing in clumps and the later means spreading out while growing.

Bamboo Name in this thesis	Height (meter)	Diameter (cm)	Node Length (cm)	Type	Material Character	Material Applications
Makinoi Bamboo	6-16	2-10	12-40	RR	The most flexible among all but still firm and strong. With delicate material texture and skin smoothness.	Good for building, furniture, utensils, tools, weaving crafts, and papermaking.
Moso Bamboo	4-20	5-18	5-35	RR	Smooth surface with thick tubular culm. Its hard surface provides stabile materiality for splitting and carving.	Good for building material, furniture, carving, weaving, papermaking, and lamination material.
Thorny Bamboo	10-24	5-15	13-35	CB	Rough surface with tough materiality	Good for heavy-duty agricultural tools and fences for domestic housing.

Long branch Bamboo	6-20	4-10	20-60	CB	Soft and easy to process for weaving material. The surface is not so refined and shined so need to remove the surface for craft usages. It is easily bored.	Very common material in Kwanmiao area in Tainan for furniture making and woven crafts.
Taiwan Giant Bamboo	10-25	10-20	20-70	CB	Soft material with thick and rough culm texture. The nodes are ridged so it is not easy to split or process. Rich in amylose (referred as <i>tian</i> (sweetness) in the field), so it is easily to get bored. Only used one section between two nodes to weave objects.	Could be use for making agricultural tools, bamboo rafts, and papermaking. Mostly for harvest the bamboo shoots rather than using the material. The leaves of Ma bamboo are commonly used for wrapping traditional rice balls.

\*Running Rhizomes as RR, and Clumping Bamboos as CB

**Table 1-2 The Bamboos Commonly for Crafting in Taiwan**  
(data collected from Miss Lin Xiu-feng at NTCRDI)

Among these bamboos, only the Makinoi and the Long Branch Bamboo are the native Taiwanese species, while the other four originated from China. Different names were used for the same bamboo in China, Japan, and Taiwan, and such differences are due to the historical background in Taiwan. The most common and widely used bamboo in the bamboo industry is Moso Bamboo. The name originated from a Chinese legend about a filial son named Moso who want to find bamboo shoot for his seriously ill mother because fresh bamboo soup is the only thing she want to eat. He goes to the Mao Chu (*Phyllostachys pubescens* Mazel ex H. de Lehaie) forest and finds all the bamboo field was covered by snow, thus not being able to find any bamboo shoot in the bamboo forest. Therefore, he is extremely sad and starts crying underneath a bamboo in the forest. He cries so hard and so much that his warm tears and body temperature melt the snow and splash on the bamboo stalk. Then the miracle happens, he saw some bamboo shoots popping out the snow underneath his body, thus he happily brought back those fresh bamboo shoots home and made soup for his mother. As a result, people named this species of bamboo Moso bamboo because the filial son's behaviour which allowed this miracle to happen. However, this name was not widely used in China but instead migrated to Japan with this species. Japanese adapted this name as the official name for this type of bamboo while also

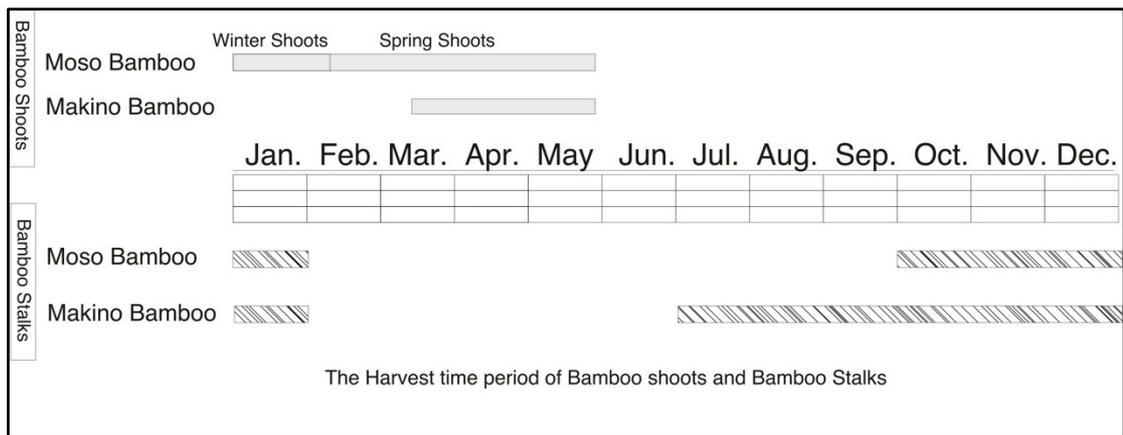
influencing the Taiwanese to the same name during the Japanese ruled era. Taiwanese call this kind of bamboo Moso bamboo nowadays while the original Chinese name had become unknown for the general public. In addition, the local bamboo craft makers never used the Chinese name “Mao Chu” while referring to this material despite been told its original name. This widely spread species is also the most controversial material in the Taiwanese bamboo industry, which aroused the material's authenticity issues and will be discussed in the next chapter.

<b>Name in this thesis and origin</b>	<b>Taiwan</b>	<b>Japan</b>	<b>China</b>	<b>Latin</b>
<b>Moso Bamboo</b> Origin from China and widely grown in southern China, Taiwan, and Japan.	孟宗竹 Mon zon chu	孟宗竹 Moso chiku	毛竹 Mao chu	<i>Phyllostachys pubescens</i> Mazel ex H. de Lehaie
<b>Makinoi Bamboo</b> An original species from Taiwan	桂竹 Kuai Chu	台灣真竹/桂竹牧野竹/台灣苦竹 タイワンマダケ (Taiwan Madake)	台灣剛竹 Taiwan kang chu	<i>Phyllostachys Makinoi</i> Hayata
<b>Oldham Bamboo (Green Bamboo)</b> Origin from Southern China	綠竹 lu chu			<i>Bambusa oldhamii</i> Munro
<b>Taiwan Giant Bamboo</b> Origin from Southern China and Burma	麻竹 ma chu	麻竹	大綠竹，甜竹	<i>Dendrocalams latiflorus</i> Munro
<b>Thorny Bamboo</b>	荊竹 zi chu			<i>Bambusa stenostachya</i> Hackel
<b>Long branch Bamboo</b>	長枝竹 chang chi chu			<i>Bambusa dolichoclada</i> Hayata

**Table 1-3 Different Names of Bamboo**

The name usage of Taiwanese native Makinoi Bamboo illustrates another aspect of the Taiwanese historical background. Makinoi Bamboo is famous for its elasticity and toughness. The name of Makinoi Bamboo is named after a Japanese botanist Tomitaro Makino, a Japanese botanist (1862-1957). The stalks of such bamboo are hard and tough, and are often used in furniture making, fishing, and construction. It is also used primarily in a variety of crafts including the splits used in weaving. Although its name is named after a Japanese botanist,

Taiwanese people referred to it as “Kuai chu (桂竹)”. However, this is a different species from the “Kuai chu (桂竹)” in China; this species is called “Taiwan Kuai chu” in China which identifies its origin and uniqueness. On the other hand, this species is called “タイワンマダケ (Taiwan Madake)” because it has similar quality as the Japanese Madake マダケ (真竹 *Phyllostachys bambusoides*). This species of bamboo is the most important species in this fieldwork since all the weavers used this material for their work. This species is under the Moso bamboo family, so they share similar growing life cycle, and needs to be managed and harvest at the certain age. Usually the bamboo farmer will avoid the bamboo shoot season to harvest bamboo stalks because bamboo stalk will “preserve many sweetness” (as they described, but it is actually the starch accumulated in the bamboo stalks that will attract the borer easier). Also, since bamboo are preparing for reproducing its next generation, they are botanically more venerable during this period of time. Hence, the bamboo farmers will not “harm” the existing plants at this moment in order to obtain a better quality of the next generation bamboo shoots and bamboo stalks. Therefore, the bamboo shoot season is the low season for the bamboo industry due to the lack of material supply for production during that period of time.



**Figure 1-1 Time Period of Bamboo Harvest in Taiwan**

Due to these botanical characters of bamboo, the bamboo farmers will only select the “matured” Makinoi bamboo in the forest to harvest instead of harvesting the whole area at the same time. The desired size and age of bamboo

are carefully selected and shipped to the location of the manufacturer. However, this kind of selective harvest is very common in managing the bamboo forest in Taiwan, but the behaviour is very different in China, where they are usually harvested within a certain area at the same time. The Chinese people not only harvest the whole area at once but harvest the same place as a whole every two years. The bamboo farmers and the bamboo factory owner accept the different age bamboos in one shipment and use these materials for manufacturing their products. The aphorism among the Taiwanese bamboo community, 'keep the three, get rid of the four, and never leave any seven' was never heard of in China. The factory owners in China do realise the different material qualities of bamboo in different ages, but they said that they cannot only pick the matured bamboo and abandon the rest of the materials because they all come in one shipment. Such different harvest behaviours are not a result of culture, but of the politics and the land policy in China. Firstly, they are not required to report to the government if they want to harvest bamboo, since "it is such a kind of cheap material, nobody cares" said by the Chinese bamboo worker in Anji<sup>16</sup>, Zhejiang Province. Since the Chinese can only 'rent' the land from the government, thus when they have the permission (or the chance) to harvest the bamboo in certain area, they want to maximum the profit at once, hence they harvest all the bamboo nearby and to ship to the market for trading. On the contrary, the bamboo forest in Taiwan are largely own by the private landowner, there are more incentive to sustain the bamboo forest since the land and the forest is of private properties. However, there are more and more bamboo forestland owners starting to 'rent out' their land to some contractor farmers. These leaseholders' attitudes are more similar to those Chinese farmers but react in a different ways. These Taiwanese bamboo forestland leaseholders want to create the maximal beneficial result during the

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<sup>16</sup> During the three weeks short fieldwork about the bamboo industry in China in the summer in 2009, some of the fundamental differences and connections between the bamboo industry in china and in Taiwan are found through interviews at several bamboo factories and trade centres in Anji, and also visiting the world expo in Shanghai. Many Taiwanese craft makers and manufacturers are debating about whether who is using Chinese bamboo rather than Taiwanese, as the result, the ability to distinguish the Taiwanese Moso bamboo and the Chinese Mao Chu became very important.

lease contract, so they will usually add fertiliser on the land in order to have more bamboo shoots and bigger bamboo stalk. However, they are not allowed to pull down the whole bamboo forest for a one-time profit and they also need to qualify the critical request regarding the age and size from the Taiwanese bamboo factory for the materiality of the bamboo they desired.

These strict requests about the qualities of Makinoi Bamboo are also related to its major usage. Most of the Makinoi Bamboos are harvested from the mountains mainly for producing the sword for Japanese martial art of kendo. The kendo sword manufacturers who only required the bottom quarter of the whole bamboo for their production paid the majority of the bamboo shipping cost from the Smangus mountain area in Hsinchu County to Jhushan in Nantou County. As a result, the rest of matured Makinoi Bamboos are sold to the weavers and the local bamboo shop at a relatively cheap price. This also explains why people in Jhushan use the rough and stiff Makinoi bamboo rather than the Long Branch bamboo that is much softer and easier to split. Therefore, even though the Long Branch Bamboo is easier to work with, people in Jhushan rather use the harder Makinoi Bamboo due to its material properties and its availability in the local manufacturing chain.

## **1.2 Taiwan's Bamboo Culture**

Bamboo's role in Taiwanese material culture is so pervasive that even one journalist from the Western-centric *National Geographic Magazine*, Alice Baliantine Kirjassoff, documented its influence during her short visit to Taiwan in the publication's March 1920 issue. In it there is an image of a Têk Pai (bamboo raft) on the first page of the article, with the following description: 'Têk Pai is the name given this bamboo raft in Formosa...Although there is a type of bamboo raft found along the China coast, it is not nearly so large as that of Formosa, since the bamboo on the mainland cannot compare in size with those growing on this island' (Kirjassoff 1920: 246).'



**Figure 1-2 Têk Pai: A Taiwanese Bamboo Raft**

Original Caption: Têk Pai is the name given this bamboo raft in Formosa (Kirjassoff 1920: 246)



**Figure 1-3 Indigenous Taiwanese carry water in bamboo poles**

Original Caption: Savages carrying water in bamboo poles (Kirjassoff 1920: 288)

In this 47-page magazine article, there are 34 pictures displaying bamboo artefacts, showing its versatility and wide application in Taiwan's material culture. However, bamboo is more than just a useful material. It is highly prized for its aesthetic qualities, symbolic value, and materiality, namely its strength and flexibility. It is also a symbol of elegance within Chinese literature, visual art, and even within music. The beauty of bamboo lies in its strong, slim and dignified sections of stalk, as well as in its straight, smooth and elegant appearance. Although its stalk is hollow, it has strong joints to support its height. It can tolerate severe weather and stay green throughout the year. Due to the pervasive influence of Chinese literature, bamboo is also highly appreciated among the general public, especially those who consider themselves highly educated. Its widespread presence in literature and music, as well as in aboriginal myths and local religions, has created unique cultural resonances to Taiwanese bamboo culture. Moreover, bamboo's identity has been gradually constructed

through Taiwanese material history. It consequently has come to represent the collective identity of the Taiwanese people.

### *The Material Associations of Bamboo*

#### **The Material Associations of Bamboo in Literature**

Bamboo is a sign of grace and nobility. In Chinese society, high-ranking officials, scholars and gentry are renowned for their avid appreciation of bamboo from their poetry, writing, calligraphy and painting, and they attached importance to the refined enjoyment of gardening. This cultural indication of bamboo shares among the Chinese speakers and also influences the status of bamboo in Japanese and even Korean culture in literature. Chinese speakers often used the word "bamboo" as an alias, or gave their residences or study rooms such names as "bamboo slope," "bamboo forest," "bamboo study," "bamboo hut," "bamboo veranda," "bamboo hermitage" and "bamboo stream." They praise bamboo because it is hollow and evergreen; they interpreted the hollowness of bamboo as humility, and its evergreen character as representing long-living and fortitude. Although this is not an expensive material, bamboo is not only a very common material in Taiwanese interior decorations; it is also a very common name of many restaurant rooms and suite in the hotels. People name these places in the name relate to bamboo in order to show the elegance of the space or locality.

#### **Visual Culture: Paintings and Architecture Decoration**

The importance of bamboo is evident not only in text and art, but also in applications of its visual images i.e. the images of bamboo found in traditional Taiwanese architecture. On the sides of the back wall of the main hall of a traditional Taiwanese house, there was often a couplet with the inscription "Bamboos and Pines Growing in Profusion (松竹長青)," which is an expression of the family's wish for prosperity, stability, and filial piety.

A bamboo grove was often planted next to the entrance of a house to shun vulgarity and bring elegance and beauty. Pine, bamboo and plum, termed the "three friends of winter" for their resilient, evergreen nature, were often also

applied. Old Buddhist temples in forests of bamboo attached more importance to the placement of bamboo and stones in the garden than the architecture, as they symbolised refreshment, solemnity and dignity. The Four Gentlemen (pine, bamboo, plum, and orchid) and the Four Friends (plum, orchid, bamboo and chrysanthemum) are popular subjects for paintings as well as carvings for walls, doors, lattice-window doors and furniture. In traditional Taiwanese buildings, it is common to find walls, railings or short posts in winding corridors made of green glazed pottery in the shape of bamboo. Stone pillars are often carved with bamboo designs, and windows made in different bamboo shapes. Such ingenious expressions reflect a sincere appreciation of bamboo.

### **The Material Associations Of Bamboo In Acoustic And Music**

Besides the visual appreciation, the “sound of silk and bamboo (絲竹之聲)” is frequently used to refer to elegant and pleasant music, as many traditional musical instruments were crafted from these materials. However, most bamboo musical instruments, such as the mouth organ, nose flute and bowed violin, are considered gems of folk music, and the formal court music instruments were usually made with wood or other more expensive materials. The “sound of silk and bamboo” is more than a reference to an instrument’s materiality; it is a material association for the smoothness and elegance of the Chinese music.

### **The Material Associations Of Bamboo In Taiwanese Aboriginal Myth**

Bamboo is more than just an easily accessible, useful, and practical material; according to some Taiwanese aboriginal creation myths, it is where their ancestors come from. These myths about the ‘bamboo birth’ are shared among the southern and south-eastern Taiwanese aboriginal groups. Anthropologists Sayama (1917), Hsu (1988), Chien (2003), and indigenous ethnographer Ten (2003), along with the Council of Indigenous Peoples in Taiwan and the Digital Archives of Formosan Aborigines (established by the Institute of Ethnology at Academia Sinica), have all noted similar bamboo birth myths among the Puyuma, Paiwan, Yami, and Tao indigenous groups.

During my field research, I found some beliefs about bamboo among the Yami and Tao indigenous peoples. For example, the Yami do not allow people to insert tall bamboo stalks into the ground as standalone poles (e.g., for signs or land markers) out of fear that evil spirits will come up to the surface of the earth through the pole. When a family finishes constructing a new house, all the warriors in the village perform rituals to clear the village of any evil spirits that might have entered through poles used during the construction. Similar to the Yami, the Tao believe that ghosts and spirits can use bamboo poles to bring plague and famine to their villages (Ten 2003: 199-200). Despite such negative superstitions, bamboo is commonly used in many rituals and as parts musical instruments, tools of divination, *ulalaluwan* (basket containers for ancestors' clothes), and other small objects.

### **The Religious Material Associations of Bamboo**

In contrast to Taiwan's aboriginal population, the Han Chinese seldom used bamboo to make any ritual objects except for those used to attract and communicate with ghosts and spirits. Han Chinese usually considered bamboo as a material that is too cheap and inappropriate to be presented to the gods. This cheap, useful, quick-growing material is for mortals' everyday life, not for deities. It is very unusual to observe people using bamboo objects in orthodox Chinese Buddhist or Confucius temples even though bamboo has always been a symbol closely connected with scholars and the gentry classes. Contrasting to the Chinese traditional concept of this material, the indigenous Taiwanese Thao people use the bamboo basket *ulalaluwan* to store their ancestors' clothes and present them at the altar during ceremonies.

However, this aboriginal material association with bamboo has a certain influence on Taiwanese religious ceremonies. It was found that people in Jhushan use bamboo baskets to present their sacrifices to their gods in Chinese Han-style Taoist temples. This is different from how religious activities are conducted in Han culture and closer to those witnessed among the Thao people near Sun-Moon Lake in central Taiwan. It is not certain that this custom was influenced by the

Thao Tribe, though the two areas in which the customs are practiced are geographically close to one another. What is known, however, is that this practice among the Taiwanese is different from common worship practices in many other west-coast Taiwanese Han Chinese temples.



**Figure 1-4 Offering in the bamboo basket in the ritual**

The day before the opening of the 2009 Nantou International Bamboo Cultural Festival is the last day of July in the lunar calendar. That day is the day when the gate between the human world and ghost world closes. Thus many people prepared offerings to the ghosts to wish them a pleasant journey back home.

In Han Chinese culture, bamboo is considered to be a Ying object (in contrast to the more positive Yang according to traditional Chinese Taichi beliefs). It plays an important role in several Chinese traditional ceremonies including wedding and the funeral (Guan 2003). It is a container for the spirits and serves as a boundary marker for ghost feasts. It is also a ladder for the underground spirits to access the world of the living. Yeh, a bamboo carver in Jhushan, once pointed to a bamboo design in a design magazine and said to me, ‘This designer placed the bamboo in the wrong direction! When we were little, we were told by adults and elders that we should not put the stick up-side-down in the field,

because it is bad luck and would attract ghosts. When you turn the bamboo upside-down, it acts as a ladder for the underground spirits.’

On another occasion when I visited a local *jiangiao* (ghost feast) in Nantou, local people told me that bamboo can designate the area of the feast. The organisers placed the pole in the plaza in front of the temple. The area of the feast was defined as any area in which the top of the pole in front of the temple was visible. Since the hollow space inside the bamboo can attract ghosts and spirits, Tao priests also use a bamboo stick to collect the spirits of the dead during Taiwanese funerals and force the spirits to stay in its stalk and follow their direction. One local Tao temple owner even grows a tall stalk of bamboo in a pot in front of his temple, describing it as an antenna for spirits and ghosts to communicate with the living.

Bamboo also serves as a tool to help the dead transition to their new home. It is a common custom to have bamboo sticks with leaves included in Taiwanese death rituals for collecting the recently deceased spirits. If a sudden fatality occurs, the Fashi (a Taiwanese wizard) will ask the family and friends to call the deceased’s name and ask it to go home as they wave bamboo sticks in their hand. It is believed that the hollow and dark space inside of the bamboo can act as a temporary shelter for the deceased’s spirits to return to their family’s home prior to their funeral. Bamboo is also used in to make offerings to the *Tu di kong*.<sup>17</sup> People use long grass to tie ghost money and incense to a bamboo stick and place it in a field for asking *Tu di kong* to protect the land and crops as well as to repel evil spirits.

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<sup>17</sup> *Tu Di Kong* (also known as Tu Di, Tu Gong, Tudi Yeye and Dabo Gong), is a Chinese earth god worshipped in Chinese folk religion and Taoism.



**Figure 1-5 Bamboo stick tied with paper money and incenses in the field offer to the *Tu di kong***

Bamboo is an easily accessible material used to serve the living and the dead, but is avoided in objects that are associated with the gods. Bamboo presents us with multiple and contrasting images, being held in prestige within the visual arts, literature and music, yet is also appreciated for its low commercial value and utility among the rural population and the poor. This dichotomy provides for a wide-reaching resonance of Taiwanese culture.

### ***The cultural resonances of bamboo***

Since there are so many different layers of meaning about bamboo, this material has developed its cultural resonances for Taiwanese and deeply rooted in Taiwanese culture. While most timber was usually imported from China and the valuable Taiwanese Cypress were taken away by Japanese from the high mountain via the railroad built by the Japanese, bamboo is the most commonly available material for most Taiwanese in their everyday life before plastic was introduced in Taiwan. It is a material in every Taiwanese's childhood and nostalgic memories. The preference on bamboo is well explicated in an interview

with a teashop owner, Mr Yeh. His tea shop is seeking for the traditional taste of the tea, and he name his tea shop as “tea giving (奉茶) which is a friendly Taiwanese culture in the past agricultural society. Taiwanese people will place some water bottles and cups on the road so the passengers can drink it for free. He adapt this traditional Taiwanese culture as the name of his tea shop and placed many pieces of bamboo furniture in his shop.

For Mr Yeh, the teashop owner, bamboo is a material which ‘*recalls my childhood memory and our past, our past as Taiwanese.*’ He later explained:

*Bamboo is a very Taiwanese material. In elder generation, most of the well-made wooden furniture was imported from mainland China. The bamboo furniture is more “拙 rough and awkward” not as delicate and refine as the Chinese Ming style furniture. Also, the weather in Taiwan is very hot; sitting on a bamboo chair can cool you down. The house of my mother in-law was built with Throne Bamboo too; the house is cool in the summer and it can last for more than 30 years.*

*Those delicate carved wooden furniture with colour paints are more for literatus, not for civilian. Normal people’s life is not that fastidious; it is not saying the bamboo furniture is ugly, it has very mild and moderate design. The contour, proportion, and texture of bamboo furniture are very beautiful; especially those marks of usage are very fascinated. The quality of antique will appears. I am especially interested in collecting these antique pieces from normal people’s everyday life. They are much more attractive to me than those expensive Ming style Chinese furniture. For me, these are what I grow up with, and these are what I remembered since I was a child. These are my past, and our past as Taiwanese.*

On May 28, 2009 in Tainan.

(Interview with the tea house owner Mr Yeh and Yu-lon Huang)

Mr Yeh is not the only one who describes his identity attached with this material. I met another informant Mr Zhang in Jhushan when he came here for

hiking in the nearby forest. Unlike Mr Yeh is a *yam* which means his families had settle down in Taiwan for several generations before 1949, Mr Zhang is a *taro*, which means his family come to Taiwan at 1949 as the first generation immigrants. Mr Zhang is the second-generation immigrant in Taiwan and he was born in 1950, which is the time just one year after his parents arrived to this island. He told me that he was surrounded by bamboo furniture in his childhood too.

‘My parents bought much bamboo furniture in our house. They are the cheapest furniture available at that time. We thought we are going back to China soon, so we don’t plan to buy expensive possessions. Well, there are not many choices in the market at that time as well. We move several time follow by the housing arrangement from government, so the bamboo furniture is easier to carry to the next place when we need to move. [...] and yes, you don’t feel bad if you need to give them away,’ Mr Zhang said. His confession of his childhood memories about bamboo declared the different cultural resonance as a mainlander, but it also demonstrated the cross-group memories of bamboo. Many of these Chinese immigrants like Mr Zhang’s parents lived in *juàncūn*, which is the military dependents' village. *Juàncūn* referred to those communities built in the late 1940s and the 1950s in Taiwan, their original purpose was to serve as provisional and temporal housing for soldiers of Republic of China (now as Taiwan) armed forces and their dependents from mainland China after the KMT retreated to Taiwan. These temporal housing communities ended up becoming permanent settlements for these Chinese immigrants and formed distinct cultures as enclaves of mainlanders in Taiwanese cities. Life in these *juàncūn* communities were usually mentioned as “life behind the bamboo fence” in literature, music lyrics, and movies because people in these poorly constructed villages often used the bamboo which is the cheapest available material to build or modified their housing during the post-war material shortage and poor income financial reality at that time. Therefore, the material association of bamboo is also imprinted in these post 1949 Chinese immigrants’ memories. From these material associated memories, bamboo is truly a significant material for Taiwanese no

matter if they were the indigenous Taiwanese, pre-1945 Chinese settlers, or post 1949 Chinese retreaters.

Their emotional attachment and opinions of bamboo unveiled several fundamental Taiwanese characteristics. First, there are always distinguishable local Taiwanese habitats from its foreign rulers such as Japan or China in Taiwan. Second, Taiwanese people have been through three authority shifts in the past one hundred years. Most Taiwanese people do not predict or plan what will happen in the future because what had happened in the past thirty years, so they tend to not plan too far for the future because they never know who will be their next ruler. They often call this kind of the shift of authority “bien-tien (變天)” which means the changes of the sky. I also met many other Taiwanese people who link their Taiwanese identity with bamboo. In a conference about bamboo in Jhushan, an old local man said, “we, people in Jhushan, were born under the bamboo roof and grow up and play under the bamboo. We eat bamboo and use it to make everything. If we cannot take good care of the bamboo forest in Jhushan, the bamboo die, and we will die as well.” This shows the people in Jhushan are deeply depended on the material for economic income brought by bamboo and also mental dependency on this material. Bamboo is surely an important and significant material in Taiwanese culture.

This cross-group memory of bamboo is reflected on the interior design in Taiwan. In many Taiwanese bistro or food stand which sells traditional Taiwanese food. They often use bamboo as the decorating material. Interior designers use this material not to express their statement about green designs but to state the ‘taste of Taiwan (台灣味)’. When they are asked to design a space with the Taiwanese flavour and style, they will either use bamboo as part of the decorative design or place bamboo furniture or lighting pieces in the space. Bamboo became a kind of cultural symbol which delivers its cultural message and presents its cultural identity rather than just a kind of green material.

From these different material associations of bamboo, we can see how important this material is and how it is closely related to Taiwanese culture. Even

though the bamboo industry had been desolate after 1982 according to research published by Huang, S. H. (1998), the bamboo industry in Taiwan had shifted its scope from the massive scale production of cheap products to high quality and high value semi-bespoke new designs recently. In addition to the cross-group material memories, bamboo is also a material that represents the freedom of individual's originality and creativity as discussed in the next section.

### **1.3 Crafting with Bamboo in Colonial and Post WWII Period Taiwan**

Bamboo is such an easily accessible and useful material so the bamboo objects are very common in many Asian cultures. Take India for example, bamboo is often used and known as “the wood for the poor” in India because of its inexpensive market price (Farrelly 1984). It is also a low priced material in Taiwan, and its market price is relatively cheap when compared to wood or even rattan. The market price of raw bamboo in Taiwan is around £1500 (in 2009) per 20 Tons when shipped from the Shin-Chu County to Jhushan Township in Nantou County<sup>18</sup>. However, the value of bamboo products rises dramatically after its transformation for different applications that turns this cheap material into various valuable products. Therefore, these value-added transformations of bamboo are vital for the discussion of bamboo culture. This section will start with displaying the miscellaneous uses of this material, follow by exploring the different common transformations and treatments of bamboo. Finally, the section will conclude by demonstrating how bamboo has developed its visual abstract meaning beyond its materiality in the Taiwanese culture.

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<sup>18</sup> The market price of raw bamboo in Taiwan is around £1500 (in 2009) per 20 Tons when shipped from the Shin-Chu County to Jhushan Township in Nantou County. However, the shipping cost is about £800 and the cost for people to harvest bamboo for a shipping usually take 3 working days for 5 bamboo logger which cost £420. This means the actual price for the bamboo before they were shipping out is only £280 for 20t, which is an amazingly cheap material.

### *Exploring creativity and originality through bamboo*

The diverse applications of bamboo on various everyday objects in Taiwanese culture are obvious. When a Scottish missionary, Marjorie Learner<sup>19</sup> (1884~1984), came to Taiwan in the late nineteenth century, she noticed the various uses of this material in people's everyday life in Formosa (the former name of Taiwan). During her stay in Taiwan, she had published three storybooks written for British young readers during 1920s about the everyday life she encountered in Taiwan. In her book *More Stories from Formosa* (1932), she included a short story about the abundant and various applications of bamboo. She told the story as the first person of a little bamboo shoot, 'I doubt whether there would be very much of this village left if we were not here,' she wrote.

*'They use us for building their cottages, the roof, walls, beams, doors, window frames, and all. And look inside [...] Beds, tables, couches, cupboards, chairs, stools, yes, even pillows, every bit of furniture made of bamboo. In the doorway, too, there's a bamboo fence – that's to keep the piggies from going in and nosing round. And there is a special sort of bamboo chair into which baby is put so she can't get into mischief.*

*The kitchen too, how would they manage without us there? You'll find a bamboo scrubbing brush, bamboo baskets, bamboo brooms, bamboo chopsticks, bamboo spoons, a bamboo sieve with which to strain the rice, and a bamboo dipper to scoop it with.*

*In the yard, they use bamboo poles for hanging their clothes on after they are washed, and you will also see a bamboo chicken-coop, and a bamboo-fenced*

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<sup>19</sup> She married in 1912 to David Landsborough who is one of the most influential missionaries in Taiwan during the late nineteenth century and early twentieth century. Dr. David Landsborough is also the founder of Changhua Christian Hospital (彰化基督教醫院.) He even cut off his wife Marjorie Landsborough's skin in an operation to save a serious burned Taiwanese boy's life. This became the story of "the skin graft with love (切膚之愛)" which became the lasting role model among doctors in Taiwan.

*pigsty. When master goes to market, he puts a bamboo hat on his head with which to keep the sun off, and he takes a bamboo pole to carry the things back with. I must forget the teapot either. Before he starts off, mistress puts some nice hot tea into a thick, short piece of bamboo, filling the space between one joint and the next. Then when the sun gets very hot, and master is thirsty, he has a refreshing drink. [...] Look at those children, now. They haven't got many playthings, [...] but at least I supply them with some. That whistle they are blowing, the little bow and arrow, and that fine humming top are all made of my big brothers.*

*[...] fishing? Yes, of course, his uncle lives at the seaside, and goes fishing in a bamboo raft, and he uses a bamboo fishing rod, and he puts his fish into a special kind of bamboo basket.'(Landsborough 1932: 261-262)*

After listing many different applications of bamboo in Taiwanese material culture from building construction, interior furniture, kitchen utensils, gardening tool to even food consumption in that story of bamboo, Marjorie Landsborough wrote, "How far have I count now? Oh, dear, I've forgotten, and I haven't nearly finish yet" (Landsborough 1932: 262). This kind of heavily dependence can be the evidence of how bamboo is important to the Taiwanese material culture, and it also emerge that bamboo is a 'plastic medium' for Taiwanese. Wen-hsiung Wang (2004) points out that bamboo is actually "the plastic for Taiwanese" (Wang 2004: 19). With the flexibility and toughness of bamboo, the creativity and originality of the pre-industrial Taiwanese society can be found in these bamboo objects. The relationship between culture and material artefact production in the case of bamboo is relatively independent of stylistic considerations but merely the individual creativity and collective techniques transformation among the Taiwanese base on their functional needs. The styles and applications of these bamboo objects are not constrained by any governing power or restriction; bamboo can be seen as a most liberal and democratic material one can have for most Taiwanese.

The traditional bamboo crafts and its construction techniques are closely bounded with the Taiwanese nostalgic memories. For those Taiwanese people born before 1960s, they usually have their personal memories about this material relating to their first toys made by their father or grandfather with bamboo or their childhood memories of surrounding by the bamboo furniture. Unlike wooden furniture which were usually made by the carpenters in their workshops, these bamboo furniture were either made by the family members or the touring bamboo furniture makers. These bamboo furniture makers would carry very simple tools and a small bamboo stool while travelling from one village to another. They would stay in a town for a few days and if anyone might need their service, bamboo furniture makers normally stayed in their commissioner's house for a few days and made the furniture pieces according to their customers' need. The material they need were usually harvest in the bamboo forest in the villages and from the bamboo clumps behind the customer's residences. Also, there was no need to purchase nails or other parts for bamboo furniture because the bamboo would shrink after the moistures evaporate from the fresh cut raw bamboo, thus metal nail could not really hold the pieces together and they needed to use bamboo nails instead. Therefore, the material of bamboo furniture was mainly from local "free" resources but the style and design of bamboo furniture was very fluid and liberal according to individual customer's need and the individual bamboo furniture maker's knowledge, techniques, skills, and the most importantly, their original creativity to fulfil their customer's requirements in each bespoke bamboo furniture.

One of the most interesting vernacular designs among the Taiwanese bamboo furniture was the tubular bamboo stool for children that Ms. Landsborough had mentioned in her bamboo stories. It was called Yigyui (椅轎、乳母椅) which is a Taiwanese style two way nanny's stool'; it can be a baby seat which the adults can put their baby or toddler in it so the toddler could sit still and eat or play and watch what the adults are doing without cuddling by adults. This was important in the old days because children could sit in the baby chair and felt secured by being aware of the adults who were simply do some work in front of

them. The most interesting feature of this chair was that it can be a stool for adults too if one flip it 90 degrees, so the mother or other adult can sit on the stool and breast feeding or cuddling the baby. An important figure of Japanese Mingei movement, Yanagi Soetsu, and the most important Taiwanese craft researcher Yen Shui-long both documented this chair as one of the most iconic original Taiwanese bamboo furniture design.



**Figure 1-6 ‘Yigyue’, the Taiwanese style nanny’s stool display in the baby chair orientation**

In fact, this tubular bamboo furniture are highly appreciated by the Japanese when they first found these designs in the colonial era; these so called Taiwanese chairs were even selected at Charlotte Perriand’s Exhibition, ‘Selection, Tradition, Creation’ at Takashimaya department store in Tokyo and Osaka in 1941. These tubular bamboo furniture also inspired Charlotte Perriand, designer of the famous chaise lounge chair, to make a bamboo version of her famous design (Benton 1998; Kikuchi 2004).

In addition to the tubular bamboo furniture, another type of important techniques for Taiwanese traditional bamboo crafts is weaving. Different pattern are created by the geometric combination of thin bamboo stripes that entails labour intensive preoperational works. The different patterns are created through time and developed for different functional and decoration requirements and also

adopt different designs from the foreign culture because of the production requests. In the Qing Dynasty, there was a lack of craft creation in Taiwan, where local farmers only make rough tools for agricultural use while crafted bamboo objects such as the fine basket containers or chest were all imported from southern China. In the 2009 Taipei bamboo craft exhibition in the presidential gallery, the display explained how those people who come to Taiwan to open up barren land for farming did not have the skill and time to make these tools. They can only buy or trade their crops for these objects from the vendors. It was not until the late nineteenth century that the Taiwanese people in the settlements started making more complicated or skilful bamboo objects for farming and fishing. However, the more finely made bamboo objects such as the bridle wealth chest and lacquered bamboo stationary chest were still mainly imported from China.

The styles and design of the bamboo craft making shifted after 1900 during the Japanese ruled era (1895-1945) due to the alienation with the Chinese suppliers and the new booming material exchanges between Taiwan and Japan. The new Japanese governor and troops brought a lot of Japanese style objects to Taiwan. Also, the Japanese ruled government considered Taiwan as a supporting supplier for Japan's larger military plan in the East Asia. Therefore, Taiwan started to massively export all sorts of material supplies to Japan from raw material such as sugar, timber, rice, tea, and later on handicraft such as bamboo crafts. Before the Japanese ruled period, there was no mass production craft industry; most Taiwanese crafts were made for local consumption. Yuko Kikuchi illustrated the relations between craft industry and colonial cultural policy. In Taiwan, "local folk crafts were ever more openly politicized and became instruments of nationalism" (Kikuchi 2007: 234). The bamboo craft industry has been carefully planned and selected to bring more profits to Japan's export market without competing with the domestic industry (Kikuchi 2007). This was also the reason that the colonial government set up bamboo craft training school in Taiwan in the 1932 in order to produce the Japanese style products for the Japanese "main land" demands.

The first bamboo craft training school was established in Nantou County where this fieldwork was mainly based. One of the informants, Master Huang, was a graduate from this institution. The faculties and master of this training school were all hired from Japan and they taught the students how to make the Japanese style basket for floral arrangement and other Japanese style containers. These techniques and the design still influence the bamboo weavers in Taiwan nowadays as we can easily find the trace of Japanese influence in the contemporary Taiwanese bamboo designs.

Another thread of the bamboo design in Taiwan is the aboriginal tribal object, where these objects shared more common designs and techniques with the other Austronesian groups than the local Taiwanese. These objects used a lot of rattans and the twisting techniques to form an object. Moreover, they would apply a mixture of ashes and oil on the surface to enhance the durability of the woven objects. The aboriginals have more backpack basket designs and bamboo containers with supporting feet when compared with the Han Chinese style bamboo designs. Also, the Thao tribe and Atayal use the bamboo basket to store and display their ancestor's clothing in the seasonal ritual to symbolise the attendance of the ancestors and their kinship lineage with the living descendants. Therefore, bamboo is not a dishonourable cheap material in the aboriginal culture as it is in the Chinese religious customs. It generates the material associated intimacy through the aboriginal bamboo birth myth to the actual material display in the rituals. The material agency of bamboo was deeply embedded in the Taiwanese culture and blended into the Han culture based Taiwanese society, where these influences can be seen in many ceremonial practices such as the Taiwanese weddings and funerals today.

Due to these chronological multi-cultural influences on the bamboo craft designs, techniques, and styles in Taiwan, the early bamboo collection in the museums and among private collectors in Taiwan can be categorized into these four categories, the imported Han Chinese objects, the vernacular collection of functional local made tools, the Japanese ruled style collection, and the aboriginal collection. As the most important figure in Taiwanese craft history Yen Shui-long

stressed, the importance of craft as ‘the silent tools to achieve the diplomatic mission of propagating one’s own culture’ (Yen 1942: 22-23; also cited in Kikuchi 2007: 233). Craft is not just a labour intensive industry, it is the result of humanity from an anthropogenic perspective, and it is also very competitive as a major export-oriented industry in the global markets from an economic perspective. External forces such as national politics, international trends and technological development influence the rise and fall of the local craft industry. These bamboo crafts are the material evidences of the history of Taiwan. These divisions of cultural influences can also be found in the recent design concepts among the contemporary bamboo weavers.

In addition to the multi-cultural tradition influences on the bamboo craft design, there exist a dramatic change in the bamboo design in Taiwan. For the past 50 years, more and more designers are paying attention to this natural material globally on top of modern materials such as metal, glass, and plastic. Designers globally noticed bamboo as the new green gold, the new possibility for an innovative and sustainable material. The Taiwanese designers were also aware of this trend and started looking at their own tradition and rethink about this material. The bamboo designs in the Yii project, and the bamboo laptop and office accessories design created by the Taiwanese based computer maker Asus are both good examples which demonstrated how bamboo culture is now deeply rooted in the Taiwanese culture. Additional in-depth discussion about the Yii project will be presented in Chapter Four.

### ***The Transformation of the material***

The abundant natural resources of bamboo also gave Taiwanese the opportunity to explore this material. This subsection explains six different material transformation and its treatments of bamboo: raw bamboo, boiled bamboo, preserved green bamboo, smoked bamboo, charcoaled bamboo, laminated bamboo, and caramelised bamboo. Although bamboo is usually praised for its toughness and flexibility, it is also typically criticised for its short durability. The moisture in the bamboo stalks changes dramatically in few weeks

and it is a humidity sensitive material; when a finish product were shipped from the production site in Asia to a drier location such as the America, there are usually some cracks accrued and this causes serious argument due to the customer's complains. Also, the colour of bamboo changes from deep green to yellow through times, thus the preservation of the colour or the permanent "colouring" the bamboo were developed.

### ***Different Types Of Bamboo Treatments***

#### **Raw Bamboo**

The value of the raw bamboo is the lowest when compared to the other five after-treatments. The Makinoi bamboo, which is largely requested in Jhushan, is now harvested and shipped from Smagus mountain area in Shinjhu County. One of the major reasons is the exhausted Makinoi bamboo resource in Nantou County after the uncontrolled massive scale harvest since the Japanese ruled era. Also, the collective bamboo blossoms in Jhushan area during the past few years also diminish the good quality Makinoi bamboo in the Jhushan area. There are only some small Makinoi bamboos available in the Jhushan area, thus the Makinoi bamboo supply in Taiwan is now mostly dependent on the Smagus area. Therefore, there is now additional transportation cost on top of the raw material price. Even so, the price for raw bamboo is so cheap that everyone tries to minimize the transportation cost of the bamboo in order to generate the most profit from the trade. Therefore, the bamboo truck is usually overloaded in the mountain area, and it would hang another empty trailer behind an overloaded truck, and they could have the excuses to avoid the overload penalty. The weight allowance of truck will be counted by its total weight, not weighted by the individual trailer, thus it can increase the overall weight by adding this extra empty trailer. Also, the bamboo truck driver usually transports the bamboo after 5PM and arrive Jhushan township around 3AM via the provincial road and not the highway to minimize the chances to get caught.

The bamboos are carefully selected by its diameter according to specific requirement requested by the kendo sword factories while the raw bamboos with a

diameter less than 2 centimetres in the market are dominated by the China's imported cheap bamboo. This following will cover five of the most common bamboo treatments that transform the material from the raw bamboo to several different visual effects (i.e., preserved green, or smoked) or different purpose (i.e., charcoaled bamboo).

### **Pre-treatment for Bamboo**

The raw bamboos are not as straight as one expects, they are normally slightly curved or twisted due to the orientation of the sunshine or the growing environment. Therefore, before applying any treatment on the material, the first step is to straighten it by toasting the curved part on the fire and adjusted by hand. This requires experience, sharp eyesight, and strength to conduct this work, thus it is mainly a male dominated job. After the bamboos are straightened, they will be cut and dispatched to different suppliers or factories for the following treatments.

Cleaning is another essential pre-treatment for most of the bamboo material transformation process. The surfaces of natural bamboo are covered with dust, moss and lichen, and bamboo's natural grease on the surface in the field, thus these must be removed before all treating processes in order to have an even and smooth finish surface for the later on crafting procedures. The degrease procedures are done by boiling with chemical solutions while the processing time and temperatures varied depending on the following treatment required. For preserved green treatment, the boiling procedure will be conduct in the lower temperature and shorter period for its pre-treatment to preserve the chlorophyll in the bamboo skin. Otherwise, the boiled bamboos usually results in a caramel toffee colour.

### **Boiled Bamboo**

The raw bamboo needs to be degreased before it is used in order to preserve the material and prevent the material from the invasion of borers and moths. The most common preserving treatment is to boil the bamboo in a long metal rectangle container. A mixture containing 0.2% ~ 0.8% sodium hydroxide (NaOH) and

water is first prepared and brought to a boil, then bamboo stalks are subsequently placed into the hot solution for at least ten minutes according to the thickness and species of the bamboo. The Moso bamboo requires more boiling time than Makinoi bamboo because it is denser and thicker. Bamboos are finally wiped dry and placed vertically in the dry area and avoid the sun after they are boiled.

This treatment will turn the colour of bamboo outer skin from green to pale butter colour. When the craft makers peel off the bamboo skin, the boiled bamboo will have a gold shimmer on the top surface. This gold shimmer colour will not fade out like the greenish natural colour of raw bamboo, and the material will last longer and is more durable than the raw bamboo. Therefore, if the craft makers want to weave a more durable object, they will use the boiled bamboo while keeping the bamboo skin to the stripes to increase the toughness of the material. The outdoor bamboo installation is usually boiled bamboo rather than raw bamboo for the weather proofing reason.

### **Preserving Green Bamboo**

Normally, bamboo will lose its chlorophyll through oxidisation, so the treatment of “Bao chin (保青, preserving green)” is using chemical treatments to keep the chlorophyll in the bamboo skin and maintain the greenness of the material. The chemical used in this process is copper sulphate ( $\text{CuSO}_4$ ), nickel sulphate ( $\text{NiSO}_4(\text{H}_2\text{O})_6$ ), and the preservation agent K33. However, these chemical treatments will produce toxic waste water during the treatment, and many Taiwanese material scientists had introduced new methods to preserve the greenness. Preserved green treatment factories are introducing new chemical methods of using alcohol-borne, solvent-borne, or the low toxic water-borne preservation agents to replace the old two-step treatment. One of the new methods is by using the Ammoniacal Copper Quaternary (ACQ) with the hyper sonic heating method to archive the same effect (Chung and Chang 2007).

## Smoked Bamboo



**Figure 1-7 Mr. Liu's kiln for smoking bamboo**

Smoked bamboo was discovered accidentally in Japan. In the old days, the Japanese usually install a bamboo on top of the hearth in the middle of the farmhouses of the time where the hook was fixed from the ceiling to overhang a kettle. The surface of the bamboo was smoked day after day and creates the dark brown patina on it. The smoked bamboo used to be very rare and can only be obtain when people are changing their roof. In olden-day Japan, when old buildings with bamboo ceilings or roof structures were going to be demolished, bamboo artisans would seek out the aged and smoked bamboo in these old buildings (Meckes 2001). The colour and patina of objects made with the smoke bamboo have been deeply appreciated as tasteful by the craft consumers in tea ceremonies since the 16th to 20th century Mingei rustic aesthetic tradition, thus the craft makers tend to have a strong demand for this material. This strong

demand for the smoked bamboos motivated people to start developing artificial ways to industrially produce smoked bamboo<sup>20</sup>.

Bamboo must be straightened, washed clean and boiled before the treatment. Bamboo stalks are piled in the temperature controlled kiln then smoked for 6-7 days. After the bamboos are smoked, there exists a heavy greasy coating on the surface and thus require to be washed again to reveal its clean, smooth dark chestnut colour surfaces. Once the raw bamboo has being smoked, the material price rises to ten times the original value.

### **Bamboo Charcoal**

Bamboo charcoal was also another Japanese invention<sup>21</sup>. The bamboo charcoal industry in Taiwan was a result of the post 921 Earthquake reconstruction project. After the earthquake, Nantou County needed to develop more economic activities during the reconstruction project. The Council of Agriculture (COA) of Taiwanese government invited the Japanese bamboo charcoal expert Toba Akemi (鳥羽曙とばあけみ) to Taiwan and transfer the knowledge and technology of producing bamboo charcoal. The COA also designate the CAS certificate and standard of the bamboo charcoal in Taiwan, the basic requirement of the CAS Taiwanese charcoal bamboo must be made by at least the four years old Moso bamboo.

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<sup>20</sup> The concept of making smoked bamboo is not complex, but the difficulty lies in the control of the correct smoking time and the temperature to create the desired colour and material texture. Japanese smoked bamboo factories always kept this knowledge highly confidential and do not release or share the know-how to others. When one of the informants Mr. Liu first saw the smoked bamboo, he is enchanted by its elegant chestnut colour. He requested the Japanese factories if there is any possibility to collaborate with them or sell him the techniques of producing this beautiful material, but the Japanese refused. They responded by treating him as an industrial spy and even insulted him for lacking the knowledge and tradition to appreciate the beauty of smoked bamboo.

<sup>21</sup> According to the Charcoal Bamboo Museum in China, Wenzhou Chen invented charcoal bamboo on October 20<sup>th</sup> in 1996 in China. However, there is material evidence that charcoal bamboo exist in Japan before 1987, even though the Japanese learned the techniques of making charcoals from China in the Tang dynasty (618 A.D. - 907 A.D.). (source: Proceedings of the 3<sup>rd</sup> International Conference

There are two types mechanism to produce bamboo charcoal, one is the brick kiln process, and the other is the mechanical kiln process. According to interviews among the producers, vendors, and the charcoal bamboo customers, most believe that charcoal bamboo made by the brick kiln has better quality than the mechanical produced one. It is also believed that the charcoal bamboo heated by the longan wood is the best quality charcoal bamboo since it produced more far infrared and it has more natural smells compare to the mechanical produced one. There are two types of charcoal bamboo, white and black charcoal bamboo. The white charcoal bamboo is black as well, but contains a silver white sheer on the surface. Both of the black and the white charcoal need to be burnt for ten days, the process of first three days are the same, but the temperatures of the following seven days are different. The white charcoal bamboo must be heated at 1000~1200°C while the black charcoal only requires 600~800°C heating temperature. The white dust on the white charcoal occurs during the cooling process when the ashes are spread on top of the heated charcoal bamboo to cool the material, and as a result leaving the white sheer layer on it.

The Taiwanese bamboo charcoal are carbonised in higher temperature than the Chinese bamboo charcoal which normally carbonised around 850 °C (Guan 2004). Also, the Chinese bamboo charcoal factories will use the bamboo residues from the process of production to make compressed bamboo briquette that is not seen in Taiwan during my fieldwork. This type of the compressed bamboo briquette will not be recognised as a qualified bamboo charcoal by the COA in Taiwan. Taiwanese consumer would prefer the whole bamboo charcoal or even the natural shards of the bamboo charcoal during the firing process over the disintegrated compressed bamboo briquette for its appearance, purity, and natural materiality.

While the quality of the charcoal bamboo can be distinguished by its visual texture, it is mostly identified by the sounds. If we click two pieces of charcoal bamboo together, the higher the pitch, the better quality it is. Since charcoal bamboo can purify water and absorb undesired smells, it is also used in food and

textile industry. Material scientists use nanotechnology to blend the charcoal bamboo powder into the textile for socks and sportswear for its odour-proof effect and the far infrared healing effect on human body. The cheap bamboo stalks became a healthy, advanced, and high-tech material after this treatment.

### **Laminated Bamboo:**

Laminated bamboo is one of the most common materials for the designers that is considered green and sustainable. The concept of making this material is to unfold the tube into a flat panel. It is mechanically cut and shaped in to one-inch wide stripes, where the left over materials in the centre were removed. It is then subsequently steamed while being pressed under high pressure to flatten it. After repeating this process several times, the straighten and flatten bamboo stripes are sent for sanding to create a smooth surface for further use on furniture, craft, or interior decoration.

Another important element for this technique is the glue that the manufacturers apply on the bamboo stripes to laminated all the pieces together. Since 1967, the Nantou County Handicraft Research & Training Institute (the formal institution of the National Taiwan Craft Research and Development Centre) developed different techniques of flattening bamboo and improved the glue recipe for lamination. Currently, most of the raw materials of laminated bamboo are using the Moso bamboo, but many of the materials are not local made and produced. There are more than 90% of the materials for laminated bamboos are the pre-treated imported material from China. There are many Taiwanese bamboo factory owners that moved their business to Mainland China to sustain their business. Since they are always in the supply chain in Jhushan, the furniture and craft manufacturers still purchase their supply from the same business, except with a different production profile.

### **Caramelised Bamboo:**

Caramelised bamboo is basically baking bamboo flake or objects in 200~300 degree Celsius a high pressure heated oven with steam. The duration is

about two hours depending on the species, season, weather, and the desired colour. The colour of bamboo will get darker after this procedure from cream to different degrees of toffee brown colour. This procedure can fix the common shortages of natural raw bamboo such as discolour, mildew, and deform; the materiality of bamboo will become tougher because the extra moisture are pressed out of the material due to the high pressure and the caramelised bamboo become not only darker in colour but also more dense as its size will also shrink after this treatment. As a result, this treatment can produce more durable bamboo material for those higher quality utensils, crafts, and furniture those need extra durability.

Modern technology has brought more possibilities for the bamboo industry, including sub-products of bamboo like bamboo juice vinegar, panelled bamboo crafts and flooring, charcoaled bamboo and charcoaled bamboo fabrics designed using nanotechnology. All these new usages of this old material have revitalised the previously waning bamboo industry. Collaborations between high-tech industry and traditional craft-making by Taiwanese designers made bamboo, as my proposed subject, a doubly interesting topic for research. Although bamboo is an old material that is famous for its sustainability, it is now also a popular material for designers around the world. Because Taiwan is rich in this natural resource, there is great potential for developments in bamboo design on the island.

#### **1.4 The Transcending Value of Bamboo**

The value of bamboo in Taiwan is built up economically and culturally. As we had explained in the previous sections, the market value of this raw material is very low, but it rises after several different treatments and people are still developing new treatment to add more value on this material. These treatments not only change the value of the market price of the bamboo but also change the appearance of this material. Due to the limited natural resources on this island, bamboo is a relatively abundant natural resource of this island and generously provides the Taiwanese people an affordable, accessible, and rich potential material from the Mother Nature. Culturally, this material is deeply rooted in

Taiwanese culture via its useable totality and the symbolic meaning associate with it. An artist Wei Lee recalled his personal experience when he conducted his art academy final project in the U.S., he had received a lot of hearty support from the overseas Taiwanese while he mentioned that he will use bamboo to make his final art project. When he need to find a small truck to transport his bamboo work, an overseas Taiwanese who is a total stranger heard about his needs and kindly volunteered to offer his truck for him, which is really rare in the community since the settled immigrants usually do not trust students whom will only stay in town for a short term period. The truck owner told Wei Lee that he wanted to help him because he is not just creating a piece of personal art work but also promoting the Taiwanese cultural identity with this very Taiwanese material: bamboo. Taiwanese people have the cultural preferences of bamboo especially appreciating the contour and the grain of bamboo. Evidence of this argument can be demonstrated via the three cases given below to illustrate further the understanding of the value of bamboo in Taiwanese culture.

This section will firstly examine how bamboo is used in the tea ceremony followed by the discussion on fake bamboo and explore the value of bamboo that has transcended and developed its visual abstract meaning beyond its materiality. The evidence of how bamboo had been chosen to show the Taiwanese collective identity in various international exhibitions will be demonstrated at the end of the last section of this chapter.

### ***The Importance of bamboo at the Tea Ceremony***

From interviewing the craft makers and the craft store keepers, it was shown that people who participating at the tea ceremony are the main bamboo crafts consumers today in Taiwan. In the tea ceremony events, bamboo holds an important role in the ‘tea seat’ design and the display its material associations through the ‘tea seat’ design. The tea culture is deeply rooted in Taiwan based on the southern Chinese tea consuming customs. The systematically tea plantation can also be tracked back to the Japanese ruled era where several locations above

the Tropic of Cancer, and my fieldwork site, Nantou County, is one of the important region for the best quality black tea and Oolong tea in Taiwan.

Tea is another important economic income for Nantou County in addition to bamboo. Compare with bamboo, tea is certainly a high value and labour-intensive farming products. The tea leaves need to be harvest in the foggy morning and go through several processes before it gets fermented and baked. The consumption of tea could be as easy as dipping a tea bag in boiling water or just to get a bottle of ready-made tea beverage from the fridge in any of the convenient store in Taiwan. Tea is such a popular beverage in Taiwan that it has developed several different tea preparing rituals including the popular local tea consuming cultural and the high culture of tea ceremony for artisan tea. The locally invented Taiwanese Bubble tea and Pearl tea are the most popular ways for young Taiwanese enjoy their favourite drink. The important process of bubble tea is about shaking and mixing thus creating the foams on top of the tea which is how the name of bubble tea came from. The bubble tea culture is invented in Taiwan; however, its legendary origin is still up for debate since both the Hanlin teahouse from Tainan and the *Chun Shui Tang*<sup>22</sup> from Taichuang both claim that bubble tea was invented by them.

For the high tea culture, the Taiwanese tea ceremony is based on the Southern China tea culture and has been deeply influenced by the Japanese tea ceremony. The display and setting of the tea sets are as important as drinking and tasting the tea itself. When organizing a tea sets (茶席 *cha-shi*), the host needs to decide a theme and decorate the tea set accordingly. Usually, there will be some kind of games played among the tea host and the guests. For example, when the

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<sup>22</sup> “In 1983, Han-Chieh Liu established Yang Xian Tea Shop (predecessor of Chun Shui Tang) , and made the traditional tea become the popular ice drink by creating foam black tea. Foam black tea (or bubble tea) has become a popular term. The most famous product it created in 1987 was “Pearl Milk Tea”. Once again, it caught young people’ taste quickly. In 1991, it opened a teashop in Jing Ming 1st Street, Taichung as a leading European fashion model on the tea street. In these years all teashops are learning from us and Chun Shui Tang’s charm are expanding from Taiwan to Hong Kong, Mainland China and all Southeast Asia.” (text quote from Chun Shui Tang official website: <http://chunshuitang.com.tw/business-overview/management/>, access on 18 Jan. 2012)

theme is plum blossoms, the guests should create or quote some poetry or create some poetic sentence to fit the theme. Sometimes, the host will give out some riddles for the guest to compete with each other. Meanwhile, the tea set should also design according to the main theme as well. Designing a tea set is very sophisticated and not only the aesthetic of the setting but also the manner of the tea set host will be considered in the tea set competitions in Taiwan. Therefore, the objects for completing an elegant tea set design at the tea ceremony are extremely important, so those people participating in the tea ceremonies are keen to looking for suitable crafts and objects to fulfil their needs. Bamboo crafts is a common genre of display objects they will choose to decorate their tea set, so this observation echoes the responses from the bamboo craft makers and antique shop keepers that the main consumers of high value bamboo crafts are those people hosting the tea ceremonies.

The Taiwanese tea set display design is based on the southern Chinese Hookah tea culture and deeply influenced by the Japanese tea ceremony culture. The southern Chinese Hakka style of tea culture is usually called the scholar tea that refers to the elegant and poetic performance between the host and the guest. They usually use small teapots and teacups instead of the bigger ones, which are more commonly used in the northern China.

Among the tea ceremony hosts, there is a preference of using bamboo objects in the tea ceremony display design. A tea ceremony attendance told me that it is because the bamboo is graceful and elegant. Using luxury materials on the tea set display can't display the aura (氣質) of the tea set design. Mr Chen, a tea ceremony host said, *'the bamboo crafts can brought the aura of scholar tea culture. Of course you can put expensive materials in the tea set, but that is too philistine and not etiquette for a celebrity'*. They appreciate the 'awkwardness' of imperfect materials and appreciated the natural and liberal gesture of the materials and planets. Bamboo basket is one of the favourite objects the tea ceremony performers prefer to acquire. They use these bamboo baskets or even antique bamboo stationary cases as the English picnic hampers to carry their tea

sets and display it alongside when they hosting the tea ceremony. These increasing needs for containers for the tea sets not only stimulate the sales of the pre-made or bespoke bamboo basket for individual bamboo craft makers but also encourage those tea ceremony practitioners to learn these craft skills in order to create their own creations for designing their tea set display. In fact, the step-by-step workshop teaches how to make a tea set basket is a popular theme for bamboo weaving workshop beginners, and the bamboo tea spoon and tools are also taught in the bamboo carving class. Many of the students' works for creating for the tea ceremony decoration sold very well in the craft shops according to Bamboo weaver Silk and bamboo carver Mr Yeh. Mr Yeh further explained to me that the object at the tea ceremony is not only for 'look at' but also to 'play with', so the touch and texture is as important as the visual appearances. Appreciating the beauty of bamboo objects is about the grain, the texture, the techniques of carving, the inner meaning of the motifs and designs. The elegance of bamboo enable this material becomes the favourite material for the tea set display.

### *The Fake bamboo in the Taiwanese living environment*



**Figure 1-8 The Pottery Teapot in the Shape and Texture of Bamboo.  
(Made by pottery artisan Tang Jun-ching)**

When people discuss about true or fake, they usually consider the authenticity regardless of whether it is about the cultural heritages (De Jong and Rowlands 2007) or the counterfeit goods such as clothes or handbags (Vann 2006; Vann 2009; Lin 2011; Miller and Woodward 2011). However, it is the mimicry of the visual appearance of bamboo that demonstrated the importance and the significant value of this material to Taiwanese people. The shape and colour of bamboo was so appreciated by Taiwanese people that they imitated the colour and shape of bamboo by other materials such as concrete or stainless steel in Taiwan. One may easily found these fake bamboo railings, columns, surface, or even wallpaper of bamboo in the everyday living in Taiwan. The mimicry of bamboo supports the preference of bamboo among Taiwanese people even if these mimicries were just shaped or printed, as they were the real bamboo. Since the material value of raw bamboo is much lower than the other materials which are

using for imitating it, this mimicry is not a cheap solution or cheaper substitute for the original material. The presence of this material, bamboo, in the environment whether it is using at the indoor or outdoor environment, its visual presence is welcomed and embraced by Taiwanese people.



**Figure 1-9 A concrete tap post was made as a bamboo stalk. The green paint had faded. (picture taken at a hotel garden in Nantou County)**

The common concrete handrail in many scenic spots or parks are moulded as the shape of bamboo with the grain and sections then painted green and sometimes including a ring of yellow to detail the grain. Enamel stainless are another popular material for imitation of bamboo in Taiwan recently, they are more durable and almost maintenance-free. There are garden pavilion and landscape designs are made by this kind of mimicry material to present as if they were made by bamboo. The visual appearance of bamboo was highly appreciated, but choosing the actual bamboo material for interior design might be considered as a cheap choice only suitable for the rural bistro or nostalgic souvenir shop. It

can be seen as a bad taste, too oriental and cliché for ‘professional Bauhaus trained’ architects and designers. These examples of appreciating the fake bamboo as an image or symbol rather than the actual material gave plenty evidence that bamboo had transcended from a real physical material to a symbolic material that obtain more visual meaning beyond its materiality.

It is inevitable that Taiwanese people emphasising on appreciating the grain, the pattern, and the meaning of bamboo. Through discussing the ‘fake bamboo’, it revealed that the value of bamboo has transcended its materiality and has developed its visual abstract meaning beyond its materiality. Moreover, the real bamboo material is also an important ‘wrapping’ material for decorating Taiwanese spaces. From the nostalgic Taiwanese traditional bistro interior decoration or the food stand for traditional Taiwanese food at the night market to some trendy café, restaurant designs, and even luxury hotel interior designs, bamboo has been chosen as the material which present the localness and essence of Taiwan. It stands for the grassroots Taiwaneseeness and has established its status by presenting and exhibiting the collective local identity toward the others from tourism to national display.

### ***Exhibiting Taiwan***

Following the trends from the previous section, bamboo is a useful, affordable, beautiful, flexible, and meaningful plant in Taiwanese culture. Despite of its cheapness as a material, it is not surprizing that bamboo was chosen as a material which is capable to display the Taiwaneseeness. Bamboo was historically the important theme material representing Taiwan at the expo since early 20<sup>th</sup> century. In the Japan-British Exhibition in 1911 and the International Exposition in San Francisco in 1915, they were both presenting the bamboo-structured Formosa Tea House. According to some vintage images dated back then, the interior of the teahouse was also equipped with bamboo furniture and objects. The Taiwan pavilion at 2009 World Expo in Shanghai and the 2011 Taipei International Flora Exposition both featured bamboo as the most important material in the exhibition special design.



**Figure 1-10** A souvenir postcard image of the interior of Formosa Tea House at the 1915 International Exposition in San Francisco. (Image sourced from the Taiwan Digital Image Archive)

The main exhibition hall of the 2009 Taiwan Pavilion in Shanghai World Expo is covered by weaved bamboo. The architect intended to create a space, which represent the space underneath a tree where old Taiwanese used to gather together and form their local agora. The ceiling and the centrepiece of the tree trunk are all seamlessly weaved together with bamboo stripes which represent the life and destiny of all Taiwanese whom are actually weaved together; no one should be separated from each other. Several of my fieldwork informants had been working on this construction project when I conducted my fieldwork. According to their response, they learned about the different materiality of the Taiwanese bamboo and Chinese bamboo from constructing this project. The Chinese bamboo is softer than the Taiwanese bamboo because they are usually harvested from small hills. Also, due to the winter snow in China, the bamboo farmers will cut the tips of the bamboo to avoid the snow piled up on the top of bamboo and crash the plant. However, since the top tip is cut, the inner water circulation cycle is speeded up because the top end is opened to the air and results in a softer texture of the fibre and less flexibility of the material. Fuma, a woman whom learned her skill from my major informant Silk, indicate the difference of Chinese bamboo and Taiwanese bamboo to me, and she said, *'of course the*

*Chinese bamboo is easier to work on, it's softer and easier to cut, but I still prefer to work with the Taiwanese bamboo for my personal work. The Taiwanese bamboo is much stiffer and the end product will create a kind of more solid appearance'.*

Another informant, Chao-ming Liu<sup>23</sup>, is responsible for the bamboo installation at the 2011 Taipei International Flora Exposition. He stayed in the small temporary house in the construction site for almost three months to complete the construction project. This expo actually benefited many bamboo craft makers in Nantou; these bamboo installations and bamboo structures shown unlimited possibilities of this material, and also earned many interviews opportunities and press exposures for these craft makers. Many pavilions and shelters are all made by bamboo in the 2011 Taipei International Flora Exposition. The most important Taiwan pavilion in this expo is actually a super-sized weaved bamboo granary which allows people to walk through. The press praise this pavilion for presenting the 'tai-wan wei (taste of Taiwan)' and 'transcending the old memory in the agriculture society to our life today.'

### ***Interim Summery***

The cases and examples about the material culture of bamboo in the Taiwanese society in this chapter showed the importance of this material in the Taiwanese culture and its rich cultural resonance within. This material and cultural background laid the foundation and elaborative potential of creating objects with this local material with traditional craft techniques and knowledge. Therefore, it is not surprising to many Taiwanese designers to choose this material to create their new designs such as in the Yii project and present them to the international market as the Taiwanese Design., There would be more discussion

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<sup>23</sup> Mr. Liu is also the one who own the smoke bamboo factory in Jhushan. His interview will be included in Chapter Three.

about the Yii project in Chapter Four that would exhibit this tendency of material preference, but it is first necessary to illustrate the core crafting techniques and the knowledge transfer process in the next chapter to provide more contextual knowledge about bamboo crafts and the knowledge transfer of it.

## Chapter 2 *Chih Jhu: the Techniques of Bamboo Crafts*

The materiality of bamboo has been imbedded into the discourse of Taiwanese-ness before the era of Japanese rule and onwards. Bamboo, as we have seen in the previous chapter, has rich cultural resonance and is the nexus of Taiwanese culture throughout history in several aspects. It could be the graceful metaphorical symbol of wisdom and moral integrity; it could be the food that provides nutrition and fibre for diet; or as a cheap material, it could be useful for making everyday artefacts. Since the market price for the raw material of bamboo is very cheap, the value of bamboo craft was determined by its craftsmanship rather than its material value. This chapter intends to demonstrate the fundamental knowledge of bamboo weaving, subsequently leading to the further discussion of the relationship between people and the skills they obtained through adopting the method of *chaîne opératoire*. This chapter does not limit the discussion of *chaîne opératoire* with how Leroi-Gourhan defined it as a series of technological operations ‘which transforms a raw material into useable product,’ but takes these technical activities further, as a sequence of technological choices and natural determinism toward developing some social and cultural constraints, agency, and innovation. Since this material is relatively cheap compared with other materials, it allows an individual’s creativity to be elaborated, developed, and expressed.

To create is to innovate. Ingold argued that reading the result of creativity ‘backwards’ may allow us to find the creativity of action by ‘tracing the novelty of its outcomes to unprecedented ideas in the mind of individuals’ (Ingold and Hallam 2007: 2-3; Ingold 2010: 97) but ‘this reverse attribution of emergent form to prior design omits the creativity of the very processes wherein every design is realised in practice.’ He suggested that creativity must be ‘read “forwards” in the movements that give rise to things, rather than backwards from their outcomes’ (Ingold 2011: 6-7). This chapter undertakes this trajectory and intends to read Taiwanese bamboo designs forwards.

The title of this chapter, *chih jhu*, presents the three layers of the study of bamboo craft making in this chapter: “understanding bamboo (知竹),” “weaving bamboo (織竹),” and “life satisfaction (知足).” Firstly, in the section where *chih jhu* means “understanding bamboo (知竹),” the four different categories of Taiwanese bamboo crafts and several important figures of these techniques in Taiwan are documented, and it is described how the bamboo craft industry was developed in Jhushan, to ground a backdrop to the field site (2.1). The second meaning of *chih jhu* refers to “weaving bamboo (織竹),” where the actual practices of making things with bamboo, focusing especially on the *chaîne opératoire* of bamboo weaving (2.2), are analysed. Subsequently, extending the *chaîne opératoire* of bamboo weaving to the knowledge transmission among different weavers through different generations is illustrated. The *chaîne opératoire* method is applied to study bamboo weaving techniques and knowledge transmission among different weavers through different generations. The final interpretation of *chih jhu* is about the stages of mastering the techniques and further develops the philosophical understanding of life and satisfaction of life (2.4). Acquiring the techniques of making becomes the path to exploring the world with freedom and finding satisfaction in life.

## **2.1 *chih jhu* <I>: Understanding the Techniques of Bamboo Crafts**

Bearing the name of Jhushan (the bamboo mountain), the site has accumulated the largest population of bamboo craft makers in Taiwan. In 1932, this town was the birthplace of the patent awarded first semi-automatic chopsticks manufacturing machine.<sup>24</sup> It is also the location where the first bamboo industrial park was established in 1973. In the past, this township accommodated many bambooware factories and since the colonial era it

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<sup>24</sup> Manufacturing bamboo crafts industrially started in the Japanese ruling period, when, in 1932, Ho-shun Chang (張合順) in Jhushan Township was awarded the patent on his automatic chopsticks manufacturing machine by the Japanese government.

focused on developing industrially manufactured products, while the bamboo craft cluster in Tainan County focused more on handcrafted bambooware such as baskets and sieves. The bambooware manufacturing industry reached its peak around the 1970s, then declined after the 1980s due to the increasing labour cost in Taiwan. Besides, Taiwanese preferred plastic from the petrochemical industry, rather than bamboo, to fit Taiwanese's more 'ideal modern life style.' For Taiwanese people at that time, plastic was a new and more durable material that represented efficient, modern technology. It is as light as bamboo but more weather resistant and waterproof. Consequently, the price-driven competitive export demand for bamboo, and the local consumption demand both decreased rapidly during that period of time. However, the rich local craft training resources, including the Provincial Handicraft Research Institute (the former institute of the National Taiwan Craft Research and Development Institute) and the Art and Craft Division at the Jhushan High School, both provided bamboo craft training courses and workshops to the public. Although the bamboo industry dramatically shrank after the 1990s and migrated abroad to (mainly) China and Vietnam, these establishments accommodated more bamboo craft makers than any other areas of Taiwan. When the bamboo industry was flourishing, almost everyone in Jhushan Township was extremely busy assisting the industry produce more goods for export, and they had no time to develop their own style or their own designs. The decline of the mechanical production bamboo industry in Taiwan left skilled labourers redundant and available to develop original and artistic bamboo craft designs of their own. People in Jhushan had to transcend the traditional and routine styles that either depended on Taiwanese vernacular everyday life or followed the designs of export orders from foreign countries. The contemporary atmosphere and economic environment forced these people with craft skills to start trying to design and develop more complicated and novel designs to attract new customers.

***Different types of bamboo crafting techniques***

In Taiwan, there are four main categories of bamboo craft: weaving, tubular furniture, carving, and laminated bamboo. Specialists of each technique are all available in Nantou County, and especially in Jhushan Township, thus this area provides a great opportunity to understand the network of making bamboo crafts. The following table includes some of the informants whose work will be most discussed in this chapter; there is a full list of informants in the appendix. This research especially focused on the weaving techniques in order to demonstrate and discuss the transformation of knowledge, techniques, and designs of the Taiwanese bamboo craft.

<b>Craft Skills</b>	<b>Material</b>	<b>Informants</b>	<b>Specialty</b>
Bamboo Weaving	Makinoi Bamboo	Master Huang	Taught by the Japanese
		Master Lee	Lacquered on bamboo
		Silk	Custom made delicate woven works
		Lotus	Delicate feminine design
		Susu	Collaboration with designers
		Awai	The indigenous style with twisted rattan and ash coating
		Su-ru	Silk's student and a weaving instructor
Tubular furniture	Makinoi Bamboo	Lee Recco	Bespoke tubular bamboo appliances
		Chen Kao-ming (as referred as Mr. Bamboo)	Media call him Mr. Bamboo
Bamboo Carving	Moso Bamboo, Ma Bamboo	Yeh Chi-hsiang	Very artistic and his works are popular among connoisseurs.
Laminated bamboo	Moso Bamboo	Larry Liu	The founder of the leading Bamboola brand.
		Tai Zhen-yi	The owner of Pu-yuan
		Ann	The actual maker of

**Table 2-1 the list of bamboo craft makers informants**

## Weaving

Weaving with fibre might be one of the oldest techniques in human history. This technique is applied on folk arts, fashion, engineering, science, medical researches and other various fields to create countless fabrics and objects in various forms, styles, and designs. The tradition of bamboo weaving in Jhushan comes from three main sources: the Han Chinese, the Japanese, and the indigenous culture. The influence of indigenous culture is fairly minor compared with the previous two, and the Japanese style and techniques mainly dominate this area because of the systematic craft training in the colonial era. Although several indigenous groups in Taiwan such as the Seediq<sup>25</sup>, Atayal, and Saisiat are famous for their weaving skills, and for their legends and myths about the techniques of weaving as a representation of one's virtue, the techniques of bamboo weaving were not mentioned as the scale to value one's virtue, only the textile weaving was. Most of the indigenous bamboo weaving skills was blended in and lost through the knowledge and skills transmission at the purposely-established bamboo weaving training programs held since the Japanese ruled era. The indigenous and the current bamboo weaving techniques can be differentiated via the tools they used and by some of their different treatment of the raw material. There will be more detailed discussion about the differences in the later sections.

Weaving is a technique that interlaces more than two yarns or liner material at particular angles to form a surface or an object, and it usually creates certain patterns on the woven products. It requires a lot of patience for the time-consuming preparation process and carefulness to avoid any possible mistakes. If one stripe among the hundreds is woven in the wrong sequence, it will destroy the whole pattern of the object. The quality of the woven bambooware in Taiwan varies, it can be delicate artistic work by high ranked craft makers or simple and

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<sup>25</sup> A woman should work hard everyday when she is alive. When a woman dies, she will meet a guard who will examine her entire life by the rainbow bridge. If the guard finds out the dead woman can weave the Miri (a type of Seediq fabric), the guard will let her pass the rainbow bridge and enjoy her delightful afterlife on the other side of the bridge. However, if the guard finds out the dead woman can not weave Miri, the guard will stop her by the bridge and push her down to the gorge to be eaten by the crabs.

rough nostalgic everyday objects made by anonymous weavers. The preparation work for separating bamboo into stripes requires time and skilled techniques. The long and dull preparation work is also the most common barrier for beginners to carry on learning the bamboo weaving techniques.

### **Tubular furniture**



**Figure 2-1 the classic bamboo tubular working stool and tools**

This distinctive craft skill takes the best use of the material character of bamboo. It is called the craft of Jhu kuan jia ju (竹管家具, tubular bamboo furniture) in Taiwan. The hollow tubular stalk of bamboo can be carved and bent with heat. This technique is common in Han Chinese Culture for furniture making. Tubular bamboo furniture usually use bamboo nail instead of the iron nail. Due to the fact that bamboo will lose its moisture in the material and shrink day after day, the joint will become loose after a while and the bamboo tube will crack if iron nails were used. Therefore, they need to use the same material for making the nails to join different pieces together as a tenon. A bamboo furniture maker

usually travelled around and looked for their potential employer. The bamboo tubular furniture maker only carries very simple tools and usually gathers the material for the furniture making locally, hence they usually harvest bamboo from their employer's backyard. The mobility of tubular bamboo furniture is not only due to its lightweight and affordability; its style and producing process are also very mobile and flexible. It is worth noting that the bamboo furniture makers called the short bamboo tube at the front of their working board as *Tu di kong*, which means the guardian of the local land. This short bamboo tube acts as the centre of resistance when the craftsman was sewing down or bending the bamboo tube. The simplicity of tubular bamboo furniture that all the nails, tenon, structures, and the surfaces are all in one material constitutes the aesthetics of tubular bamboo furniture for this beauty of material simplicity.



**Figure 2-2 Mr Lo, Owner of Sun Moon New Bamboo Shop is Making a Tubular Furniture**

## Carving



**Figure 2-3 Bamboo Carving**

Bamboo Carving is very similar to wood carving but it works on a curved tubular surface instead of a panel or a block of wood. Many bamboo carvers also learned wood carving as well, but they chose bamboo to work with for the accessibility of the material and the challenges of working on the tubular shape of bamboo. A bamboo carver in Jhushan, Mr Yeh, who owns a craft studio named ‘ArTop,’ used to be the apprentice of a famous wood carver in Taichung when he was young. There are three basic categories of bamboo carving base on the relief carving techniques: the Ying carving, the Yang carving, and the pierced relief. Bamboo carvers share the same types of tools and the basic carving methods with the wood carvers. However, the bamboo carvers usually leave some outer skin of the bamboo on the surface and keep the joint of the bamboo section to differentiate its material character from wood. Carving the solid bamboo rhizomes is a challenging work because the carver has to deal with the complicated texture pattern of the material. However, this is the most interesting and valuable part of the bamboo carving.

The Taiwanese bamboo carvers usually prefer to carve the theme about nature such as the orchid, lotus, frogs, or country lifestyle while the carver in

China today still mainly focus on carving the magnificent detailed scenes about ancient stories or the Chinese mythology. Yeh once said to me about how he saw his work. He said, *“I do not create these works you see here on my own. I see something in the material before I start carving it. Those irregular and awkward shape materials that are like junks in the eyes of the bamboo craft factory owners are the treasure for us carvers. We can see the potential of the material; what we do is not just create but to **bring out** the pre-existed characters in and of the materials. I work with nature, not create something from nothing on my own.”*

For bamboo carvers, they treat each different pieces of material as individual independent subjects. No two stalks are identical, so there will not be two identical objects even if the same person carved these two objects with the same design.

### Laminated bamboo



Figure 2-4 Laminated Bamboo Craft design and made by Bamboola ©

Among the four typical types of bamboo craft categories, laminated bamboo are usually the most commonly used techniques for most of the designers but it is also the less authentic bamboo techniques for many bamboo craft makers.

*'Laminated bamboo works are not bamboo anymore; using the laminated bamboo is just like using wood. Besides, it is the fake wood,'* declares bamboo carver Yeh and many other bamboo craft makers. For them, the laminated bamboo loses the materiality of bamboo, and it should never be treated the same as wood either.

The processes of making laminated bamboo generalise the material and demolish especially the visual material character of bamboo. Since this technique neglects the authenticity of the material, it loses its value as an authentic bamboo craft.

The laminated bamboo products are popular around the world now, many designers create household product such as utensils, salad bowls, kitchen tools, furniture, and floor panels under the flag of green design or claim of sustainable living style since they do not harm the forest. However, the process of gluing the bamboo pieces together typically uses toxoid material and pollutes the environment. Laminated bamboo products are in fact not as sustainable as people might expect, but not many consumers and designers are aware of this fact. Many scientists and engineers are still researching new compositions of the non-toxoid glue and the less polluted manufacturing process. Bamboola and Pu-yuan are the two major laminated bamboo manufacturers in Taiwan, both of them claim for their Taiwaneseess and craft skills. However, they have been accused by some craft makers for using the Chinese Moso bamboo instead of the Taiwanese Moso bamboo for their products which led to a scandal in Taiwan. Since this process generalised the material, it is difficult to identify whether the material is local or imported.

During the fieldwork in Nantou, all four types of workshops were visited and recorded. However, the bamboo weaving techniques is the most interesting among the four because it includes more obvious evidences about cultural influences, changing style, and its own design. Therefore, the following sections would demonstrate how the weaving technique of bamboo is engraved with the

cultural influence, technical development, pedagogical debate, and the transmission of knowledge and skills.

### ***The Knowledge of the Imported Tradition(s)***

The process of crafting objects with bamboo is very labour intensive and embodied with skill knowledge. For Marx, labour is ‘a process between man and nature,’ and this process of man ‘mediates and controls his material interchange with nature by means of his own activity. Confronting the materiality of nature, he is himself a force of nature’ (Marx and Engels 1974: 53). This Marxism view point on the result of labour, which in my case is the crafted object, are not ‘isolated phenomena, but are mutually dependent with other cultural activity of predominantly social, political, moral, religious, or scientific character’ (Marx and Engels 1974: 6). While Marx seen the object as the result of the qualities mentioned above, Gell might looked at the same subjects with the agencies attached on them which I would consider as read the object ‘backward’ in Ingold’s critics on the ways of ‘reading things’. There are also abound literatures including Arnold (2000), Bowser (2000, 2002), Dietler and Herbich (1998), Gosselain (1992, 1998, 1999, 2000, 2008), Livingston Smith (2000), MacEachern(1998), Sall (2005), Sillar (1997), Stark (1999, 2003), all indicating that we cannot expect to understand the spatial and temporal evolution of the craft making without ‘paying attention to specific social and historical context which they belong’ (Gosselain 2008: 152). Therefore, this section of the chapter intend to excavate how the skill knowledge of bamboo craft was developed in Taiwan through the historical background of several key institutions that influenced the developments of bamboo craft in Taiwan, and discusses the cultural hybridity of skill knowledge which leads to the current new bamboo designs.

The knowledge of bamboo weaving is about the design, techniques, and styles. It is really difficult to define what is the Taiwanese bambooware style, because it is very ambiguous and hybrid. In the 18<sup>th</sup> Century, the Han Chinese people habituated in Taiwan did not participating in craft making; they would either purchase or brought the object from China or exchange them with the local

indigenous people because they were preoccupied at opening new grounds and farming. There was not enough male labour to bring wasteland under cultivation, and thus people in Taiwan also didn't have time and skills to make craft. As a result, they imported many tools, crafted objects, and furniture from Mainland China. Sometimes they would trade with the indigenous people for some local utensils, but most people were more used to, and preferred the Han Chinese style utensils. Therefore, the design, the techniques, and the knowledge of making circulated among the Han Chinese immigrants in Taiwan were adapted mainly from Mainland China at that time. The local bambooware during this period in Taiwan were mainly functional tools in Han Chinese style, except for in the indigenous communities. However, the local knowledge of making was mainly for making useful tools, not the delicate decorative objects. Even at the late 19th Century, bamboo craft making in Taiwan are still limited in the rough agricultural tools and utensils for Han Chinese; the indigenous bamboo crafts were also made mainly for the domestic and agricultural usages (Lin 2002: 28). Before the Japanese ruled era, the bamboo craft skills had never been systematically trained and performed. The Japanese introduces the knowledge of making delicate bamboo baskets for floral arrangement. Due to the life style changes and the demands of exporting goods to support the consumption of the Japanese main island, the needs of Japanese style bambooware grew rapidly during colonial era. Before the Japanese ruled period, there was no mass production craft industry; most Taiwanese crafts were made for local consumption. However, there is an ancient stele, which dates back to Qing Dynasty (1824 A.D.) shows the evidence of harvest and trade of raw bamboo from Jhushan Township. On the stele, it announced that no one should rob those bamboo clusters in the rivers. If anyone offends the rule, they will be charged for a large amount of fine and severely punished by the government. The fine will contribute to the Mazu temple for temple maintaining cost and supporting the local poor for food and services. This stele is still displayed in the Mazu temple in Jhushan Township today. Bamboo is obviously the most important material to people in Jhushan.

	Institute	Mission and Goal
1936	Fine Bamboo Crafts Supervision Workshop (竹細工指導所)	Local gentry in Luku suggested and the proposal of bamboo workshop to upgrade the local industry got accepted after Yanagi admitted the rich bamboo craft resources in Taiwan after his visit. So the Township established two Bamboo Crafts Supervision Institutes in Jhushan and Luku township in order to improve local craftsmanship but this project failed in two years due to lacking of participants.
1938	Jhushan Town Bamboo Craft Training Institute (竹山郡工藝傳習所) (Takeyama-gun Takezai Kōgei Denshujo)	The Japanese ruled government set up a 'school style' Jhushan Town Bamboo Craft Training Institute as a funded boarding school. The graduates from the three years program can receive a high school equivalent academic degree so there are stable perspective students coming to the training institute annually. The mission is to make superior Japanese style bamboo crafts for exporting to Japan mainland. The instructor will bring the sample from Japan and asked student to reproduce them accordingly.
1946	The Jhushan Town Bamboo Craft Training Centre terminated due to the Japanese authority was forced to leave Taiwan after the WWII.	
1954	Nantou Craft Research Workshop	A county level institution for training skilful local people participating in the production for export market and earned more income.
1956	Taiwan Handicraft Promotion Center	It is a non-profit social oriented organization funded by the Council of U.S. Aid (CUSA) and dedicated to the development and promotion of the handicraft industry in Taiwan.
1959	Nantou County Craft Research Institute	Reformed from former Nantou Craft Research Workshop as a local institute of the county. Its goal was to capture and transmit the traditional skills, invent new tools, machine, and also introducing new techniques to the industry.
1973	Provincial Handicraft Research Centre	Reformed from the previous Nantou County Craft Research Institute and became a provincial institution.
1974	The Jhushan High School Art and Design Division	Officially brought design education into craft training in Nantou County. Its bamboo craft major program was the first and best training program specialising in bamboo crafts in Taiwan.

**Table 2-2 The Chronological chart of the establishment of important bamboo craft institutes in Taiwan**

The colonial government decided to invite Japanese craft masters to Taiwan to train local Taiwanese people how to make the products that fulfil the Japanese lifestyle and needs. Therefore, they established several craft training schools after they had found that there is abundant bamboo recourse on this island through large-scale colonial natural resources and ethnographic research investigation. In 1936 the Japanese ruled government established two Fine Bamboo Crafts

Supervision Workshops (竹細工指導所) in Jhushan and Luku township in order to improve local craftsmanship. Ostensibly these institutes functioned to advance local craftsmanship, but they also allowed local bamboo craft skills, which were inherited from southern China, to be modified before being exported to Japan. The colonial government hired two Japanese instructors and recruited ten Taiwanese students to learn Japanese-style bamboo crafts. The Japanese craft makers also taught the local Taiwanese makers how to apply lacquer surface on weaved objects. Two years after the establishment of the Bamboo Crafts Supervision Institutes, the Japanese ruled government established Jhushan Town Bamboo Craft Training Institute (竹山郡工藝傳習所)<sup>26</sup> to improve the local craftsmanship in 1938. Many distinguished Taiwanese bamboo weavers are all graduates from this most influential four-year craft training program. Potential students had to finish their elementary school education and pass the entrance exams in subjects such as sketching and language before receiving an offer to study in the training centre. After they enrolled, students were given a small allowance. Tu-shan Huang (shown as Master Huang in the following sections) is currently the eldest professionally trained bamboo weaver in Nantou. He was taught by the Japanese from 1938 to 1942 and later became the most influential figure on transmitting the techniques of bamboo weaving in Taiwan. Master Huang and his first generation student Jung-lea Li, whom I interviewed during the fieldwork, are two of the still living and most experienced bamboo craft masters, whom both are part of this generation from the Japanese ruled period.

According to interviews with these former students, their Japanese instructors, Ikeda (池田) and Doidani (土肥谷), taught them how to weave domestic containers and also military supplies, such as suitcase and handbarrow for the Japanese during the South Pacific War (Wong, Syu-De 1998:6). The bamboo industry in Taiwan has become predominantly export-oriented since this time. In 1940, there were almost twenty thousand Taiwanese working in the

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<sup>26</sup> This centre was later succeeded as the former institutes by National Taiwan Craft Research Institute after the KMT government took over Taiwan.

bamboo industry, which produced bamboo objects for both local and export markets in a labour-intensive process. Bamboo crafts and bamboo sprouts were regularly exported to Japan and China from Taiwan. Master Huang, the former student of the Japanese instructors, recalls that almost every family in Jhushan Township were participating in the bamboo craft production during the 40s. The dealers gave them some samples then the local makers would copy the style and design of the samples. When they had accumulated a certain amount of the end products, they would sell them to the dealer in exchange for some extra income for their families. The designs of the crafts they made were based on what the dealers required and were not involved with personal innovation. These export-oriented objects are usually flower baskets, clothes cases, and woven bamboo containers for Japanese domestic consumption or the containers for the military use in the pacific wars; these objects have little to do with neither the makers' personhood nor usages. On the contrary, other bamboo crafts for local use such as agricultural tools and handmade toys are filled with each maker's ideas of solving a problem or each child's special requests. These individual's creativity of crafts will be further discussed in the next chapter.

The bamboo craft industry is significant to Taiwanese people and was also recognised by her coloniser, Japan. In the Japan-British Exhibition (5/1-10/31, 1910), bamboo crafts were selected along with Taiwan pith paper and tea as the three main focus exhibitions in the *Taiwanese Pavilion* representing the Japanese ruled Taiwan (Lu 2002; Lu 2005). According to the governmental documents, the quantity of Makino Bamboo harvest has reached its peak, exporting 3,775,236 pieces to Japan in 1936. However, the market price of bamboo is not very stable and the growth of harvest does not really benefit the local farmers. Moreover, the Mitsubishi Corporation strictly controlled trading the bamboo harvest and all the harvest has to sell through the Mitsubishi Corporation. During this period of time, there are continuous conflict between the local bamboo farmers and the Mitsubishi Corporation. Therefore, some bamboo farmers wrote letters to the Japanese ruled governor-general to present a petition (Hsu 2002: 773-780). This book, *The History of Jhushan Township*, included the whole original text of the

letter (Hsu 2002: 838-844) that illustrated the origin of the conflict between the bamboo farmers and the Mitsubishi Cooperation and the following up witchcraft homicides due to this conflict (Hsu 2002: 780-784). There are abundant of evidences in the governmental documents and annual reports that showed the Japanese colonisers imported bamboo, bamboo craft, and the bamboo shoots from Taiwan. Consequently, the ways of producing these products were deeply influenced, or perhaps controlled and regulated, by the Japanese's requirements, which in turn changed the traditions of processing this material including the bamboo craft making traditions in Taiwan.

Master Huang worked as the teaching assistant for his Japanese instructor after he graduated in the bamboo skill training school in 1942, and until 1944 when he sign a three years contract to join the Japanese navy. He only spent 18 months instead of three years in the Japanese Navy base since Japan lost World War II in 1945. He came back to his hometown and started his career as a commercial bamboo weaver after he left the Japanese Navy, and established the first private bamboo craft factory in Jhushan. At this period of time, his had some Japanese clients in addition to the local Taiwanese customers. Although the Jhushan Town Bamboo Craft Training Centre is dismissed after the World War II, the bamboo industry still profited from the economy of Taiwan even after the Nationalist Party fled to Taiwan in 1949. Few years later, the father of Taiwanese craft, professor Yen Shui-long, invited Master Huang to teach bamboo craft skills at the Chiayi Craft Training Institute in 1953. Huang still remember there are seven kao-sua *yin-na*<sup>27</sup> (高砂タカサゴ) (indigenous Takasago children) in his class that year. Master Huang followed professor Yen and taught in the bamboo craft skills at the Nantou Craft Research Class in the following year<sup>28</sup>. He became a fulltime instructor and taught in different training courses all around

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<sup>27</sup> During my conversation with Master Huang, he use the word children' to refer to his students, especially those indigenou student who live with him at the school. Those indigenou student are not really children, they are actually teenagers.

<sup>28</sup> Master Lee attended Master Huang's weaving class at this period of time.

Taiwan including many indigenous communities. These training workshops toured around Taiwan and assimilated the *chaîne opératoire* of making bamboo crafts in different community groups. The KMT government took the advantages of the local knowledge of making bambooware from the original establishment of the colonial governmental training institution, and founded the successor training school of “Nantou craft research workshop” in 1954, a county level institution. This training workshop later on reformed as the “Nantou County Craft Research institute” in 1959. It then changed its supervising organisation to the state level Taiwan provincial Construction Hall<sup>29</sup> (臺灣省政府建設廳) as the Provincial Handicraft Research Centre in 1973. At that time, its goal was to capture and transmit the traditional skills, invent new tools, machine, and also introducing new techniques to the industry.

The purpose of organizing these courses is to help people learn skills that enable them to earn some additional income to improve their family financials, hence the technique and style they learned in the training course are mainly Japanese style for export dealers. However, due to the rapidly developing petroleum industry in the 1970s, which introduced massive amounts of plastic products for domestic use, many of the domestic everyday objects that were traditionally made from bamboo were replaced by their plastic counterparts. Consequently, the domestic bamboo industry experienced a downfall during this period, with factories turning to European and American markets to ensure their survival. The local bamboo craft industry relied on producing objects that followed their customers’ design drawing or reproduced samples provided by the foreign customers and massively exported to the foreign markets. When the overseas demand for bamboo crafts were high, this production model worked efficiently and the bamboo industry in Jhushan reached its peak between 1971 and 1980. During this period of time, the KMT government also hired some famous

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<sup>29</sup>Taiwan provincial Construction Hall was a state level administration institution, it was established in 1945. It was responsible for the issues about the industry, commerce, mining, cooperate supervision, technology, urban planning, handicraft promotion, and retails. This institution was dismissed on 1<sup>st</sup> of July in 1999 because of the government reformation.

industrial designers such as Russell Wright from the United States as the consultant to develop and upgrade the industry, as well as to improve quality and design of Taiwanese handicrafts. The famous art and craft program at the Jhushan High School and the Provincial Handicraft Research Centre<sup>30</sup> were both set up during this period of time, which subsequently implanted western design into the Taiwanese bamboo craft making. However, the bamboo industry in Taiwan began to shrink due to rising labour costs since 1981. Many factories were forced to close or to relocate to Mainland China or Southeast Asia, where labours were cheaper. As a result, the Taiwanese bamboo industry collapsed after the 90s under the threat of price competition from China, Vietnam, and Indonesia. However, Jhushan, as its name means “Bamboo Mountains” in Chinese, was never forgotten as a bamboo town, which were once and will always be famous for its rich resources of bamboo for many Taiwanese since the Japanese ruled era. Moreover, the Japanese imported knowledge of making bamboo craft localised among the weavers in Taiwan.

The Taiwanese bamboo makers adopt different terms in specific languages revealed the hybrid knowledge originated from different cultures during the knowledge transmission and communication. Although Mandarin Chinese is the official language in Taiwan, Taiwanese is still a common language for daily communication especially for those people who do not live in Taipei City. When these craft makers communicate each other or talk to the students individually, they usually speak in Taiwanese to each other. However, when they were standing on the rostrum and talk to the students as a group, explaining their work or skills to the government officers and press media, or announcing important information to the whole class, they will choose to speak in Mandarin. This preference is more than the distinctions between the official language and the more intimate language, but the content of the conversation also influence people’s choice of language to communicate in different situations. When people

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<sup>30</sup> The Provincial Handicraft Research Centre is transformed as the National Craft Research Institute (19), and it was renamed again this year as “National Taiwan Research and Development”.

spoke to each other in the workshop, they would mainly speak in Taiwanese throughout the conversation, but if one asked the question in Mandarin they will still respond in Mandarin. They use terms in Taiwanese, Mandarin, and Japanese all together for teaching. It does not mean that they can use these languages interchangeably; rather they have preferences of using and mixing specific language while they speak. Weavers describe most of the action and objects in Taiwanese, but they use Mandarin to describe more abstract adjectives or modern terms. Japanese terms are used mainly for the name of the tools or materials, mostly nouns. Tool names such as such as 'nolitsu' (vernier Scale: this a misunderstood pronunciation of the Japanese term 'nogisu') or 'Penchi' (piler). These weavers usually cannot write the correct Japanese word for these terms they use, but they constantly including them in their conversation which means they learn all these terms by oral transmission rather than any written resources. It is also common that they will use the Taiwanese term in their Mandarin conversation when they want to refer to a local person or an action verb. These language preferences in teaching bamboo weaving identified the Japanese root of this skill in Jhushan, the awareness of the formal, official self-presentation, and the more relax context embodied in the local knowledge of individuals.

Because these knowledge and style are localised through teaching and organized workshops with those Japanese trained craft makers, Taiwanese people are more familiar with these Japanese ruled style, designs, and techniques, especially when this is the main systematically training source provided by the governmental training institutes. The Taiwanese bamboo craft style is more similar to the Japanese style than the Chinese style. In a cross-strait bamboo exhibition in 2010 at the Shin-kwang Misukoshi Department Store, the Chinese and the Taiwanese bamboo artworks were placed side by side in the same exhibition. One can easily identify the differences of the 'Taiwanese' style from the Chinese style. The refined Chinese style is very detailed with mythical animals such as dragon, phoenix, or the Chinese emperors. The Taiwanese bambooware is more abstract and expressive, or more close to people's everyday life and theme from nature. According to several Chinese bamboo masters who

were invited to Taiwan by the exhibition organizers, these Taiwanese bamboo weaving objects are ‘too Japanese’ for the Chinese bamboo weavers.

The critiques about the Taiwanese woven bambooware are too ‘Japanese’ is also comment by a Taiwanese bambooware collector, Wang Fong-ming. Mr Wang is the second-generation mainlander whose parents come to Taiwan with the KMT in 1949. He is served his entire life and retired from the government sector. He is also a famous bamboo craft collector in Taiwan, he told me the reason why he wants to collect craft is because each piece of craft requires a lot of a man’s time, efforts, and labour to complete it. For Mr Wang, collecting these objects is collecting the intangible time and efforts the makers devoted for them. He collected mostly the Chinese antique woven bamboo objects, because he found the folklore Taiwanese bambooware too rough; he refer to those early Taiwanese bambooware are made for peasant not for the collectors nor *wen-ren* (*literati*). He complained about that the NTCRDI never invite his collection to be exhibited at the gallery of NTCRDI since the DPP won the election. He blamed the post 2000 pro-independent political domination for purposely ignoring the beauty of his collection. He assumed his collection is too Chinese so they are not welcomed in the gallery space at the national institution. He did not like the lately praised Taiwanese weavers’ work because he considered those are too ‘Japanese’. *‘How come these people’s work can be called authentic Taiwanese style? They are following the Japanese. Look at these Chinese bambooware, they are so delicate and detailed unlike those Japanese simple style and designs,’* he said angrily<sup>31</sup>. He argued that many these pro-NTCRDI bamboo weavers had come to his personal collection exhibition in Taichung and ‘steal the techniques’ from his collection. He was upset about his collection not receiving the proper honour of being exhibited and officially credited by the government. For Mr Wang, these contemporary Taiwanese bamboo woven objects lacked the orthodox Chinese tradition, but the NTCRDI would mistakenly promote them as the authentic

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<sup>31</sup> Interviewed with Chinese bamboo craft collector Mr. Wang at his apartment in Taichung on 30<sup>th</sup> of May, 2014.

Taiwanese crafting traditions. ‘The indigenous woven bamboo objects may be called the Taiwanese traditional styles, not the Japanese styles,’ Mr Wang argued.

Mr Wang’s critics about the current exhibition preference revealed the colonial root of ‘Taiwanese woven bamboo crafts’. The current active bamboo weaving communities in Jhushan were institutionally influenced and constructed. The local bamboo industry in Jhushan is primarily semi-automatic manufactured products such as chopsticks, tubes, and the thin material for mat weaving<sup>32</sup>. The skills of weaving are more focus in Kwanmiao in Tainan County instead of Jhushan. However, Kwanmiao lost its status in woven bamboo production since Jhusahn has a constantly growing weavers’ community as a result of the continuous training courses in the town hall and at the NTCRDI in the same county. Therefore, the tradition of making bamboo craft in Jhushan is not merely an original local knowledge, but rather intuitionally established through time with its Japanese influenced background.

## **2.2 *chih jhu* <II>: The *Chaîne Opératoire* of Bamboo Weaving:**

The Swedish geographer Torsten Hägerstrand, who imagined the world as a ‘big tapestry of nature’ weaved by history (Hägerstrand 1976: 332). The process of weaving can be described by borrowing Paul Klee’s phrase as ‘form giving’, and it is the method of making which is closest to ‘growing’ in the nature before 3D printing. This process of making could display how human’s hands ‘bring things to life’ (Ingold 2010) and create the meshwork, both metaphorically and literally, of craftsmanship and design.

Weaving a piece of bambooware is a complicated and time-consuming work. It requires time-consuming labour and also a series of techniques and knowledge.

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<sup>32</sup> The mat weaving skills in Jhushan was using the rounded bamboo sticks squeezed through the machine to be tied together by the string and woven into a surface as a mat or screen. It uses the same techniques as the mat that makes sushi rolls.

As Sigaut reminded us, we see people doing and making things, but not see the techniques of it (Sigaut 1994: 424). In the case of weaving, which involved not only the complicated weaving techniques, but also the time-consuming preparation processes to ready the materials which require significantly more time than the actual weaving duration. Instead of focusing on the end result of the weaving as the fixed entities and studying its styles and forms, this following section will aim to capture the processual entities of weaving by adapting the thick description of *chaîne opératoire* as the method, in order to further study the process, techniques, and the designs.

The authorship of the *chaîne opératoire* concept should be addressed to the Marcel Mauss and Leroi-Gourhan, although the term was first referenced in ‘Le denomination des objets de pierre taillée’ by Brezillon in 1968 (Sellet 1993: 106). Leroi-Gourhan wrote the pioneer work about the *chaîne opératoire* although he did not directly use this term; he described it as a "sequentially organised system by means of a syntax that imparts both fixity and flexibility to the series of operations" (Shott :96). Leroi-Gourhan described *chaîne opératoire* as a "series of technological operations, which transforms a raw material into useable product" (Cresswell 1990: 46). These technological choices are based upon numerous items including raw materials, tools, and sequence of gestures. This section will first illustrates my personal learning experience in the fieldwork as a participant observer, followed by discussions on these technological operations following Lemonnier’s (1992) logics of the *elements of the process*, then finally demonstrates how the hybrid cultural influences and technology changes are embodied in the knowledge and practice of bamboo weaving.

Each different design of the objects requires specific width and length of bamboo stripes. One of the basic challenges for beginners learning how to weave is how to prepare the materials and notice the patterns. I still remember how Master Lee told me the difficulties of this skill when we first met at NTCRDI and I told him that I would like to learn how to weave from him; ‘*the most important thing about learning bamboo weaving above all other criteria is that you have to be patient and bare the boring preparation process,*’ he said. A similar reminder

was given by another famous female weaver, Silk. She also told me that only if one can prepare well-treated bamboo strips, one can create beautiful objects. Any imperfection of the material, even invisible imperfection will be revealed on the final work during the process of making. The uneven thickness of a bamboo strip or the mechanical pressed pre-treatment do not reveal any differences when each individual strip is laid on the working benches before being woven into an object, but once these imperfect materials were woven into an object, they either fail to create a perfect smooth curve or they will crack in the centre after being woven. It is not possible to replace an individual strip unless one takes apart the whole object and remove the single one piece where everything went wrong. However, a weaver has to take the risk of breaking more strips while reversing the sequence of weaving. Master Lee said, *'when one strip goes wrong, the object will go wrong all the way through. You don't need to stare at your fingers to know if you do it correctly. You will know there is something not correct when losing the smoothness of actions between your fingers'*.

Since many bamboo weavers cannot stress enough the importance of dividing raw bamboo stems into small strips, it is worthwhile spending some paragraphs to explain how the preparation process is completed, and the *chaîne opératoire* of weaving a basket. The techniques of weaving in this chapter will be discussed, followed by the logics of the *elements of the process* by Lemonnier (1992), and demonstration on how the hybrid cultural influences and technology changes are embodied in the knowledge and practice of bamboo weaving.

### ***The Elements of the Process of Bamboo Weaving***

These operational sequences of preparation is base on the observation on individual informants and my personal participant observation ethnographic fieldwork in three different workshops taught by Master Lee (March 2009), Master Huang (October 2009-June 2010) and Silk (February-July 2010). Since Master Huang is the teacher of both Master Lee and Silk, and Master Lee also taught Silk lacquer skills, there are many similarities in the way they prepare the

material, including the tools and the basic preparation skills. However, the differences among them will also be discussed later in section 2.4.

### **The Materials**

Although there are numerous bamboo species around Taiwan, most of the twilled plaiting are made from the two species of the Makinoi Bamboo (桂竹 kuai chu, *Phyllostachys Makinoi* Hayata) and the Long Branch Bamboo (長枝竹 chang chi chu, *Bambusa dolichoclada* Hayata). The Long Branch Bamboo usually grows in southern Taiwan in the plain areas while the Makinoi Bamboo inhabits the higher altitude mountain areas above the Tropic of Cancer in the Mid-Northern Taiwan. The different growing environment results in different material differences of these two kinds of bamboo. The Makinoi Bamboo is harder than the Long Branch bamboo, hence it is stiffer and will create a firmer finished object for the same design. The Makinoi Bamboo is more popular among the weavers in Nantou and Shinjhu (新竹 which means new bamboo) area while the Long Branch bamboo are more commonly used in Kwanmiao Township in Tainan County.

The quality of Makinoi Bamboo is closer to the Japanese Madake Bamboo (マダケ). Madake bamboo is the most popular bamboo weaving material in Japan, therefore the material similarity of these two species is also the reason why Makinoi Bamboo was called Taiwan Madake (タイワン マダケ) in Japan. The current techniques of bamboo weaving in Taiwan are deeply based on the Japanese bamboo weaving tradition because of the early systematically professional training at the bamboo weaving training school established in 1938. This historical colonial background influenced the Japanese trained Master Huang and many of his students until today.

Functional woven bamboo products such as the basket for agricultural usages, bamboo sieves in the households, fishing traps, and the indigenous woven bamboo-ware, usually maintain the top surface of the bamboo skin so as to keep the durability of the woven object. However, delicate woven bamboo-ware uses

only the bamboo skin after shaving off the top surface of the skin. Therefore, very limited woven material can be produced from each bamboo stalk. Bamboo weavers usually select four years old bamboo and use only the middle portion, which provides a more durable material with medium stiffness and better flexibility. The age of the bamboo can be distinguished by the exterior appearance or more accurately by the sounds it produce when it was knocked on the culm.



**Figure 2-5 Each bamboo sticks needs to be layered five times and smooth and even it with knife before it can be a weaving material**

As mentioned earlier in Chapter two, imported Chinese bamboos are very cheap, compared with the cost of harvesting and transporting bamboo stalks locally in Taiwan from the mountains to the market on the plain area. The only reason Taiwanese Makinoi bamboo still has its competitive strength is because the Taiwanese Makinoi bamboo is the essential and required material for producing Japanese kendo swords. The preference for using Taiwanese bamboo among Taiwanese craft makers cannot be more emphasised. Many people, both the craft makers and local people, told me that “Taiwanese bamboo is the best bamboo,” or “We have the best bamboo in Taiwan” during my fieldwork in Taiwan. I wonder whether this is a patriotic emotional preference, or a fact, since Japan, Thailand, Vietnam, Indonesia, and China all have bamboo, and in fact all continents except Europe have native bamboo species and bamboo crafts. It will be too subjective to say that Taiwanese bamboo is the best bamboo or it is ‘better’ than bamboo from elsewhere. My suspicions and queries about this statement were answered in my later intensive fieldwork in Jhushan. Local people’s statements about the

irreplaceable materiality of the Taiwanese Makino bamboo coincided with the ‘superior’ recognition of the Taiwanese bamboo, since ‘*the Japanese do not accept materials from other places, they only want our bamboo to make the best kendo swords.*’ Even though the rich flexibility and hardness of the material causes more difficulties during the making process, the craft makers are proud that they can handle this material, and believe the outcome of craftworks made by the Taiwanese bamboo will be better quality and durability than those made with foreign bamboo.

The materiality of the Chinese bamboo is too soft and does not obtain the same flexibility that kendo regulations require. The bottom part of the bamboo stalks are the most valuable part, and are typically bought for producing swords for the Japanese martial art of kendo, thus this allows the rest of the bamboo to be sold at a relatively cheap price. Therefore, the bottom part of these raw bamboos are cut, degreased, and pre-treated in Taiwan before they are sent to Mainland China for assembling. The middle parts of the raw bamboos are sold to different bamboo weavers, bamboo mats and bamboo screen factories, scent stick manufacturers, and architecture suppliers. The remaining shards are usually sold to the farm supply and gardening shops at the same price as the imported cheap Chinese bamboo, and are usually used for gardening and to make bamboo broom. In *Research of the Practical Use of Bamboo in Taiwan* (Wang 2004), Wang points out the totality of the practical use of bamboo in Taiwan, where bamboo is a useful material from the root to the top branches and leaves. Since bamboo weavers only need the bamboo skins, it leaves the rest of the material as waste. However, this ‘bamboo waste’ was sent to the paper factories to provide the fibres for making bamboo paper in the past. These bamboo papers are produced for religious usages as ‘ming-chih (冥紙 paper money for the dead)’, which are burned for the ancestors, ghost, and gods as offerings. Chang, a researcher at the Academia Sinica, has asserted that Taiwanese people believe ming-chih made by bamboo fibre are better than those made by timber fibre, due to the fact that bamboo paper will produce white smoke while timber will produce black smoke after burning, therefore the bamboo fibre ming-chih is superior than those of

timber for its white smoke and purity. It is believed that a reverent worshiper should use the bamboo-made ming-chih in the ritual to show respect. (Chang 2006)



**Figure 2-6 the materials for making bamboo sword for Japanese martial art of kendo**

The material chain was closely linked in Jhushan in the past since all the parts of bamboo are used for certain purpose. However the chain is now broken due to the decline of the bamboo industry and the environmental protection laws. The private small bamboo paper factories could not afford the waste recycling system, hence shutting down their business in recent years. The closure of these bamboo paper companies resulted a situation on how to deal with the waste of bamboo for the weavers. The thickness of the culm of Makinoi Bamboo is about 0.5~1.5 cm, but the weavers only need the top 0.005 cm (~ 0.5%) of the thickness of the whole bamboo culm. Therefore, the other 99.5% of the material will be disposed after the weavers separate the bamboo. This once useful material has become production waste, and some weavers regularly burn it since the town garbage trucks do not welcome these waste, and the weavers do not wish to spend

extra money on hiring private companies to handle the waste. In the past, paper companies would come to the weaver's door and collect them from the weavers, and even purchase the bamboo waste for making bamboo paper. These once valuable and useful fibres have become unwanted garbage now. They proved very problematic during my personal experience of learning bamboo-weaving techniques. It is questionable how bamboo can represent a 'green material' if one has to dispose 99.5% of the material in such an unsustainable way to acquire the required surface material. Not only is bamboo weaving not as truly *Green* as it is presented, the laminated bamboo also requires several toxic procedures in order to be able to be stably glued together and shaped.

### **The Energy**

Jhushan was famous for its semi-automatic manufacturing technology since the Japanese colonial era. They further developed this technique of treating bamboo, and were capable of treating the whole bamboo culm and splitting them into small strips for weaving, or thin sticks for making mats and curtain. These semi-automatic machines was once operated by treadles, and later operated by electric motors. These machines sped up the preparation of the material and increased the efficacy of production while reducing the labour requirements and production costs. However, it is still believed among the weavers that the hand treated materials are superior than the machine treated ones. When the machine cuts off the bamboo skins, it needs to press down the bamboo culm tightly. Since the bamboo culm is round, the force will accumulate on the central top surface and potentially create the invisible crack in the material after each cut. If the strip is thick, then the crack won't be obvious, and the other fibres on the rest of culm wall will support and hold the surface together. However, if the weavers need to have a very thin layer of bamboo skin, the mechanically-treated bamboo skin will easily crack at the last stage of preparation when peeling off the inner fibre of each strip, and all the previous efforts will have been in vain. Therefore, the bamboo weaving process is still predominantly by hand.

Although it required a lot of handiwork in bamboo weaving, it involved other different energy except for gasoline or electricity driven motors for mechanically treated bamboo. Smoking and boiling are the most common pre-treatment for preparing the bamboo for a better surface finishing, but heat also activates not only during the pre-treatment but also was used as a tool for shaping bamboo into specific curve and smoothing. Heat is used in the process of making more than a type of energy to driven the machine but also as a tool which would be further explained in the next section.



**Figure 2-7 Silk's husband built her a small heating devise powered by electricity to bend the rattan and bamboo**

## **The Tool**

The tools for bamboo weaving are very simple and can be carried around easily, which allows this craft skill the mobility when making. The weavers use simple tools that allow them to work mobile in different places. Even for Master Huang, he uses almost the same tools as the beginners. The picture below shows the essential tools for bamboo weaving, and this tool kits belongs to Master Huang. The peeler knife (A) is used for peeling off the top surface of bamboo skin. The chopper knife (C) is specially made for splitting the bamboo culm. One side of the blade is 6mm thick which allows the user to use it as a hinge to split the bamboo. Since the bamboo fibre are mostly vertically parallel to each other, most of the time the weaver are splitting it instead of cutting it. Scissor (D) is another important tool; normally the bamboo weavers will use the scissor for Japanese floral arrangement scissor for cutting bamboo stripes. Objects (E) are two pieces of blade which is called jian-men (knives gate). Jian-men always come in pairs and it is a multi-functional tool; it allows the weaver to trim all the bamboo strips into the same width or round the edges. It can also be use for trimming the rattan when the weavers need to treat the rattan for the final finishing laces.



**Figure 2-8 Tools for bamboo crafting**

**A. Peeler Knife; B. Gloves; C. Chopper; D. Scissor; E. Jian-men (knives gate); F. Ruler; G. –K. All different kinds of knives and carving tools for making bamboo tubular furniture**

These tools almost remained as the same as they were when Master Huang started to learn how to weave 80 years ago. Although Silk’s husband has developed a set of gadgets for preparing the bamboo material, Master Huang and Master Lee do not encourage students to use them. Silk’s husband, Mr Lin, is a mechanical technician; he used to own an iron-work machine shop which produced machines for bamboo production in the past before most of the bamboo factories moved out from Jhushan Bamboo Industrial Park. When Silk started learning the skills of weaving, he made some small tools for her and hoped those little gadgets could help her to work better. It turned out to be a very innovative and successful design since no one else had ever invented such things.

An awl is an important tool for weavers. It can be used to adjust the position of weaved bamboo. But, according to all my instructors, the fingernail is the best tool to adjust woven bamboo because it will not scratch the bamboo surface. Well-experienced weavers usually have deformed thumbs because they are constantly using their thumbs to push and correct the bamboo strips. During

my apprenticeship experience in the three workshops, learning how to weave a simple basket, the physical pain on my finger due to the continually repeated actions highlighted the overused muscle on the thumb and explained the commonly deformed thumbs of the weavers. Some students at the weaving class use the metal awls purchased from the local stationary store, however this would scratch the surface of the bamboo. Therefore, Master Lee asked us to make a bamboo awl before we started weaving, as an alternative way. However, sometimes it is still necessary to use the metal awl because it can create the path for the thin rattan strips to run between bamboo strips in order to create some delicate finishing.

Beyond those visible and touchable tools, there are also some invisible substances of bamboo weaving which may be required, such as water, glue, and heat. Water is not only for drinking, pouring, washing and bathing; it holds a significant role in weaving. The different levels of moisture in the bamboo will dramatically change the texture of the bamboo. One will easily feel the differences of a dried bamboo and a moisturised bamboo when one cuts them. The weaver will adjust the moisture level in the bamboo culm so the preparation work can be done easier. When weaving, the water is also a significant substance/tool for weavers; it can tenderise the bamboo strips and increase the flexibility of the strip, as well as hold each strip in the right place. It is both a temporal lubricant and glue for weavers during the process of weaving, and it will disappear when the object is finished thus leaving no trace and mark on the finished object.

In addition to water as a temporal substance during the process of weaving, glue is another important and almost invisible tool for weavers. Many shapes require glue to hold the strips in the right position. However, there are some cynical old Taiwanese sayings about glue. Master Huang said there are the ‘chef of tenon, the chef of nail, and the chef of glue.’ The chef of glue is the worst among them, because one will need the glue to put an item together. One should use glue carefully and only apply a small amount of it so one can hide the trace of using glue in the object. Students are encouraged to use their fingers to apply the

glue in a very thin layer on the object when it is necessary to use glue. The white glue most people uses now will become transparent and almost invisible when it is dried, but it still leaves a little varnish-like trace on the applied area.



**Figure 2-9 I carefully burned to smoothed the surface of the complete bamboo basket made by myself**

Heat is the final but not the last tool for weavers. Heat is usually used for bending or smoothing the surface. In the past, they will use an oil lamp to do this job, and later on they use the alcohol burner or Bunsen burner as the heat source. Recently, many weavers start to use the electric Bosch heat gun after one of them receive a heat gun from a designer he worked with as a gift. The heat source is continuously changing through time and the development of technology, but it only enhances the convenience and efficacy of making in this case.

Most of the tools are very similar among different groups of makers; from Holo and Hakka Han Chinese bamboo weavers, the Japanese bamboo weavers, and the indigenous bamboo weavers, all require these tools and substance when

they make woven bamboo objects, but the knives they use are different which leads to the different gestures when cutting and splitting the bamboo.

### **The Gestures**

Hands are no doubt the most engaging body parts in the process of weaving, but the weavers in Jhushan use their other body parts to extend the limitation of hands. Weavers' gestures create a working space for weaving; the Taiwanese weavers seldom work on the table, their body forms a working universe while they sit on a stool. Weavers don't sit on the chair with back as other craft makers because that allows them to have more space to move their body freely. Bamboo weavers usually sit on a low stool (usually 10-15 cm in height) as shown in the figure 2.1. They do not sit still on the stools; they bend their back and create a small space surrounded by their arms, laps, and body.

Technical systems are also composed of such crucial elements as the knowledge, skills, values, and symbolic representations generated in the course of action, as well as the social frameworks implicated in the production and reproduction of everyday life. Among the Taiwanese bamboo weavers, there are three different ways of splitting and layering the bamboo: the Japanese style, the Hakka style, and the Holo style, each with a different posture. The Japanese style required weavers to use their toes, so one has to sit on very low stools or sit on the floor. People use their toes as an extension of the length of arms when layering the bamboo stripes as shown in Figure 2-6. When they are layering the bamboo, they would pinch the bamboo stripe between the hallux (big toe) and second toe. This mode of working allows them to layer longer bamboo stripes, and if one can master this skill one can enlarge the size and the complexity of the object one can weave. The Hakka style requires the weavers to use their mouth to bite one end of the bamboo stripe while layering the skin of bamboo, thus they can sit on the normal stools when they prepare the material. The Holo style of splitting only involves weaver's hands and arms and they usually sit on a bench or a higher stool. Therefore, both the Hakka style and the Holo style allows weavers to work in a higher seated posture. The difference of their postures during making may

relate to the tools and the requirement of materials as mentioned in the previous section of tools.

The knives Japanese weavers use are double-bladed so they are able produce very fine strips, and one splits the bamboo by bending the angle of the knives against the bamboo. The Holo and Hakka Chinese use the square-front single-sided blade, thus they typically add a piece of bamboo or wood under the knife to increase the thickness of the blade when splitting the bamboo. The Chinese style of splitting is to push the knives away from the body. On the other hand, the Japanese style of splitting is by pushing the knife toward one's body, which enables the movement of one's limbs as an extension to enlarge the micro universe when sorting the materials.



**Figure 2-10 Master Lee demonstrating the Japanese way to split bamboo with toes**



**Figure 2-11 Ms. Tu demonstrated the Hakka Chinese style of splitting bamboo with mouth**

Another notable point of sorting the bamboo material from the stalks into the strips is that the craft makers do not really move the knife to cut or split the material; they push the material toward the knife instead. This allows the maker's body to become a stable mechanical workstation and process the material without large repeated body movements. This body-as-workstation method also applies to their weaving gestures. Although some weavers (usually the beginners) use tables as a working surface when they make woven bamboo objects, most of them prefer to work on the floor or they will bring their own stools to the class to work on, especially when they are splitting the bamboo and preparing the bamboo strips. Their bodies are used as small universes of working environment, in order to position the bamboo enclosed by their body. Tables are not necessary for making

such craft. Some of them only use a piece of thick cloth laid on their thigh as a working surface. The weaver's body is the holder, the structure, and the micro-universe for which the object grows within the space surrounded by the weaver's body.

### ***The Operational Sequence Of Traditional Weaving***

The operational sequence of traditional weaving can be divided into two main sections; the preparation of materials, and the weaving which includes the final decoration and finishing such as varnishing and colouring. Each section could be repeated independently, however the sequence within each section is not reversible.

### **The Preparation Sequence Flow**

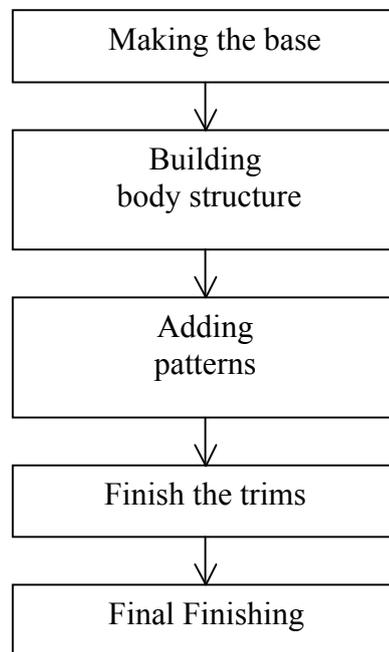
<b>Bamboo Weaving</b>		
Gather the material ↓		
↓	The harvest team in Smagus Mountain in Shinjhu County received the request order from the bamboo supplier in Jhushan.	
↓	The harvest team harvest the bamboo roughly according to the requested order, such as size, age, and quantity of bamboo.	The bamboocutter work in a team of 3 to 5 people.
↓	Load all the bamboo in one truck and ship them out from the mountain areas before sunset.	It usually takes 3 days to accumulate enough quantity for a truck load.
↓	Add another truck behind the first truck to gain more legal load for shipping.	
↓	Take the provincial highway instead of the motorway to avoid passing the toll and the police.	
↓	Arrive Jhushan around 3AM. The bamboo are weighted and traded to local bamboo supplier.	
↓	The truck drives to the supplier's storage field and unload the bamboo.	
↓	The bamboo supplier in Jhushan starts to classify according to the different sizes and cut the bamboo.	The "Head" of bamboo (the bottom part close to the root) are chopped off for the factories making the kendo swords.
↓	The bamboo weavers purchase the bamboo from the supplier in two nodes (two sections stuck) or the desired length	The weavers pick the bamboo that has less scratch on the skin and trim it to desired length.

	↓	Prepare the material ↓	
	↓	Peel off the top surface of bamboo but keep the bamboo skin	
	↓	Split the bamboo in half and mark the desired width.	
	↓	Use the chopper to make small cuts on the end of bamboo at the side that is away from the root.	
	↓	Divide the bamboo pieces in half and repeat several times according to the marked small cuts.	
	↓	Layer the bamboo strip in half the first time and put away the inner part of each piece.	
	↓	Repeat layering the bamboo stripes and maintain the outer skin at least three times.	
	↓	Size the bamboo stripes to required width.	
	↓	Even the thickness of bamboo by knife	
	↓	[Optional process] die the bamboo with different colour	
	↓	<u>dao-jio/de-ga (reverse angle)</u> : Round the edges of each bamboo stripes	The name for this action is actually name after the shape of the tools for this process. The jian-men will be placed as a reverse triangle to perform this function.
	↓	<b>Start weaving ↓</b>	
	↓	<u>chi-de/qi-de (start the base)</u> : structure the base from centre	
	↓	Build up body shape of the object	Creating a Shell. Weaving is about to create a shell to enclose a hollow space rather than a solid object.
	↓	Add some strips to create the decorative pattern	
	↓	<u>sho-co/shu-tzue (close the opening)</u> : Finishing (it is called in local language)	
	↓	Cut of the excess material and burn out the extra fibre on the surface	
	↓	[Optional process] put on the varnish	people do use the artificial varnish after the colonial era, but craft makers prefer to use the natural lacquer as the varnish.

**Table 2-2 The Preparation Sequence Flow**

***Different types of operational sequence of woven bamboo objects***

After all the materials for weaving are sorted and prepared, the process of making such kind of works can be separated in five major sequences: making base, building body structures, adding patterns, finishing the trims, and final finishing. From the collected data during the fieldwork and indepth research analysis, the typologies of woven bamboo objects can be defined in six major types according their techniques to form the base of each objects. The six types of bases is as followed: circular base (stack and strand), square base plaiting, twill plaiting, triangle base, hexagon base, and ring base. Most of the woven bamboo objects can be categorise in these six categories. Sometimes two objects may look very similar but they might be made by different types of base, thus the best way to understand an object is to look at the base if a craft maker want to duplicate or remade an existing object. The technical terminologies in the following table chart are mainly the translation form the local term in the fieldsite but also referenced the terms by Lee (2000), Moroyama (2007), and Sentance (2001).



**Table 2-3 The Basic process of Making Woven Bamboo Objects**



Figure 2-12 Making the Base / NTCRDI 2010 Bamboo Weaving Workshop (April 11th)



Figure 2-13 Peel Off the Top Surface / NTCRDI 2010 Bamboo Weaving Workshop (March 14th)

Base Type	Circular Base (Stake and Strand)	Square Base Plaiting	Triangular Base	Hexagon Base	Single Ring Base	Double Rings Base	Twill Plaiting
Making the Base	Place all the stripes in radial arrangement	Put four strips in the same direction as a pattern of windmill with two in the horizontal axes and two in vertical axes	Place three stripes one on top of each other and overlap in one point as the centre	Place three strips on top of each other and create a triangle in the centre	Place several stripes one on top of another (usually four or five pieces)	Place two stripes one on top of another and overlap in one point as the centre	Place two stripes one on top of another and overlap in one point as the centre
	Use the very thin bamboo as the strands to weave through the stake until desired size for the base	Interweaving the horizontal and vertical stripes	Then add another set of three strips around the centre to create more triangles	Place parallel strips along with the three axes and repeat it again	Put another stripe on top of the first stripe and underneath the other stripes	Then surround the centre to create more twilled patterns	
Building Body Structure	Adding more stripes in both axes circularly to the desired base size	Repeat this action around the central triangle cluster and plait a surface	Reverse the order of the stripes at the edges of the hexagons in order to lock them in position.	Repeat the above process and make sure the two ring are exactly the same size.	Place the two identical rings together and start to weave them together	Repeat this action to extend the width of the twilled surface to desired	Adding more stripes across each other to extend the length of the twilled surface to the desired size
	Bend the radial stake stripes upward and start to build up the volume of the body	Bend the four sides and plait the four edges of the basket	Repeat adding more parallel stripes along with the centre then lock them by reversing the order of the stripes at the edges	Plaiting the radial stripes together follow the rules of 'two up two down', or 'three up three down' ...etc.	Plaiting the radial stripes together follow the rules of 'two up two down', or 'three up three down' ...etc.	Open Twill Plaiting	
Finish the trims	Plaiting the body and shaping the curve of the object	Let all the stripes in the base turn into the crossover upward axes longitude	Build up the body by plaiting more horizontally stripes then lock it in position and plait until desired height	Let all the stripes in the base turn into the crossover upward axes longitude	Repeating this action and shape the body of the object until there is only about 10cm left at the top. (or stop at the desired height and trim the extra length of each pieces and left about 10 cm.)	Stop plaiting the flat woven surface and close the two side together by insert them to each other	Stop plaiting the flat woven surface and close the two side together by insert them to each other
	Adding thinner stripes to create the decorative pattern	Build up the body by plaiting more horizontally stripes until desired height	Build up the body by plaiting more horizontally stripes then lock it in position and plait until desired height	Build up the body by plaiting more horizontally stripes then lock it in position and plait until desired height	Weave in the end of each stripe and hide them underneath of each other. Then adjust the ring to a perfect circle or oval shape.		
<b>Stop plaiting and adding the rim on the object</b> Finish the trimming Final Finishing							

Table 2-4 The Operational Sequences of Making Different Kinds of Woven Bamboo Objects

The inner structure of the plaiting sequences is as important as its visual appearance. For instance, the sequence of weaving the basic grid pattern has its own unchangeable sequence due to its structural balance. After I analysed the pattern of weaving, I decided to adapt the paper weaving skills I had learned from the craft courses in the high school to make the same pattern since the pattern “may” and “shall” end up the same visually in theory. However, my attempts to change the *chaîne opératoire* of weaving failed because the squares in the grids I made were never equal and the strips did not interlock with each other properly when I bent it to a basket. It has to be made by the way Master Lee taught us, to “grow” the surface from the very centre like a windmill turning in a circular direction. This implies how there is a need for this research to examine if there might be something more than the visible result appearing in front of us as the finished objects, or beyond the tangible bamboo material. To understand a man-made, crafted item, it may not be enough to merely look at it from the result as a object. Instead it is like what Ingold (2010) and Bunn (2010) have suggested that we should ‘read things forward’, instead of backward as in Gell’s approach. Therefore, it is desirable to investigate the intangible qualities of how items were made from the very beginning of learning the techniques.

### **2.3 Acquiring the Knowledge of Skill**

‘The problem of getting at artisanal knowledge as an important element and product of workshop practices has been most fruitfully pursued by museum scholars in recent years. The sources they turn to for evidence include documents such as guild regulations, contracts, accounts, inventories, correspondence, descriptions of the workshop in written or pictorial form, artists’ accounts and correspondence, and technical treatises’ (Smith 2007: 36). When a new technology has intervened in pre-existing practice, it may be covered up by the first person to successfully discover or apply the technology but would soon be deciphered by other people in the same practice within the same community (Eyferth 2010: 189-190).

The acquisition of craft skill requires different stages of engagement, such as receiving instructions, performing repeated physical practices, and conducting research and analysis on objects. Embodying the knowledge and skills in oneself requires hands-on practice by the individual; no artisan can master a technique by only reading another artisan's manual alone. The process of acquiring the knowledge of skills requires one to 'engage in the activity, practice the gestures, use of tools, and finally obtain "something" in order to progress' (Gosselain 2008: 153). There are many literatures about how people inherit technical traditions and put them into practice, but Gosselain criticises that some of these neo-Darwinian approaches place too much emphasis on the transmission as a process that is isolatable in time and space without exploring its characteristics. Instead, he argues that the tradition of craft making is a 'specific sets of procedures, gestures, tools, materials, finished products, and beliefs and attitudes toward actors and materials' which does not evolve quietly within silent cultural boundaries (Gosselain 2008: 150-152). Gosselain made this claim as an observer, not an actual practitioner of the craft activities. Therefore, this section is intended to extend this thread of thinking and discuss the knowledge of skill transmission in the context of Taiwanese bamboo craft making while I personally participated in the learning process and acted as a student in the workshops.

This section is divided into two sub-sections. The first section explores the changing pedagogy of bamboo craft making among craft makers in different generations. The second section discusses from the learners' point of view the different evaluation standards and expectations among the beginners/learners. Many excellent Taiwanese craft makers refer to themselves as bad students during their early school days who failed to have good academic performance, since they could not sit still in the classroom and focus on memorising knowledge from the text book. Instead, they liked wondering about new ideas and creating devices or objects. These 'bad habits' are indeed very important personal qualities for generating creativity and new design. The following sub-section discusses how these people consider their own learning process and how these experiences are reflected in their different pedagogies in their own workshops.

### *The changing pedagogies of bamboo weaving*

In Jhushan, when asked about the origin of the bamboo makers' skills, most craft makers explained their personal learning history through introducing different masters and workshops they had attended chronologically. In many research within craft communities, the cooperation and knowledge sharing between workshops was facilitated by a kinship ideology. A key phrase here was *beifen* which distinguished between generations and emphasized the equality and to some extent exchangeability of participants or performers belonging to the same generation of marking members of the same generation with a shared character. Eyferth (2010) found within the Chinese papermaking community, '*beifen*' was less about generational inequality than about the equality of men belonging to the same generation (Eyferth 2010: 190). However, in my fieldwork, the hierarchy of *beifen* is usually set up by the 'master-apprentice' relationships and the 'learning-teaching' relationships which setup the hierarchy based on the knowledge and technique transmit network rather than kinships.

My major informant Silk was first taught by Master Huang by attending a six months bamboo weaving course sponsored by the Ministry of Agriculture in 1987, subsequently became the teaching assistant for Master Huang the following year. She then attended different advance courses of weaving skills at the NTCRDI taught by Master Lee and Master Cheng. She had her own teaching position at the Jhushan Town Hall adult learning course, but she would took the opportunities to attend some material and design courses taught by visiting craft makers and designers invited by NTCRDI. The design and patterns of the woven bambooware are not copyright restricted by certain groups or people since most styles were acquired from those public funded training courses that were considered as a public sphere. Most of the middle-aged bamboo craft makers had seen or even practiced basic bamboo craft skills before they officially attended the bamboo courses. Silk's student Fuma<sup>33</sup> is a typical case representing this multi-

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<sup>33</sup> Fuma was invited to build the bamboo woven hall in the Taiwan pavilion at the Shanghai World Expo in 2008.

layered learning pattern. Before she attended Silk's weaving class, she had helped her family members to make bamboo baskets for export to the overseas market. She recalled that almost every family in Jhushan were making all sorts of bamboo-ware at the peak of bamboo industry in Jhushan, thus most people participated in this craft activity. However, she would refer her learning starting point as the time she attended the weaving course instead of the time when she started to work with bamboo. The actual practice of making and the awareness of learning are separated. This separation between the action of making and the awareness of learning is common among the craft community in Jhushan; people usually referred to their unstructured early leaning/practicing experience as ‘幫忙 *ban-mang* (giving help),’ not as a learning process, even though they were actually experiencing and embodying the knowledge skill with these experiences.

*Ban-mang* is a common type of labour exchange among makers, Jacob Eyferth (2010) translate *ban-mang* as ‘helping out’ which included both informal labour exchange as well as capitals exchanges such as tools and cash, and materials exchange between neighbours and the communal technique contribution during certain special occasion. He observed the informal labour exchanges when he tried to understand the craft knowledge at the interface of written and oral culture through reconstructing the manual papermaking in Sichuan Province in China (Eyferth 2010: 185-189). When the bamboo craft makers in Jhushan offered their help in their family businesses during their childhood or teenage years, they performed a section of the whole production process under the instruction and at the request of a more experienced family or factory crewmember. They were requested to repeat fragmentary process instead of understanding the whole *chaîne opératoire* from scratch to the finished product. They offered their help and served as a machine on a Fordist production line, and their bodies continuously repeated the fragmentary action to produce a partial product.

For these craft makers, they started ‘learning’ the bamboo weaving skills when they finally had a chance to attend the weaving courses or go to a training

school. The first bamboo craft skill training school was established during the Japanese colonial era in Jhushan, and this training school/institute strengthened the tradition of bamboo craft making in this town. The current National Taiwan Craft Research and Development Institute (NTCRDI) is actually the descendent of this 1932 bamboo craft training school. After the Japanese colonial era ended, the Japanese craft instructors left the training school but their skills remained and were diffused among the local residents. This town carried on the original development plan of the colonial government with the existing skills and knowledge. Factories of semi-automatically manufactured bamboo crafts accumulated in Luku and the old town in Jhushan until the Jhushan Industrial Park was established in 1973 near the newly built highway exit and it remained as the hub for industrial production of bamboo crafts.

The bamboo craft production in Jhushan was based on this historical background, as described in more detail in Chapter One, and the trader brought in the required design samples and exported the end products. The local craft makers do not have direct access to their end customers or wholesale buyers, hence they were not allowed to modify the design of products except for making some minor changes of the production process or material treating techniques. The makers applied neither their own taste and thoughts, nor their individual designs on the items they made. Usually the trader from the city contacted some small factory owners, whom people called *tao-ge* (head of household), which meant both husband and business owner. These local *tao-ge* assigned the work to several local craft makers according to the needs for each product and each individual's skills. The production line was usually not set under one roof; instead, the parts travelled through town in different households during the production processes, then finally being assembled together. Therefore, most of the 'helpers', like Fuma mentioned previously, only participated in part of the production and were unaware of the whole *chaîne opératoire*, thus often do not have a complete picture of the final product design. Since they were only participating in some section of the process, they did not and could not develop a whole structuralised knowledge of making. In rare cases, some craft makers did

develop and improve skills or tools for the section for which they are responsible, but not new designs.

After the end of the training school established by the Japanese, due to the South Pacific War and the result of World War II, there were no systematic learning programs in Jhushan to transmit craft skills. Some of the previously trained craft makers kept their skills as their secrets and were not willing to teach others (like Mr Wu Shen-zon). Master Huang was the first among the Japanese-trained bamboo craft makers who taught the bamboo craft skills to the public at the Chia-yi Craft Specialised Class organised by Yen Shui-long and the Nantou Handicraft Research Class (the former institute of the present-day NTCRDI) later in 1954. From the photos and records in the local archives, and also confirmed by Master Huang personally, these training schools used to recruit more male students to the class during the 1930s to 1950s. Both the instructor and students were mainly male. There were only very few female students in the training school in Jhushan at that time. Comparing to the bamboo weaving class in Kwanmiao District, where the softer Long Branch Bamboo was commonly used, it was dominated by female students. This male-dominated bamboo weaving class in Jhushan showed that bamboo production operated as the main family income, rather than a family income supplement in the Nantou County at that time. Moreover, the male member in the family usually made most of the bambooware for domestic consumption in the past, in contrast with the current female bamboo weavers dominated craft environment nowadays. The male dominated bamboo weaving community was also found in the Saisiat group, where they considered bamboo weaving a man's work since the weavers had to harvest the bamboo from the mountains then cut and split the bamboo with knives. Therefore, the current female dominated bamboo weaver community and the female dominated weaving classes were not a traditional gender distribution of weavers but rather a newly developed phenomenon. The regularly request for material from the Kendo sword factories in Jhushan provided easier access to the material, and the increased mobility of female for when they can drive or own scooters to carry the material required. In addition to the accessibility of material and mobility for transport,

learning craft skills had become a leisure hobby rather than a ‘useful’ skill for more family income, thus there are more female housewives available for this activity than males who were responsible for supporting the major family income.

Master Huang, as a master in teaching bamboo craft, spread his knowledge and trained several professional bamboo craft makers whom were currently very active in the craft and design field in Taiwan, such as Master Lee, Silk, Lotus, and many others. These weavers also started to teach in various institutions to fulfil the increasing demands for learning Taiwanese traditional craft skills. Unlike many other craft makers whom I met in other professions, Master Huang claimed that he was a student in the training school and a research fellow after he graduated. He clearly stated that he was absolutely not an apprentice but a student when he learned his skills from 1938 to 1942. Master Huang said, ‘we had our syllabus of learning at that time. We learned math and Japanese in the morning and had drawing classes and the hands-on bamboo craft courses in the afternoon. We were not apprentices; we were students.’ His clear distinguish between students and apprentice signalled the personal identity and recognition when learning techniques, and the next section would further illustrate these differences.

### ***3 Years and 4 Months***

The Taiwanese apprenticeship is called “‘òh (tsò) sai-á” which is similar to the Indian Guru-Sishya Parampara relationship; the “sai-á (apprentice)”<sup>34</sup> needed to follow and serve the “sai-hū (master/guru)” for all sorts of trivial requests for years during one’s learning period. The words for “sai-á” in the Chinese characters meant the junior or child of the “sai/ sai-hū (master)”. For a typical apprenticeship in Taiwan, “sai-á” would spend 3 years and 4 months in the workshop with the master and did whatever the master asked one to do, including cleaning, cooking, housekeeping work, farming, or gardening, with very little allowance or even just free accommodation with the master. Usually, apprentices

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<sup>34</sup> In Taiwanese, people would use *tô-tê* to refer the apprentice in the workshop, but I found my informants in the Nantou area use the word “sai-á” more often to describe apprentice in the workshop.

were not allowed to touch the tools for the first 6 months, and the apprentice only learned by watching the master and senior apprentices working day after day until they were considered 'settled down their mind'. Then, they would finally be assigned more skill-relevant jobs. The apprentices were 'trained' to make something as their master did. Master Huang considered his experience of learning as a student because firstly he learned other academic subjects such as math, language (Japanese), and practical drawing course rather than purely be trained for the techniques. Secondly, he had his own tools during his learning period while apprentices did not. The relationship between the apprentices and their tools is worth mentioning here.

According to Master Huang, *'in the past, you did not have your own tools as an apprentice until your master admitted your hard work and progress after you had done 3 years and 4 months as a qualified apprentice in the workshop.'* After full participation in the workshop as an apprentice who had finished the learning period, the master would give a set of basic tools to the apprentice, which indicates the apprentice has the abilities to start working on his individual work. The apprentices does not normally purchase their own tools when they started their apprenticeship; they would borrow the tools or share the tools with others in the workshop. The ceremonial moment when the master gave the apprentice the tool kit symbolised the independence and qualification of one's learning outcome and the quality of one's work. This tradition was very common among different craft specialists such as carpenters, goldsmiths, ceramicists, and wood carvers in Taiwan. One possible reason for this custom of tool giving was that many apprentices were sent to the workshop to learn some useful skills by their parents due to poverty; sometimes the apprentice could not afford to buy a set of tools when he was sent to the workshop at the beginning. Also, one could not guarantee the success of obtaining the skills, so it could be a waste if one spent a fortune on tools one might not use in the future. The third possible reason was that the apprenticeship usually started with observing, not learning the actual skills, so there was no need to own one's personal tools at the beginning. The apprentice should learn how to maintain the tools before owning them in the

Taiwanese traditional apprenticeship training. Therefore, this tool giving ritual was the reward of one's labour contribution to the workshop in the previous years, but it was also a ritual that declared one's transition from apprentice to independent craft maker.

In today's craft training pedagogy, students usually purchase their first set of tools after they finish the fundamental basic course. For the student's convenience, the instructors usually order the basic tools for the students and obtain a group discount for them. The instructor at the NTCRDI, Master Lee, usually orders the tools for students from a special blacksmith's workshop at Lukang. Some bamboo craft instructors order tools from the local blacksmith in Jhushan, but it is often believed that the blacksmith at Lukang makes the best tools.

Master Huang and Master Lee both told me they usually purchase their tools from Lukang (the name of the place literally means 'the port of deer'), which was formerly a busy commercial port and religious centre for Mazu<sup>35</sup> believers. One possible reason for this preference is that Lukang used to be a major city in the past, and many wood carvers and carpenters gathered there because of the demand for shrine tables and statues of different gods of local religions from the believers coming from all around Taiwan to worship Mazu in this town. In the past, the blacksmiths at Lukang might have had better iron sources from China or Japan, and had a good reputation among the wood carvers. Therefore, many of the bamboo weavers and bamboo carvers followed this tradition and preferred to purchase their tools from the blacksmith in Lukang instead of their local blacksmith in Jhushan.

Today, students in the training courses are allowed to choose the tools they want to buy even though they still preferred to consult their instructors for tool shopping advice or asked the instructor to order for them. For this reason, most of

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<sup>35</sup> The Sea Goddess of the Daoist religion in Southeastern China.

the bamboo weavers now in Taiwan uses Japanese-style tools, except for some elder generations who inherited their tools and skills of weaving bamboo from their family members. However, the moment of owning one's first set of tools is still very important in craft learning. The beginning craft makers need to collect different kinds of tools to expand their crafting ability. As a result, most of the craft workshops tends to provide students with basic tool kits at the beginner class and kept the tradition of awarding students with the tools if they are doing well.

Most of the bamboo craft makers in Jhushan were connected by learning networks; many of them attended several different workshops and courses to improve their skills. During my fieldwork between 2008 and 2010, I attended three different workshop courses in Caotun, Yunlin, and Jhushan led by Master Lee, Master Huang, and Silk, respectively. Their differences in teaching and craft making revealed the changes in different generations.

In Master Lee's class<sup>36</sup> at the NTCRDI, all students had to learn how to prepare the material from scratch; it was necessary for students to learn how to peel, spilt, layer, edge, round, and size the bamboo tube into even strips for weaving. This is the basic threshold of learning and one had to go through this dreary process to show one's true will and ambition to learn. In the 10-week workshop with Master Lee, he did not announce any concrete syllabus or learning goal at the beginning. He only continuously gave all the students more and more bamboo stems every week and instruct us to prepare more material for weaving until he said to stop. In Master Lee's class, I believe he kept the old training style he learned from Master Huang in the early days and modified it with his own experience. The measurement and quality of the material he requested were neither specified nor according to an objective measurement. He always said that

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<sup>36</sup> I attended the Bamboo Weaving Class with Master Lee from March 2009 to May 2009 at NTCRDI. This weaving class at NTCRDI was the first course I attended during my fieldwork. More than half of my colleagues were retired people; many of them were retired teachers and housewives, and some of them were middle-aged factory or small business owners. The hands-on experience of bamboo weaving, wood carving, bamboo carving, or pottery making allowed these participants to enjoy the fun of making items by themselves and helped them build up self-esteem.

each bamboo is different and one has to appreciate the differences. Therefore, we were only told that we needed more than 100 gi-han (one stalk) sized evened bamboo strips. I prepared more than 200 strips from which they were selected and qualified for weaving. Since he taught individual students according to their progress and talents, he would usually walk around the workshop and monitored everyone's progress, then demonstrates some tips when necessary. He never showed us the final products that we were going to make, and he allowed us to have the maximum freedom to modify the final work with our individual creativity.

Master Huang's class,<sup>37</sup> on the other hand, was hosted at the National Yunlin University of Science and Technology (YUNTECH). Master Huang was hired as a professional technician (equivalent to associate professor) at the Department of Cultural Heritage Management. All his students were registered full-time university students aged between 18 and 22. The material for practicing in this course was prepared by Master Huang's former student Miss Tu Su-ying. She worked as Master Huang's teaching assistant for over 10 years and she drove Master Huang to the university from Jhushan every week. Master Huang would discuss the next term's assignments with her in advance so she could prepare the material for every student. As Master Lee pointed out, the material preparation is the most difficult and boring process in the whole learning process. Master Huang's class at the university skipped this process and let the students jump into the weaving process, which was considered to be more fun and are able to attract the students' motivation to learn this traditional craft in the cultural heritage management department. However, people treated the material differently when they did not prepare the materials themselves one strip after another. They disliked the strips with spots and did not preserve them well. Most students at Master Lee's class used some container or made some special tube-like bags to store the bamboo strips to prevent them from bending or crushing each other. On

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<sup>37</sup> I attended Master Huang's Class at the National Yunlin Technology University from September 2009 to June 2010.

the other hand Master Huang's students at the university usually left them tied up by the elastic band as those strips were previously given to them. Sometimes they would even use the material to fight with each other until the teaching assistant Miss Tu warned them if they break the stripes, they will not get any more replacements. Master Huang thought teaching in the university was an honour to him and did not really care if the students did good work or not. Miss Tu did most of the teaching and preparation. However, this did not mean that Master Huang disliked teaching. If one approached him and asked for help, he was always very patient and happily demonstrated the techniques to the young students repeatedly. In Master Huang's class, he was just like his teachers in the training school. He would bring a sample to the class at the beginning of the term and instruct everyone that this was this term's assignment. Everyone would see what those strips laying in front of them would become, and this would give students a promising goal for their work in the later weeks.

Silk's class<sup>38</sup> was a combination of the previous two masters since she was taught by both of them. She learned bamboo weaving from Master Huang in a craft training course organised by the Ministry of Agriculture in 1987, and learned how to apply lacquer to bamboo objects from Master Lee in the later years. She also integrated her teaching experience in the elementary school before she got married into her teaching in the craft making adult class. She made hand-outs or wrote down the list of all the required materials with quantity and measurements on the whiteboard at the beginning. Silk always wrote down the size and quantity of the objects they were going to make in the class at the beginning and asked students to take note of it. Recently, she started to print out information and instructions as handout to students to complete as exercises. She was also the only one among the three instructors to specify the actual measurement for each strip. She taught students to use the Vernier Scale to examine the thickness and width of the bamboo strips. Silk also separated the students into two groups:

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<sup>38</sup> I attended Silk's class in the basement of the Jhushan Town Hall from February 2010 to June 2010.

beginner and advanced level groups. The beginner level group used some machine-treated materials and practiced some basic weaving patterns, while the students in the advanced level group prepared bamboo-weaving materials from scratch.

Silk's student Su-ru, who was a math teacher at Jhushan Junior High School, was also very devoted to bamboo weaving. She became responsible for the bamboo craft courses in her school in addition to her math courses; she even established a professional bamboo workshop at the Jhushan Junior High School and supervised students. She thought that since bamboo craft was the traditional skill of Jhushan Township, the public school should provide the young students some basic skills and knowledge to understand their local tradition. Su-ru prepared step-by-step instruction and attached diagrams along with the material requirements of the process in her teaching handouts. For Su-ru, bamboo weaving was not a skill she needed to learn to earn a living; she took the actual physical practice of bamboo weaving as a self-mediation therapy. She enjoyed the moments when she would 'soak herself' in the joy of making, and this helped to release her stress from work and heal her mind to forget all the unhappy things which happened to her. 'I found a peaceful world in bamboo weaving, so I hope to use this skill to teach these teenagers not only to learn this valuable tradition of their home culture but also calm down these impatient teens. They are not bad students; they just need something to keep them busy. Learning craft can help them to focus and build up self-esteem when they find themselves finishing an object', she said. For Su-ru, her teaching was more about how to meditate and calm one's mind than about craft making and creative designs. It was the mind she wanted to train through the practice of the hands.

The teaching method is changing from Master Huang's generation to Silk's generation. Based on my personal participation at workshops taught by Master Lee, Master Huang, and Silk, there are some major differences in the pedagogies among these instructors. First is the way they organised the information about weaving. In Master Lee's class, he separated the steps in the making process from one another. Students had no idea in advance about what the end product would

be like. This situation troubled me because it contradicted my former learning experience as a designer, in which we usually needed to have a master plan before the individual details of the design work, and so one would gain a general picture of the entire item. Secondly, Master Huang and Master Lee did not provide handouts for students. They preferred to explain simple facts to individual students repeatedly, but did not consider organising the learning information for each practice model. They did not even specify to the students the thickness requirements for weaving or the accurate size of the object. Master Lee divided all the steps up and taught students only one step at a time in order for the students to focus on the current step. Master Huang followed what he had learned from his Japanese instructor in the past. He always brought and displayed a finished product to the class, and asked everyone to check the size and shape of their own practice work, back and forth, against the sample. Therefore, students had to ask Master Huang to check their work and confirm with them all the time. When checking the size of a flower basket at the workshop at National Yun-lin Technology University, Master Huang sometimes only brought a bamboo strip with several marks on it, and used that bamboo strip to check the size of students' work. On the other hand, Silk always wrote down the size and quantity of the objects her students were going to make in the class at the beginning, and asked students to take note of it. Recently, she started to type out information and instructions that the students might need to complete the practice objects and subsequently printed it to give her students as handouts.

Their pedagogies are obviously different from the beginning. Master Lee started his teaching from the boring and repetitive practice of treating bamboo raw materials. For Master Lee, if students could not bear the boring preparation process, then they did not pass the task and qualify to learn this skill. Master Huang thought the college students were just learning this skill as a supplementary course at the department of cultural heritage management, so he did not require them to practice the fundamental material preparation skills unless they were especially enthusiastic about practicing this skill themselves, and actively asked to learn the technique. Otherwise, this course was more of a

social/cultural service for him to contribute to the society due to the award of the fame of living treasure in Taiwanese craft. Compared with Master Huang and Master Lee, Silk's point of view is that the most important objective is to arouse students' interest at the beginning. She believes that if students can engage in the pleasure of weaving, they will be patient and willing, to learn and practice the long and boring process of material preparation.

#### **2.4 *chih jhu* III: Mastering a Technique toward the Satisfaction**

The previous section illustrated the different pedagogies of different teachers in bamboo weaving classes even though they were taught in one knowledge system, the colonial traditional training. This section focuses more on the apprentice's opinions about their learning experience of acquiring the techniques and skills. Why is there a desire to learn craft techniques that is once considered 'out of date', and how it was learned are illustrated via several informants' learning experiences.

##### ***Being Good and Doing Good***

Learning craft skills is never the first choice for a good, successful Taiwanese young person in the opinion of most people I met in the ethnographic fieldwork in Jhushan, even though there was a tradition of bamboo craft. They still have rooted in their mind a traditional hierarchy of job rankings: *Shi* (governmental officer and teachers) at the top, *non* (farmer), *kong* (labour workers), and *shan* (merchant) at the bottom. The only way to be an official governmental officer is to pass the exam to acquire the qualification and secure a position. If one wants to be a teacher, then one may also have to have certain academic achievements and pass other exam too. Therefore, 'good' children should focus on studying the textbook and do well on all the exams to get a bright future. Many parents will warn their children by saying '*if you don't study hard, you will need to do hand work for living.*' As a result, there is always a distinction of what a good or bad student is when it comes to learning. Good students spend

their time studying subjects that benefit their academic performance instead of learning ‘useless’ craft skills for ‘fun’. For most Taiwanese parents, spending time on craft making skills is a waste of time and usually considered fooling around.

For example, bamboo craft maker Yeh recalled his youth as a bad student who could not focus on his school assessments and studies. He said he liked to wonder about random ideas and was curious about everything when he was young. *‘Maybe this was the reason that made me become a craft maker and had good reputation with the public. I am always looking for the possibility of things and the new ideas,’* he said. Yeh’s family ran a bamboo factory in Jhushan for three generations, but at the beginning his family did not want him to inherit this business. His family arranged for him a position at the government-operated Chunghuwa Telecommunications Company, which most of his family thought was a decent and secure job for a young man. However he quit in the first month since he thought the job was too boring. Although he studied in the art and craft division at Jhushan High School and received an excellent score in his bamboo craft class, while even though he failed most other academic subjects such as mathematics and English, his family did not support his involvement in the bamboo craft business since the bamboo industry was already declining at that time. His family thought having a stable and office job is beneficial for a young man to have a stable and easier life to raise his future family. Being a craft maker, or o-chu jobs (lit. ‘black hand’ - those jobs which will get your hands dirty) is not the least desirable option. He decided to defy his family’s wish and be an apprentice at the workshop of one of the most famous wood carvers at that time. However, the training and effort he devoted to becoming a professional craft maker were not interesting nor easy. On the contrary, he recalled the period of apprenticeship as very strict and disciplined.

*‘The master wouldn’t say much; you watched how he did things while he was doing the job, and he also came to see your work then pointed out what you had done wrong. I did learn from those days but I choose to teach my students now in different ways. We will discuss what a student wishes to do and show them*

*the techniques and the tips. People today learn this skill for entertainment or personal interest. You do not need to ask them to have the commitment to learn the skills. As an instructor, I would rather put more effort into encouraging them and let them develop their own thoughts and designs. I carved texts on wooden panel for a long time during my apprenticeship, and I have to say, for a young boy like me then, that was really suffering. I do not want to teach in the same way because even I find it very boring. I was a bad student, because I cannot sit all day and try to memorise facts for the exams. I hate invariable boring things. Therefore, I don't want students in my class to be boring or restricted, because I personally like neither of those situations,'* he said to me sincerely in his workshop.

Mr Yeh's testimony regarding being a bad student and hence becoming a craft maker echoes Master Huang's claim that he was a student not an apprentice at the training school. Master Huang indicated clearly that he learned maths, language, and science in the morning courses, not just craft skills 'at the school'. For most Taiwanese, learning a 'practical and useful' skill to obtain a secure position in society is more important than anything else. Creativity and originality have long been ignored in Taiwanese educational values. For people who grew up in that age, focus and being single minded is the path to success.

### ***Doing Right and Doing Wrong***

For strategies of learning, there is an old Chinese saying that one has to 'reach' one's eyes, ears, mouth, hand, and heart (眼到、耳到、口到、手到、心到). People believe that the eye is the first organ of observation in learning. Doubtless, observation will always be an important skill when it comes to learning craft skills, but observation is not limited to the visual. Likewise, many skills of recognising how crafting should be practiced cannot be taught verbally. It requires all the other senses to understand a minor difference of the material's condition or adjust the force one applies while learning how to make an object. For instance, bamboo weavers judge the moisture in the bamboo fibres and 'correct' it by soaking the bamboo in water for hours or drying it under the sun. It

is it hard for them to standardise and define an exact benchmark to check the materials, thus the knowledge to make these judgements is usually transmitted from one to another through repeated demonstration and other senses. Kitty, a glassmaker at NTCRDI workshop, once said, *'it is not the instructor but the material which will tell you when it is ready. When it is ready, you will know it by looking at the material and seeing the fluidity of it. It's like the material will talk to you; it will tell you when it is ready if you have enough experience of making it.'*

From my fieldwork in Taiwan with the craft makers, none of them talked about there being any Standard Operating Procedure (SOP) in learning craft; they always said to me, *'there are no concrete rules of making it because there are too many things that you need to adjust. What you should pay attention to is how to keep the balance of the material and the environment.'* To understand what the material was *saying* required experience, and one had to receive information from *'beyond one's vision'*. When I was trying to use fire to smoothen the trimmings of my woven bamboo basket, I paid full attention looking at the basket, and tried to avoid burning it. Master Huang walked passed behind me and said, *'be careful, you are burning it!'* At the very moment, I saw part of my trimming start to burn, so I had to remove it from the fire quickly. However, I couldn't understand how as an aging man with limited eyesight he would know my basket was almost burning. I could not resist asking him. *'I smelled it, I don't even need to look at it. If you smell sweet corn, you are doing right. If the smell become bitter, then you are probably going to burn it.'* What we saw is the result of making, but the material can usually talk if one can comprehend it. The master can only warn you not to burn it, but it needs the individual learner to read, listen, smell, and feel what the material was trying to communicate to us in a non-verbal way.

Therefore, the traditional way of teaching craft skills does not involve too much talking or verbal communication between the instructor and the student. There is always a medium, a material substance, or an object that bridges and creates the communication path for them. Craft makers, as skilled practitioners, involves within the processes of making and creating their work through flow and forward movements. The ways these skilled practitioners create are not about

imposing but the continuously interactive responses between the maker and the materials. A skilled practitioner would conduct one's act of making "depends upon understanding properties of materials," and the creativity of making, which was described as the 'skilled innovation', lies in the making itself. (Gunn, Otto et al. 2013:5). Therefore, they were less likely to be fooled by the superficial vision due to their knowledge and experience of the materials.

Like Richard Sennett (2008) reminded us in his book *The Craftsman*, vision is the easiest sense to delude. In order to master craft skills, people should always rely on their other senses besides their vision. From my personal learning experience at different bamboo weaving classes, some of the qualities of learning craft skills were discovered through participating in observational experiences. Firstly, one should weave with the rhythm of one's body, not the logic in the brain. One should remember the sequence by the hands, not by the eyes. If one weaves with one's eye and memorises the pattern in one's brain, the object will go wrong easily, but if one remembers the sequence with one's body and feels the rhythms, then it usually goes well. Secondly, weaving is not about strength, but about how to control and withhold one's strength and balance. When one weaves, one is forming a hollow space, not the object in one's hands. One should not press down the strips that will make the basket smaller; rather, one should control all the strips within one's two hands, then hold them and weave them into a space. One is only utilising the strips to shape the boundary of a certain space. Thirdly, one should focus and isolate oneself in the process of making and ignore the outside world. Master Huang and Master Li both said, 'put your head down and weave, so you can be a real master not a "nail master"<sup>39</sup>'.

Another very interesting fact about diagnosing whether one is doing right or wrong is through suffering pain. When I complained about my blister and pain on my thumb and index finger, Master Lee told me that I was not evening-out the

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<sup>39</sup> in the carpentry tradition, a good carpenter must know how to make tenon, thus one uses a tenon instead of nails to make things; therefore, people call the unskilful carpenter a 'nail master' because he cannot use the tenon well.

bamboo strips in the right way. *'You did not layer them enough, and made it too thick,'* he said. The next week, I brought the bundle of bamboo strips to the class and showed them to Master Li to check if they were ready to make the basket. He asked, *'you must have used the mechanical tool not the knife to even it, am I correct?'* I did borrow the mechanical tool to process the bamboo strips from Silk's bamboo workshop because I felt using the knife to even the strips was time-consuming, and made it easier to fail and waste the material. It is allowed to use the mechanical tool for preparation in Silk's workshop. In fact, Master Li had also purchased these tools personally but he discouraged students from using them, especially the beginners. For him, the right way to learn is by preparing everything from scratch and doing it in the traditional way. From the shape of blister on my finger, he knew whether I was using the bamboo knife to even the bamboo strips, or pulling strips through the mechanical tools. He certainly had his own authority for forbidding students such as myself from using the assistance of tools before we were qualified in our technique. This teaching philosophy had made it difficult for beginners to enjoy the fun of weaving while in fact not mastering the technique.

For someone with my design background, it is strange not to query many of the rules in craft making. *'Why can I not do it the other way?'* I always chased down the masters to answer my questions or my newly-invented ways of doing things. *'It is the way it is'* is the answer I often heard from the master; sometimes it is not about the rule but about the natural materiality or the tradition. Many of the methods of bamboo weaving have an inner, relative relationship, thus if one misses one sequence or performed in a different way, it might cause a problem unless one is completely aware of the whole process and can create one's own sequence of making. However, the masters' teaching pedagogies did not provide this kind of master picture of the making, and the evaluation standard was usually based on their embodied experience, which cannot be directly transmitted to students. When Master Huang was walking around the classroom with his *'magic strip'* to check everyone's work, even though it was only a bamboo strip with several pencil marks on it, it was an object which presented his authority and

advanced status above the rest of the students. In fact, Master Huang kept those marked strips in his studio. He said he could duplicate another identical object matching that strip with marks and notes on it. He did not draft the technical drawing for his design; these strips recorded his thoughts and designs and provided the index for duplication. From those strips, his design was not visible in reality but invisibly structured in his mind.



**Figure 2-14 Master Huang is using his marked strip to check the size of student's work**

The current situation of learning bamboo craft in Jhushan is different from researches done by Gosselain (1998, 2008) or Venkatesan (2010), which found that craft making limited one's opportunities to go 'outside' the village or gain self-esteem. Venkatesan (2010) argued that the choice of learning to weave was the result of lacking other choices. The weavers felt aggrieved by their delayed payments and non-respected working status. Weaving was a kind of work which would restrain them inside the household, not a creative or valuable skill. 'People who could successfully work with new ideas, incorporate new technologies, take advantage of new opportunities, would not be weavers' (Gunn, Otto et al. 2013:

5). However, the cases I found in Jhushan were the opposite and showed the choice of learning to weave, which allowed people in a small town to have a voice in the family, get a chance to be seen, or be invited to go abroad to exhibit their work and demonstrate their skills. Unlike the fieldwork research done in Pattamadai, south India, or Niger, which found the craft skills trapped the craft maker in the bottom of the social system and locked them in the village, the bamboo craft making skills were the force which supported these people to go out of their village and explore the world, and even to improve their social status. This is the same force that attracts people in Jhushan to learn and be willing to master this skill.

Bertrand Russell (1951) in *On Denoting* critically examined the equivocal nature of the word 'know', and suggested distinguishing two fundamentally different types of knowledge: "knowledge by description" and "knowledge by acquaintance". The two contrasting expressions "knowledge by description" and "knowledge by acquaintance" are ultimately dependent upon experience, since some of it is direct (knowledge by acquaintance) while on the other hand some is indirect (when it depends upon a description of a direct experience) (Venkatesan 2010: 172). However, this does not mean there must be an orthodox way of doing things correctly, Jacob Eyferth (2010) noted that 'secret recipes', which several workshop owners claimed, do not exist in a strict sense because it is not a fixed recipe rather than a set of knowledge which allows the owner to be able to adjust and modify the materials and process in a certain way flexibly (Eyferth 2010: 185-189). In order to do things right, it is important to acquire both "knowledge by description" and "knowledge by acquaintance," so that one may be able to react flexibly to different situations in making, to achieve a stable result in making.

### **Chapter 3 Tradition or Innovation: Making, Doing, and Designing with Bamboo**

The basic pedagogy of bamboo weaving is still based on imitation, as we illustrated in the previous chapter. In fact, the practice of imitation has usually been the starting point of the process of learning a skill: a ‘fundamental instinct, an irreducible fact of human nature’ (Russell 1951). As the ancient Greek philosopher Aristotle said, “imitation ... [is] natural to man from childhood, one of his advantages over the lower animals being this, that he is the most imitative creature in the world, and learns at first by imitation” (Cassirer 1962: 138). Like language originates in an imitation of sounds, art is an imitation of outward things, craft starts with an imitation of specific sets of techniques and the imitation of the finished products. However, if imitation is the real purpose of language, art, or craft, the very concept is highly questionable. For how can we improve our reproductive model without disfiguring it? How can we differentiate an individual’s work, and how can the individual identify themselves? “In this case art would remain reproductive; but instead of being reproduction of things, of physical objects, it would become a reproduction of our inner life, of our affection and emotions,” he said (Cassirer 1962: 141). These characteristics of artistic practices also apply to craft making among the bamboo weavers in Taiwan, where making crafts was no longer merely a repeated process of producing duplicated objects, but a realisation of their life and desires. Bamboo is a relatively cheap material compared to wood, steels, and other materials, so it allows the individual’s creativity to be elaborated, developed, and expressed with this cheap material. In Chapter Two, I discussed the actual process of making with the different *chaîne opératoire* models, from the raw material to the end consumable product. Here I would like to return to this thread, and intend to read Taiwanese bamboo designs “forwardly” at the initial beginning of the birth of a craft maker’s own design about the tradition, the nature, functions – as idealist or finalist factors – to further understand how bamboo craft making in Taiwan evolved from making imitations of reproductive traditional objects, to seeking out original and innovative designs.

### 3.1 Learning in Reverse

In previous sections, the actual process of the knowledge transmission of the bamboo weaving displayed basic local knowledge about Bamboo in Taiwan, and here I would like to undertake Ingold's arguments on reading the result of creativity 'backwards', allowing us to find the creativity of action by 'tracing the novelty of its outcomes to unprecedented ideas in the mind of individuals' (Ingold and Hallam 2007: 2-3; Ingold 2010: 97). He suggested that creativity must be 'read "forwards" in the movements that give rise to things, rather than backwards from their outcomes' (Ingold 2011: 6-7). In this section this critical point is followed up, trying to examine the process of making things in both directions of reading; I intend to read Taiwanese bamboo designs in "both ways". On one hand, the craft makers receive an end product to read and comprehend it backwardly in order to acquire the technology and skills. To create is to innovate, as Ingold argued: the craft maker re-created a novel *chaîne opératoire* through reading and reinventing a lost "traditional" design, and techniques to modify the end product.

When one tries to make an object with an unfamiliar style and design, one may either be taught by an instructor, follow some instructions, or analyse it personally. However, when the skilled knowledge has been lost, and requires some excavation to be able to be re-constructed or re-invented, other analysis processes are required for learning. The following case studies about bamboo making in Taiwan are different from the common routes of acquiring the knowledge and skills, in which knowledge and technique were not transmitted from parents to offspring, nor from master to apprentice, but may be described in Gosselain's terms as involving 'an amazing propensity to mix old elements, borrow elements, invent new traditions, manipulate material culture strategically, and the loci of constant redefinitions by individuals and local groups' (Gosselain 2008: 152). This section intends to show the reinvention of traditional techniques of bamboo weaving and how people search for one's own traditional techniques and styles.

***Case I: Deciphering the bamboo hat from the Penghu Islands, also known as the Pescadores (Silk)***

Since the Japanese established the first bamboo craft training school in 1932, the craft makers in Jhushan were usually requested to produce certain designs of craft according to other people's orders. These orders were the actual demand for certain objects and these commercial orders can also be seen as the authority of the ways of making things. Usually, the trader would bring a 'sample' from the foreign market to the weavers and ask them to reproduce the same design locally. Most craft makers were valued for their speed and the quality of their making, and not for the originality or uniqueness of their work. This section discusses the case study of *wan-zi-li* from the Penghu Islands, which reveals another learning route for the craft maker, a route borrowed by the bamboo weavers in Jhushan, which opened up opportunities to expression and develop one's personhood.

The Penghu Islands, also known as the Pescadores (from Portuguese: fishermen), are an archipelago off the western coast of Taiwan in the Taiwan Strait consisting of 90 small islands and islets covering an area of 141 square kilometres. *Wan-zi-li* is a kind of traditional woven bamboo hat which was unique to and popular in a small village called *Xiyu* (澎湖縣西嶼鄉). *Xiyu* village is famous for growing premier quality peanuts, according to local residents in Penghu. Although peanuts are commonly grown in several villages or imported from Taiwan or even Mainland China, the peanuts grown in *Xiyu* village are said to taste better than those from the other regions because of the soil and weather conditions. The local residents in Penghu would try to recognise the farmers from that village by whether they were wearing the *wan-zi-li* or not. The hat became the identifiable mark for vendors from that village and also an everyday essential for the villagers because they wore it for farming and fishing in everyday life. The famous nationally-recognised living-heritage bamboo weaver, Pong Kuo, was awarded the merit of the national cultural heritage transmission by the ministry of education of Taiwan in 1985, because of his techniques for making this kind of hat.



**Figure 3-1 Two models of *Wan-zi-li* were displayed side by side at the 2009 Bamboo Festival**

Even though the hat has been designated as cultural heritage, there are not many people who can make it, since the previous generation did not really pass this skill to the next generation because the technique was regarded as useless. In addition to this example of a knowledge-transmission crisis, not many of the older generations can make this hat now, because they stopped making it and forgot how to do so. The only person who could still make this hat was Pong Zu-lin, the son of Pong Kuo (Lu 2004). His father taught him how to weave this kind of hat and he earned his living by making it in the early days. However, the market stopped requiring this kind of hat, so he stopped making it a long time ago, since the late 1980s. He had almost forgotten how to make it when the cultural bureau found him and asked him to make it again. He later was invited to teach prisoners in Penghu how to make the hat and quite a few students were able to re-make this design. Some of the prisoners even created their own pattern designs such as the *fu* (福 lucky), *so* (壽 longevity), and so on.

In 2009, when the cultural bureau wanted to hold another workshop for transmitting and preserving this technique to the locals, they suddenly realised that Pong Zu-lin had died several years before, which meant no one from that village could make this kind of hat anymore. Therefore, they flew over to Taiwan and found Silk, my major informant, to help them to solve this problem. They sent Silk the hat from the Penghu museum collection and asked Silk to find out how it was made and then teach the local people in the Penhu Islands. For Silk, this was a totally new object and she needed to learn about the process of making it and teach other people about the techniques, but she had no one to ask. One method applied in such a situation is called reverse engineering, a method commonly used in mechanical engineering and also in archaeological research. She tried to read the pattern on the hat and find out where the starting point was and where the end was, and also the relationships and sequences of the individual strips in order to make the pattern. Then she started to make a new one with the method which she had analysed and guessed. Using the size and curve of the existing hat from the museum collection, Silk made a model, to shape the woven mat to the desired shape. She said that she pressed the hat too hard in her first sample, so there was a line on the curve that she did not want to be visible. After the patterned surface was done, she cut the woven, shaped mat into a circle and created the ring of it by thicker bamboo strips, then tied them up to secure them in place. After she made the first sample, she started to work on separating the techniques step by step for teaching. It was very important to always keep the correct pattern on the hat; otherwise, it could not be called a *wan-zi-li* but just a *doli* (bamboo hat). She then used a wider strip to make the demonstration handouts section by section so they could be easily recognised.

Since Silk made the hat according to the original *wan-zi-li*, from the object from the museum collection, Silk's *wan-zi-li* and the *wan-zi-li* in the museum collection are made with different *chaîne opératoire*. Even though the final product looks similar and 'the same' in a general way, Silk's *chaîne opératoire* is different from what Pong Zu-lin did, according to the student he taught. Pong Zu-lin wove the centre pattern first, regardless of the curve and shape, then soaked the

woven mat in water overnight and shaped it with a base of flower pot he brought from his home. On the other hand, Silk made the model at the beginning and only sprayed water on the bamboo strips instead of soaking them in water. She also made holes on the model, so she could make sure the entire trimming on the ring could be tied up evenly. This different operational sequence resulted in a more refined quality in Silk's version.

There are several major differences between the hat Silk made and the original hat. Firstly, the material is different. Even though Silk knew the original *wan-zi-li* was made with Chinese *mao* Bamboo, she brought *makino* bamboo to Penhu for teaching and used this material for the teaching samples. For Silk, the *makino* bamboo is more flexible and durable as a weaving material. Also, the *makino* bamboo has a kind of golden shine on the skin, so it would give the hat a more delicate and splendid surface. Secondly, the delicacy is different; Silk's *wan-zi-li* is much more delicate than the original one, not only because of the glow on the material surface, but also the technique she used to secure and decorate the hat. The original *wan-zi-li* only had a simple tied-up pattern as the functional ending for the woven hat and the decoration, but the way Silk's version is made is much more delicate. The space between two tied-up rattans on the original one is uneven and roughly decided, but Silk's *wan-zi-li* has a beautiful ring with even edge-spacing on the ring. Also, the decoration on the top of the hat is different. The original one only has a ball on the top with several rattan strips to secure it in place, while there is an octagonal decoration laced around the top of the hat to secure the ball in Silk's version.

The full process of making this *wan-zi-li* was documented and recorded by the Penhu County Cultural Bureau and published as a book with a DVD film demonstration for knowledge skill transmission. However, the techniques documented are not the same as the original folk-style vernacular object making; instead it became a much 'more accurate' making of 'fine craft'. Besides the pictures and films on the DVD, the exercise book documents the *chaîne opératoire* of 'remaking the *wan-zi-li*' in text, not in graph or drawing. Each text presents a position of each intersection of the strips.

The way this ‘remaking the *wan-zi-li*’ project was conducted was more about recreating the end product of the *wan-zi-li* than about maintaining traditional ways of crafting. As Immanuel Kant remarks, ‘The hand is the window to the mind’ (Lu 2004); Silk and Pong Zu-lin’s different ways of making the ‘similar’ object reveal their different mind-sets. Pong Zu-lin inherited the skills of making *wan-zi-li* from his father while the *wan-zi-li* was an everyday accessory in the agricultural life. His family did not ‘invent’ or ‘create’ the design but carried on this traditional ‘useful’ technique and earned extra household income for this craft activity. He was not aware of the need to transmit his knowledge since he considered it ‘not useful’ anymore. He only transferred his knowledge to the prisoners at the jail factory in Penghu for producing *wan-zi-li* for the tourist market in the Penghu Islands in exchange for extra income for the prisoners. On the other hand, Silk analysed the *wan-zi-li* as an end product and tried to solve the puzzle of how to make it. After she successfully cracked the technique and made the first study model of *wan-zi-li*, she made another bamboo hat with the *wanzi* (swastika). For Silk, the *wan-zi-li* should have the pattern of *wanzi*, or it should not be called the *wan-zi-li*. At the 2009 International Bamboo Culture Festival in Jhushan in September, Silk displayed both designs next to each other at the bamboo craft exhibition. For Silk, the real Taiwanese one should be like the one with the swastika, not the volute pattern on the *wan-zi-li* from the museum collection.

‘The Penghu *wan-zi-li* does not have the *wanzi* on it; I don’t think that should be called *wan-zi-li*. Maybe it’s because the style might come from mainland China. I made this one with the *wanzi* (swastika) on it; this should be the true *wan-zi-li* for we Taiwanese because we read the *wanzi* here. Our *wanzi* should be like this.’

Interview with Silk in September, 2009.

She further explained the intuition of changing the Chinese *mao* bamboo to the *makino* bamboo for her students to practice in the Penghu Islands: ‘our Taiwanese bamboo is the best bamboo, much better than the Chinese bamboo.’

Our *makino* bamboo is more flexible, finer, and smoother than the Chinese *mao* bamboo and the Taiwanese *moso* Bamboo. Look at the golden shine glowing on the surface of *makino* bamboo. Our bamboo is harder to make with because it is tougher and finer, but the object made with it appears much more beautiful. Since it takes so much effort to make one *wan-zi-li* and we are not making this for the agricultural functional use but as a nostalgic folklore decoration, we should use the best material to make it look beautiful. Besides, we are making this to learn and to preserve the Taiwanese culture; we should use the Taiwanese bamboo, not the Chinese bamboo.’ The material attachment to the local bamboo and the subjective changes in the chaîne opératoire reveal Silk’s mind-set of her identity and responsibility as a Taiwanese bamboo craft maker.

*Case II Pan San-mei : The Reverse Learning Experience of Indigenous Bamboo Weavers*

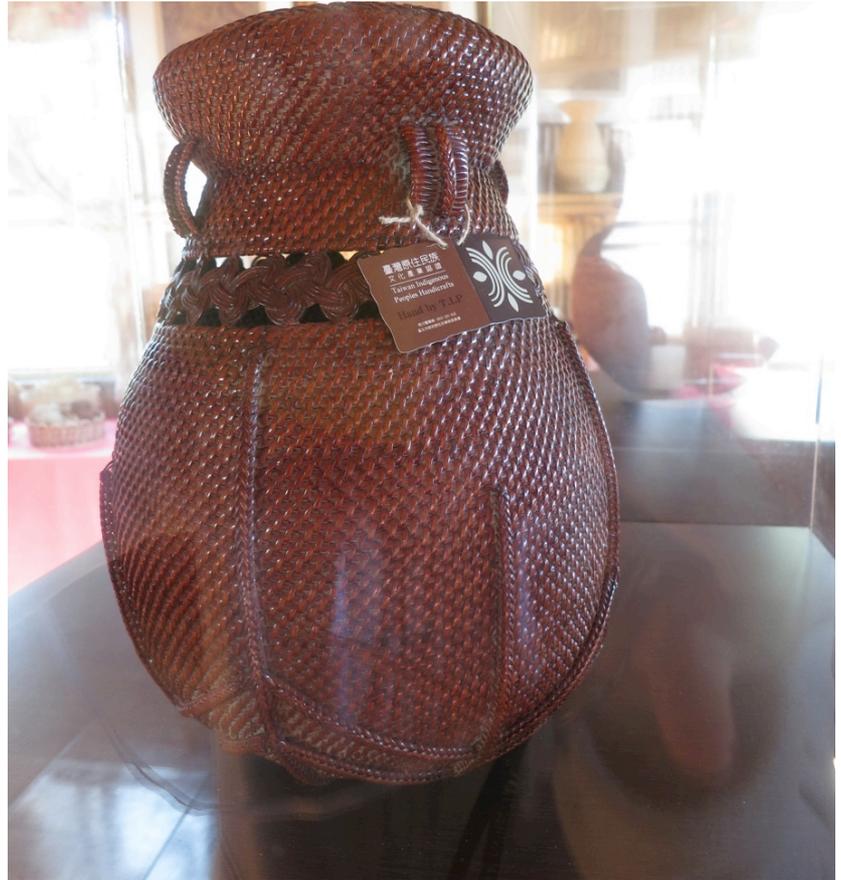


**Figure 3-2** Awai’s craftworks had been recognised by many different craft awards and became the advocator of indigenous bamboo weaving crafts. (Awai’s showroom in her house, 2013)

In a different community setting from Han Chinese areas of Taiwan, the indigenous bamboo weaver in Taiwan also presents an example of a ‘reversed’ learning approach, used to construct and reconstruct their cultural identity. Awai Tain Sawan (Madrian name: Pan San-mei, referred as Awai afterwards) is the most significant indigenous bamboo weaver in Taiwan and has received many awards that compliment her achievements as an indigenous weaver. Her works have combined the indigenous Saisiat (Saisiyat) motif and legends. Her learning path reveals a typical learning path of finding self-identity through the practice of craft making. When younger, she left her home village and went to a factory in Hsinchu to work at a bamboo and rattan wares factory owned by the Chang family. The factory owner Chang Xian-ping was the second generation of this family business and he found great interests in making his own bamboo and rattan

crafts besides the daily work of manufacturing the orders from his Japanese customers.

Chang had been awarded several merits because of his excellent craftworks and devotion to bamboo and rattan weaving, including the highest merit of the National Craft Master Award. His works have been sold at a price of 1,200,000 NTD (equivalent to about 27,000 GBP) for a woven bamboo pot with a diameter of 35cm, which was the highest recorded price in the market for bambooware in Taiwan. He collected many indigenous objects out of personal interest, and also design samples for his export business. His Japanese customers usually came to him with a sample and asked him to produce the same things, or his customers would choose the samples provided by Mr Chang, and perhaps made some minor adjustments. He also collected beautiful Japanese bamboo and rattan wares during his business trips in Japan as samples. Therefore, the designs, techniques, and styles of Mr Chang's work were deeply influenced by both Japanese and Taiwanese indigenous crafts. Mr Chang met Awai when he was invited to Nanzhuang as an instructor of 'housekeeping course (家政班)' by the township government and started to commission the local Hakka and indigenous students from the housekeeping course to work for him. He prepared all the materials and brought the treated and sorted material to Nanzhuang for local people to produce qualified woven objects for him. Later on, he hired several distinguished students in his factory, to work for him as full-time staff. Awai was hired during this period of time and learned most of her craft skills from Mr Chang. Mr Chang taught Awai the techniques of applying ashes on the bamboo and rattan wares in order to age the object visually for the souvenir and export market. This technique later became Awai's signature style.



**Figure 3-3** The newly made woven bambooware which has been given the certificate of authentic indigenous craft. (Awai's showroom in her house, 2013)

Saisiyat group in Nanzhaung were culturally influenced by the Hakka and Southern Chinese style earlier than many other groups, due to the fact that they lived geographically close to Chinese Hakka immigrants' settlements, according to Awai. Many Saisiyat learned the Hakka language for trading purposes. Now, many Saisiyat people can speak Hakka better than Saisiyat. Awai's father was a bamboo weaver. He sold bamboo and rattan wares for agriculture and everyday use to mainly local Chinese settlers and other Saisiyat families. Therefore, the objects he made were not purely Saisiyat styles and designs, but more Han Chinese styles for trading purposes. She remembered how she has enjoyed watching her father making bamboo objects ever since she was little, but bamboo weaving was usually man's work, and it was considered inappropriate for women due to the heavy work load: from cutting the bamboo in the mountains, carrying or dragging bamboo stalks down from the mountains, and requiring strength for splitting the bamboo stalk with the indigenous knife. Therefore, her father refused

to teach her the techniques because it was inappropriate for a girl to learn this craft technique. Traditionally, Saisiat (Saisiyat) people do not really use any special tool for craft making; they use the same knife set for cutting pork in the ceremonies and also for craft making or cutting the grass when they go hunting. The Saisiat female did not traditionally use this kind of larger knife, and this might be another reason why women were not encouraged to perform bamboo weaving techniques. Since Awai acquired her craft technique when she went to work at Master Chang's factories instead of learning from her father or the senior members in her indigenous group, she started learning the skills with Han Chinese tools and the Japanese tools, instead of the traditional Saisiat-style tools. As an owner of a certified Taiwanese Craft House, Awai also had won her status as the designated indigenous traditional craft maker. However, her design and style are not inherited through the Saisiat tradition but invented by her own learning experience, observation, and creativity. Although her works have usually been considered as "traditional crafts" by viewers, she did not merely inherit or copy the so-called "traditional" designs. She usually borrowed the shape and decoration of indigenous artefacts, such as pottery, and added the indigenous motif such as the 'hundred pacer' from indigenous myth.

Awai did create several pieces using the Saisiyat traditional patterns such as the Thunder Goddess pattern (雷女紋), motifs from indigenous mythology, or adding the *panyas* seed which was a common Saisiat craft material on top of the woven bamboo and rattan craftworks. However, the majority of her craftworks were several mini-sized indigenous back baskets and other miniatures of Saisiat artefacts for the tourist market. She used to produce these kinds of 'products' for Mr Chang in his factories which were destined to be exported to the Japanese market and the local souvenir shops in Taiwan, and now she produced similar products for selling at the restaurant and local souvenir shops in the village. For her, creating craftworks with the indigenous design elements was a way to establish her own identity and distinguish her work from the other Han Chinese bamboo weavers. She is trying to establish the identity and awareness in her indigenous community by making "new but traditional" artefacts for her people.

She established a workshop in the village to teach visitors how to make bamboo wares, and she also had a small showroom on the first floor above the workshop space. She provided different price ranges for tourists attending those mini DIY workshops and that was the major income at this moment for her family. This workshop was partially sponsored by individual funds from the Council of Indigenous People (CIP) and the Ministry of Cultural Affairs (MCA). Funds from CIP were for creating job opportunities for the local indigenous villagers so she could hire several local villagers during the peak season as teaching assistants to operate the DIY workshops and courses. Funding from the MCA was for the traditional craft technique transmission and the innovative collaboration projects with the design school students. One of her major problems in operating this workshop in her village has been access to material supplies. She constantly complained about the limited material resources she can access because she cannot drive, and it is also too far to go to the shops in Jhushan. Craft makers in Jhushan can simply go to the local bamboo shop and buy or order the material they need. Awai had to personally harvest the material because bamboo was not available in the local shops. She would otherwise depend on her friends to bring her material supplies if they went to Jhushan. When I visited her, she asked if I can bring her some smoked bamboo, which she had heard a lot about for a while, but had never actually got a chance to use. Therefore, I went to Mr. Liu (the owner of the smoked bamboo factory) and bought some smoked bamboo. I told Mr Liu I would like to have several different shades for a bamboo weaver. When I handed over these smoked bamboos to Awai, she promptly responded, “these bamboos are very beautiful, we don’t have such beautiful ones here. It is hard to find bamboo that has such length between two nodes.” The accumulated bamboo craft maker community in Jhushan was not only a result of the training institution, but also sustained by stable material supplies, from the leftovers of the continuous requests for *makinoi* bamboo from Japanese Kendo sword makers. Because they need the specific Taiwanese *makinoi* bamboo, they would pay for the shipping cost; and it is the leftovers from the bamboo sword production that means an affordable supply of materials exists for local bamboo craft makers. Although the local bamboo resources in Jhushan are extinct, and the factories have to ship the

material from Shinjhu County, the demand for materials from the local bamboo sword industry happened to provide a stable materials supply for not only the bamboo industry culture park, but also the local bamboo craft maker community.

With limited resources, Awai was no different to those craft makers in Jhushan in distinguishing the different categories of objects she made. Most craft makers I met during fieldwork could generally distinguish an object they were working on, according to whether it was a piece of *work* (craftwork/artwork), *product*, or an *utensil*. They may use the same tool and material to make all these three types of things, but with different personal attachments to the object. While they were making a utensil, the most important task was to make sure the thing is functional and durable; on the other hand, when they were making a product, their major requirement was to make a duplicable and desirable object for consumers. However, the most interesting and paradoxical practice of making things was when they were making a piece of “work.” They needed to fully devote their personal thoughts and senses of personal worth to the process of making, and treated these works as the extensions of their self and self-identity. They all learned to adapt this strategy to survive in the current environment, despite Awai learning this process by making the *products*, then the *utensils*, then finally, to creating her own *works*; while Silk took different learning route, from mimicking a master’s techniques, to creating her own *works*, to making *utensils*, then finally making *products* to set up her business. They all had to develop this hierarchy of made objects in order to sustain their workshop and create work opportunities for their students. Moreover, their techniques of making bamboo crafts were hybrids of Japanese techniques, Han Chinese techniques, and were their own acknowledgement of cultural identity through their learning experiences while acquiring their techniques. The new style and designs were introduced with the changes in the *chaîne opératoire* during the process of learning and making. Upon this point, we could say technology, which means the techniques of making in here is not only about production, since we have observed how the techniques and designs of bamboo weaving were intertwined with the historical, social, and political context.

### 3.2 The Style, Design, and Competition among These Bamboo Makers

Whether it belonged to one of the three categories of things craft makers made, a piece of *work* (craftwork/artwork), *product*, or *utensil*, most of the craftworks were made to be commodities in the market. Sometimes they were pre-made for sale like other industrially produced products and sometimes craftworks were bespoke pieces. The true value of a commodity is the embodied labour instead of the general form of value, according to Marx (1974: 165-166). He made the distinction of two different types of values: use-value and exchange-value. Something's use-value can only be redeemed when it functions, and its exchange-value is quantifiable and transferable. For Marx, the value of things was built upon the accumulated labour and its functional usages (Baudrillard 1981: 131-134). 'Value' in Marx's point of view is built upon the 'physical needs', such as hunger, of a living human being. Sahlins questioned Marx's formulation of the value of things in the Grundrisse as limited to biological and physical consumption, but ignoring the meanings constructed in society (Sahlins 1976: 148-161). Tim Dant has also pointed out a difficulty with Marx's analysis in that 'it obscures the processes of consumption and the links between use-value and exchange-value' (Dant 1996: 8). Exchanges cannot be made without the judgements and preferences of similar goods which would influence the economic value of things by other social and perhaps aesthetic values. As Dant (1996) suggested, Marx might overlook the complex form of social value (beauty, functionality, longevity) in order to emphasise the basis of economic value in human labour. This absence of certain, absolute value in Marx's theory cannot be ignored in the competitive craft market. Since most of the products did not offer any real function for the owner (use value), and all the general forms of value are similar as they were all made of bamboo, there should not be such big differences in terms of object value. If a craft maker were awarded acknowledgeable merit in the competition, all of his or her work would consequently obtain higher market value (price) in the craft market, because the possession of a prize bestowed upon a craft maker's work what Jean Baudrillard defines as a sign in a code of

significatory value in the system of relations, a sign which can serve as ostentation for its owner (Baudrillard 1981). However, there were often debates and issues between the viewpoints of the ‘professional’ judges and the craft makers about which craftwork should be selected to receive the first prize. The judges in craft competitions usually came from fine art or design departments in academia and did not necessarily practice all the different types of crafts and did not value the work by how much labour was embodied in the material but by the aesthetic appearance and originality of design. Silk once pointed out a colourful bamboo vase to me and complained, *‘this woven bamboo vase is so delicate, look at how delicate and complicated the rose on the side of the vase is. You should look at how many colours it has on its floral pattern. Each colour took extra time and effort to do. I can’t understand why the judges give the first prize to the very plain one and this beautiful and resplendent vase only awarded the runner-up prize. I think this is so strange; I can’t agree with their judgments.’* The first prize of that year was given to another woven bamboo container that only had single colour and simpler, modern abstract geometric patterns on the surface. Silk questioned the fairness of this competition and whether this simpler and ‘easier’ object could be considered superior to complicated and more difficult-to-make craft objects.

In the craft and design market, the price tag also conveys this phenomenon, whereas the market value does not really reflect many economists’ theories about the rareness of the material or the labour devoted in the production. This situation can be partly explained by Jean Baudrillard’s criticism of Marx for seeing the exchange-value indifferent from the use-value as a fetishised social relation (Baudrillard 1981). There is there the question of why things cost more when work is done by human agents, and made with the same material, but are valued less than others. On the same trajectory, Mumford (1934) borrowed the ‘pull’ theory from Veblen and Sombart, in which value is defined not by an object’s origin, rarity, or the work done by a human agent, but is linked to aesthetics, ostentation, and the consumption of luxury to express status (Dant 1999: 132). For two objects made of the same material, design could be the control factor to

distinguish one from the other, with different prices in the market, and different valuations in craft competitions as well. Silk's doubt of the judges' valuations of craft works reflected even more obviously on the different opinions of what was more valuable in a craft competition. One common comment about the craft works from the craft competition judges was 'qiǎo duó tiān gōng (巧奪天工)', which means 'human's work is so superior that almost only the Mother Nature can achieve it.' However, those judges from academia appreciated those kinds of works less, because they thought they lacked originality and creativity, but focussed on techniques.

One judge told me at an NTCRDI annual award event, '*too many craft makers were just showing off their techniques. They need to upgrade their work to the level of art. They need to be artistic enough in order to win the competition, not just decorate an object with splendid techniques.*' Another judge from the design school was criticising about how some craft makers were lack of "good taste" and cannot get the proportion right. '*Look at these objects, I knew it has taken them a lot of time to made, or excellent technique to make such an enormous size of woven bamboo basket, but it just doesn't look right. The contour of the object is awkward and the proportion is not right. The shape looks stupid, not smart nor pretty,*' the design school professor said to me. I felt so bad on behalf of the maker, thinking of all the effort they gave in every single piece of their work. However, craft makers were not usually seeking to dissolve the hard stuff of things in the crucible of one's imagination, to discover a new world of poetical, musical, or plastic forms. Many craft makers focussed on shaping the form of the object. This general perspective of the craft competition judges contradicted the basic training of the apprenticeship, in which their ultimate learning goal was to 'make' not to 'create.' Those craft makers who tried to mimic the textures and forms of nature were seen as merely shaping the form of craftworks or things, not creating works of significance that would stimulate intellectual inspirations or elaborate originality. Kenji (2002) considered that the closed involvement with a material brought a set of limitations due to its natural character, and these material limitations stimulate the craftspeople to work with

and enjoy this process; good craftspeople shall seek for ‘what can be achieved by working with and through the limitations imposed by particular materials’ (Greenhalgh 2002: 29-30).

Whether one can transcend the limitations of reproducing the visible, and capture the invisible quality that distinguishes the quality of their work, is the difference between being considered as an artisan or a master. This differentiation echoed the Taiwanese ways of differentiating the hierarchy of crafts makers as the ‘師 (*shi*, the master) or the ‘匠 (*jiang*, the artisan)’. A good apprentice and good student in Taiwanese culture should pay obeisance to the master and bear the boring repeated tasks given by their instructors. Anyone who learned any skills and got used to mastering techniques may well find odd moments when all the learning tasks shift from repeating practice and mimicry to individual creativity in the learning process. In my own experience, a major part of the advice given by instructors was not very applicable to the problems faced when one tried to create something new. Consequently, if one hoped to obtain status in the field of craft and design, people usually sought originality in their performance outcome, in order to receive good prizes in craft competitions. Under these circumstances, independent and mature craft makers may require a lot of originality along with their skills and techniques to craft objects with new thoughts.

These different attitudes of making may lead one to be successful as a *Shi* (master) or an ordinary *Jiang* (artisan). These different values of making usually determine if one can win prizes in national competitions or not as well. Those who can reproduce traditional designs with perfect techniques and complicated designs do not necessarily receive praises and merit, and sometimes they may receive criticisms such as “*jiang chi* (*highly-skill crafted without originality*),” or platitudes.

### ***The Authorship v.s. Copyright: when the Apprentice Becomes Independent***

Obeisance is always the first priority for Taiwanese apprenticeship, and one must bear the boring repeated tasks given by their instructors. However, independent and matured craft makers may require a lot of originality along with their skills and techniques to craft the objects with new thoughts. When an apprentice becomes independent, one may have the capabilities to operate all the techniques required during the process of making independently without assistance from the master. One should have clear thoughts of each operational sequence and be able to solve all the problems that may accrue during the process. However, one may be no more than a *jiang* at this moment unless one can establish one's reputation and develop individual's original design. If one can only mimic master's work without individual's originality, one may never be considered as a *shi*. Therefore, whether one was capable to make design innovations and create one's own identity of making became the indicator of this transformation from *jiang* to become a *shi*. The originality of design started to intervene in the process of making at this moment when a craft makers want to establish one's own fame.

Although a craft apprentice may receive praises for making exactly the same object as their masters, no designer would be praised for doing replicas of other's work or feel appreciated if people said one was doing exactly the same as one's tutors. A good designer should bring out a design from the concept rather than a visible sample, as do the premier craft masters who bring the quality in the material visible. Although all craft makers likely performed movements and actions when making things, many of them were limited by producing the replicate finished forms that are already settled. As a result, by the end of the process of making, the thing in one's hand became a dead object for shipping out for the customer rather than joining with those very forces that bring form into being. Taking their cue from Klee, philosophers Gilles Deleuze and Félix Guattari argue that the essential relation, in a world of life, is not between matter and form, or between substance and attributes, but between materials and forces (Deleuze and Guattari 2004: 377). This kind of quests for bringing the forces and

thoughts to be visible is the Holy Grail for anyone who wanted to make impacts from the things<sup>40</sup> one may create. For the mega graphic designer Tibor Kalman, what lies down between the materials and forces is the “intelligence” which differentiates the ‘good design’ and ‘great design’.<sup>41</sup> As one of the most intelligent man in the 20th century human history, the German born American Physicist Albert Einstein, who developed the special and general theories of relativity and received the Nobel Prize for Physics once said, ‘the true sign of intelligence is not knowledge but imagination’ (Einstein 2005). The German industrial designer Dieter Rams<sup>42</sup> also further pointed out that “Good design is making something intelligible and memorable. Great design is making something memorable and meaningful.” There were numerous quotes from design gurus cannot emphasise more the value of bring the invisible quality such as the imagination or thoughts and meaning of the tangible things. If we borrowed Marx’s comment on the art objects and applied it on the craftworks and designs, they are also “not isolated phenomena, but are mutually dependent with other cultural activity of predominantly social, political, moral, religious, or scientific character” (Marx and Engels 1974: 8). It is the invisible qualities of design and the agency surround the birth of things that are appreciated than the tangible object. These were also the general viewpoints and taste of the craft competition judges from the fine art and design academy training. However, when the craft makers needed to satisfy these judges in order to win the merit and increase the market value of their work, the judges’ ‘taste’ confused these hard working craft makers.

This reality on the preference of aesthetic value in the competition answered Silk’s complain about the fairness earlier. These hard working craft makers

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<sup>40</sup> I use the word “things” here in order to present as the whole things people create/design/made.

<sup>41</sup> Tibor Kalman once said, “The difference between good design and great design is intelligence.” (<http://www.designfeast.com/thoughts-on-design>)

<sup>42</sup> Dieter Rams (born 20 May 1932 in Wiesbaden, Hessen) is a German industrial designer closely associated with the consumer products company Braun and the Functionalist school of industrial design.

devoted their time to mastering their techniques when they started learning, not their creativities. As Christopher Zeeman commented “technical skill is mastery of complexity, while creativity is mastery of simplicity,” the beginners seeking for technical skills usually were fascinated by the complexity of things especially when they started with mimicking the master’s techniques, body movements, styles, and design. However, whether the practices of imitation must be the antithesis of creativity with innovation, I would like to refer Ingold’s insightful quote on the ‘operational’ value of imitation.

*To imitate, in this view, is to run off replicas from an already established design or template. Precisely such a reading underwrites theories of observational learning which posit that knowledge is acquired through the transmission – from mind to mind and across generations – of information specifying traditional patterns. The elements of transmitted design, popularly known as ‘memes’ (by analogy to the ‘genes’ that are said to encode a design for bodily conformation), are alleged to populate the minds of their carriers and to govern their behaviour in ways that bring about their own replication in the minds of imitators. Just as evolutionary novelty is attributed to the mutation and recombination of genes, creative innovation in the history of culture is likewise supposed to result from analogous processes at the mimetic level. Yet this reverse attribution of emergent form to prior design omits the creativity of the very processes wherein every design is realised in practice.*

(Ingold 2011:7)

Although the teaching methods were changing from Master Huang’s generation to Silk’s generation, the mimicking and imitation were always the major learning task in all the craft courses. However, the results of this kind of craft courses may cause controversy in the craft competition. In 2002, when Master Huang’s former student Lotus won the first prize in the craft competition help by the NTCRDI, which is the biggest national craft competition in Taiwan, the organizer was blackmailed, and accused of copying her tutor Master Huang’s

work. At the first glance, the two objects did look similar. They were both round base baskets with single handle on top and with similar ‘chaos woven’ pattern, but the shape of Lotus’s basket was more oval. In the NTCRDI’s announcement about this issue, the NTCRDI said that they wouldn’t withdraw Lotus’s award even though the shape and design of these two objects were similar because she did personally make it herself, not by others. This whole drama ends up when Master Huang and Lotus have a joint press conference and declared that he felt honoured to have such an outstanding student and even though he taught her the style and techniques of weaving, she completed this object all by her own. The presenter who held this press conference also concludes this incident as a beautiful story of traditional techniques transmission instead of the plagiarism scandal. These tensions between designs and techniques can be traced back to the initial learning scopes when originality was not fully encouraged but obedience was. The changing pedagogies of learning and teaching techniques among different generations of instructors led to some conflicts and challenges to hierarchies of weavers while also creating tensions and competitions among instructors of different workshops as well as among students. Most of the bamboo-weaving teachers in Jhushan were Master Huang’s student, but his recent students did not receive many merits and awards. Also those craft makers participated in the recent collaboration projects with designers became very famous in Taiwan and were introduced on the international media, so the student’s may become more well-known than their masters. These transformations will be further discussed in the next sections.

### **3.3 Recent Transformations**

When craft makers started to participate in the craft competition, the purpose of making was not merely a functional need or repeat production for more income; the goal was to create their own style and design to show off their techniques and creativities. It was more for the self-realisation and the honour as well as the recognition of their achievement in craft making. Therefore, they

needed to create “meaning” for as well as the meaning of the object they made. When they finished an object as utensil, it would just adopt the existed name of the object by its function. When the work of craft was just a practice of techniques or a product for the folklore market, it was usually simply named by the combination of its shape, pattern, and style as the name for the object. However, when they were making an object to attend the competition, craft makers needed to come up with a “name” for the object that had some “meaning” or a beautiful phrase for presenting the object. This was because there was always a blank field for the “title” and “concept description” of the work on all the competition registration form. When Su-ru finished her latest work that she wanted to submit for the national craft competition, she went to her tutor Silk and asked for help. Requesting a name from another people for one’s work (or one’s child) is called “*ho-mian* (合名)” which means to “fit the name to” in Taiwanese. When many people are illiterate in the early days in Taiwan, they would usually go to the scholar in the village to ask for a good name for their child if they were more serious about the faith of their child. Even nowadays, contemporary Taiwanese people still ask knowledgeable seniors or a fortune teller to give a name to the new born for good luck. Sometimes, adults would also consult with the fortune teller for changing their original name to a better one for good luck. This social custom of giving the right of naming to a more “superior” person in the society is a social norm in Taiwanese culture and it appears in the naming for those craft works attending the craft competition as well. The bamboo weavers did not usually start making a craft work with clear lexical concepts, instead they would usually start with a shape and techniques. The image of shape of the work in their mind was usually vague and not accurate, and the measurement of the object was not clear at this moment. Bamboo weavers would decide the length each strips may require for each part of the object by the numbers of nodes but most of the other details of making would be adjust and developed during the process of making when the object “grow”. Therefore, it was very difficult to have two identical craft objects even though they had the same identical design and made by the same person; the detail quality and also the exact size and curve of the object usually varied depending the length of each nodes on the stalk.

However, even though each object is different, one cannot claim the merit for the competition by submitting a mimicry woven practice object from their training course in the national craft competition. Some local smaller competition may accept this kind of “practice work” into the competition in the past, but weavers who want to attend the competition were required to have at least some minor adjustments to present their individual difference of the practice object. This rule was specially included in the regulations of the National Craft Competition of NTCRDI. As a result, creativity such as the ability to imagine new designs, generate the concept, and form the meaning of individual’s work, became more and more important and necessary for the bamboo weavers in Taiwan. This confusing situation for many bamboo weavers represented that craft in the contemporary visual culture had become similar as the studio art that had be redefined to ‘obscure object of desire’ (Kikuchi 2004: 235). These crafts were obscure for which fell in between ‘fine art’ and ‘design’ but failed to be legitimised by either field. The boundary became blurred and ambiguous. There are the ‘twin process’ as Kikuchi pointed out that more and more craftsmen enter the art world, while there are also more artists hi-jack craft at the same time (Kikuchi 2004: 235).

These recent transformations in the attitudes of craft learning also could be the result of the success of several collaboration projects sponsored by the National Taiwan Craft Research and Development Institute (NTCRDI<sup>43</sup>). The craft makers saw the new possibilities of craft and started to attend the design workshops at the NTCRDI. The NTCRDI was an agency under the Council for Cultural Affairs of the Taiwanese government, and it was the main institution responsible for preserving and upgrading the craft culture and the craft industry in Taiwan as well as encouraging cross-disciplinary craftsmanship. The Institute promoted and assisted the unique local crafts, design, innovation and the development of the culture industry. In recent years, the NTCRDI paired up

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<sup>43</sup> It was formerly called the National Taiwan Craft Research Institute (NTCRI) and it was renamed in 2010.

designers with craft masters to develop new designs, as well as invited high-tech companies such as Asus, PEGA, HTC, Logic-tech to use the traditional craft materials such as bamboo and lacquer in their consumer electronics products. ‘Applying traditional craft skills and materials to such products gives technology a touch of culture and nature,’ according to the NTCRI newsletter<sup>44</sup> in August, 2008. These ‘high-tech crafts’ was displayed in the Tokyo International Gift Show in 2008 (September 2<sup>nd</sup> – 5<sup>th</sup> at Big Sight in Tokyo) under the theme title “In Taiwan In Design” by NTCRDI. By exposing the Taiwanese design on the international events, it aimed to promote not only the new Taiwanese design and craftsmanship but also the international recognition of its national identity.

Under the current enlarging shadow of its giant neighbour China (PRC), Taiwan was still not a member in the UN<sup>45</sup> and was prohibited to enter many international governmental conferences as an official member and its national flag is also prohibited to be displayed in many athlete competitions including the Olympics. Therefore, there were multiple purposes for sponsoring these new designs to attend different international exhibitions or trade shows by the governmental funds and presented together as a national pavilion in these events. One reason was to upgrade the current declining local industry under the competitive global market to benefit the economy; on the other hand, it was for gaining international awareness of its own identity by promoting its traditions and innovations. This strategy was not only limited in the craft and design field; the Taiwanese government encouraged students and industry to enter all kinds of international competitions including the Math and Science Olympics, International Exhibition of Inventions of Geneva<sup>46</sup> which was the world's largest

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<sup>44</sup> The NTCRI newsletter on August 18<sup>th</sup>, 2008; download from [http://www.ntcri.gov.tw/03\\_news/news\\_B\\_2.asp?n\\_id=1251](http://www.ntcri.gov.tw/03_news/news_B_2.asp?n_id=1251) on August 29<sup>th</sup> 2008.

<sup>45</sup> Taiwan left the UN as Republic of China (R.O.C.) when PRC enter the UN in 1971, and Taiwan can not re-enter the UN as a member until now.

<sup>46</sup> In 2012 International Exhibition of Inventions of Geneva, there are inventions from 46 countries with about 1000 inventions submitted to this exhibition. Among the 125 inventions submitted from Taiwan had awarded 45 Gold, 52 Silver, and 25 Copper Medals in additional to 8 special awards. This result make Taiwan ranked in the first place in this world biggest invention

market-place for inventions, IF design award, the Red Dot design award, and many other internationally well-known awards about designs and innovations to promote the international awareness of Taiwan as an independent country. Therefore, these craft and design projects were not merely encouraging the local industry development for economic profit and cultural revitalisation, they also had diplomatic missions.

One of the most influential and significant projects among all this type of projects was the Yii project, which was sponsored by the NTCRDI. When the local craft industry was declining due to the raising labour cost since the 1980s, the NTCRDI was indispensable to assist the local craft producers to upgrade their traditional craft skills to meet contemporary tastes and needs. Yii was one of the most successful projects the institution launched recently. It brought out new Taiwanese designs by the collaborations between craft makers and designers. Yii was pronounced as '[i]' which might evolved from the concept of 'yi-jing (易經 the book of change)', but it also derived from "yi (異 change and varies)," which in Taiwanese philosophy meant "change and transformation" and was believed to be the underlying law of nature. The Taiwan Craft Research Institute conceived the brand in 2007, and it intended to transform traditional Taiwanese crafts into the contemporary context through design. Yii project had invited both local Taiwanese designers and famous international design masters such as Konstantin Grcic (German) in 2008, Gijs Bakker (Dutch) in 2009-2011, along with Nendo (Japanese), Campana brothers (Brazilian), and Markus Heinsdorff (German) in 2011 to participate in this project. The result of their collaboration works with craft makers were exhibited alongside with those Taiwanese designers' work presented in the 'Taiwan Pavilion' at several international design shows such as the Maison et Objet in Paris, Salone Internazionale del Mobile in Milan, Heimtextil in Frankfurt, Tokyo International Gift Show, 100% design and Tent in

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exhibition again. Meanwhile, China submitted 40 inventions in the same year which means the sum of new inventions submitted by Taiwan and China is more than one fifth of the total number entered the exhibition this year.

London, and the Creative Industry Expo in Shanghai every year since this brand was launched. In addition to these shows, the Yii projects also drew the attention of international media and the design world. The products of Yii project were invited to be exhibited at the Clarence House stands beside St James's Palace for the Earth Award in 2010 and at the Design Museum in London in 2011. The Craft and Design Museum in New York also invited some of the craft makers of Yii project to be their museum guest artist when exhibited some of the craft designs from Yii project in 2011. The Yii project did not only bring the international invitation for Taiwanese craft and design in the various exhibition, it also created exchange opportunities with famous design institutes such as the Vitra Museum, the Parsons The New School of Design, and other design and craft associations or designer houses to visit the institute and Taiwanese craft makers and designers.

The outcome of the Yii project included the collaborative new designs made with lacquered ware, leather craft, textile, ceramics, glasswork, silversmith, stone carving, woodcarving, bamboo carving, bamboo weaving, and furniture making. Among all the craft techniques applied in these new designs, the bambooware won the highest popularity and received the most optimistic feedback from the media and potential customers. The collaboration work of 'Bamstool' made by Su-ren Su (craft maker) and Kevin Chou (designer) was selected as 'Coup de Coeur' by the press and the visitors at the Maison et Objet in 2007. This news was reported back to Taiwan and drew the attention of the public and cheered up the local craft makers especially the bamboo craft makers in Jhushan. Suddenly, learning the 'traditional' craft skills became more and more popular among Taiwanese people and many people started proudly talking about their childhood memories of those crafts and their family members or neighbours who were capable of making crafts. Previously in the 1960s to the 1980s, most people learned the craft skills because they aimed to earn more family income with the skills. After the 1990s, most people that came to learn craft skills were either retired seniors or housewives, they learned craft skills as leisure hobbies. Since the DPP won the presidential election in 2000, the 'Taiwanese Crafts' had been

promoted as the ‘Taiwanese authentic traditions’ and should be preserved and transmitted to the next generation as living heritage. The Taiwanese government tried to sustain the traditional craft skills and knowledge and designated those masters of traditional crafts as national living heritage in order to create a collective cultural identity through material culture. This policy was officially announced in the White Paper on Cultural Affairs (2004) and conducted as a major cultural construction project on both craft skills and performing arts. The main mission of promoting and preserving these local traditions had shifted from increasing economic benefits to establishing cultural identity. However, the geography of learning age had gradually changed after the success of the Yii project launched. The aura of the Yii project started to influence the younger generation Taiwanese at design schools to show up in the craft learning workshops. This trend of combining traditional craft in the new designs or creating new designs from the traditional crafts rapidly spread with the fame of new products which won the design competition with this kind of concept and this trend was also flourishing with the funding support from the government at the same time.

Following the success in the 2007, the CCA (now the Ministry of Culture) decided to double the NTCRDI's budget for the 2008 Yii project. The NTCRDI continuously increased its annual budget devoted on the Yii project which reach twenty million NT dollars (4 millions GBP) in 2010, which is a massive amount for such a small size<sup>47</sup> middle-ranked governmental cultural institution on single project. Funded by the governmental budget, the products of Yii were expected to embody Taiwanese local cultural essences into new designs that can also be able to market globally. This focus of craft and design in Taiwan also made significant influence on the new generation Taiwanese young designers and design school students. There are increasing numbers of new design works combining traditional craft skills especially all kinds of bamboo crafts exhibited in the New Designers annual graduation design show. The first prize of the best design in the

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<sup>47</sup> The totally number of employee of NTCRDI is under 50 staffs.

2012 New Designers Show in Taipei had awarded to two students who make a woven bamboo chair from the techniques of making the traditional Taiwanese agricultural tool, and so does the second and runner up prize were all given to students combining the traditional bamboo craft skills into their design projects. These young generation designers-to-be learned the ‘traditional’ craft skills not for merely preserving the skills as living intangible heritages but an opportunity to create something new from their rooted background to present their creativity and identity.

In addition to participating in these trade shows and exhibitions, the after effect of this craft revival movement also influence the local community to response to the growing demand of these Taiwanese ‘designer crafts’. A social enterprise in Jhushan called Townway which operated B&B, local tours, and supplying local crafts as souvenirs with the mission of displaying their living value to the tourists. They use local resources including agricultural products and local labour to operate their co-op organisation. This social enterprise Townway not only created business opportunities for the local people, and they also supported and participated in Jhushan Bamboo Living Culture Association (JBLCA) which setup craft training workshops lead by local famous bamboo craftspeople like some of my informants as supervisors and recruit local people to produce some design product for different designers. Many of these participated designers were participating at the Yii project were considered as the ‘Yii generation’ designers or their students at the design academies would come here to commission their design products to be produced by these local recruited junior craftspeople. Making crafts has become the mediation of raising the awareness of presenting their creativity and identity for both the designers and the crafts makers.

### ***Interim Summary***

The most significant character of the Yii project design collection was that it involved the beauty of traditional craft techniques rather than the visible forms, shapes, styles, or functions of the traditional crafts. Mauss used to call technique regardless if it was from a magical, religious or symbolic action as an effective

and traditional action. He asserted “there is no technique and no transmission in the absence of tradition.” (Mauss 1973: 75) The execution of Yii project can be seen as the effective adaptations of tradition, there must be a dual quality of the existed old and the fostering new co-existed in the things created in the Yii project. These collaboration projects required creativity and aesthetic senses applied with the techniques and knowledge to execute the new designs. By creating these new designs, the traditional techniques and knowledge could be sustained and transmitted. As Latour argued, design never started from scratch: ‘to design is always to *redesign*’ (Latour 2008); the collection in the Yii project must be built upon the memory, needs, knowledge, skills, tradition and cultural identity of the people who created them. In spite of bamboo was understood as a sustainable green material internationally which had transcended from an old craft material to become a new possible hint for design, it had its special cultural resonance for Taiwanese people. Although there was not a dichotomy between the tradition and the innovation, there is certainly tension between them. Since the craft makers usually presented the traditional side while designers usually presented the innovative side of the world, the biggest challenge of conducting such projects was how to help designers and craft makers tangoing together in the process of creating something innovative but with tradition together effectively. The contradiction and conflicts between the designers and craft makers when they were trying to achieve these goals and create new marketable ‘Taiwanese Design’ would be worth to explore, and it will be the main focus for the next chapter.

## **Chapter 4 The Marriage between Designers and Craft Makers**

Having discussed the background, mission, and goals of the Yii project in the previous chapter, this chapter focuses on the disparities, difficulties, and conflicts craft makers and designers face when working together to generate new designs for the Yii project. In addition to the differentiated tasks discussed in Chapter 3, the actual interaction between the craft makers and designers during the process of presenting the new designs exposed fundamental differences between these two groups of people. Craft makers and designers have different work habits and attitudes that were often the cause misunderstandings, tension, and conflicts during their time working together.

The first section of this chapter looks at how craft makers and designers generated new design concepts. The two groups thought differently and used different languages to describe the same scenarios. I focus on how they were different in the way they thought about their work and what they thought of each other. I explore how their different outlooks, lexical expression, and naming customs constituted a process through which they gave birth to new designs.. I discuss two major aspects of the differences between designers and craft makers: concept and conceptualisation and their drawing ability and comprehensive level of drawings. Through the discussions about ‘concept’ and ‘design concept’, the third section of this chapter tries to locate the fundamentally different ways of thinking and making things between designers and craft makers. From the analysis of their different ways of thinking and doing for creating a new object design, I had found that drawing played an important role within this process of creation, and found can be seen as the ‘Manuscripts of Thoughts’ arousing the discussion of why they delivered design differently.

#### **4.1 The Encounter: When the Craft Makers Meet Designers at the Yii Project**

The NTCRDI initially launched the Yii project in 2006; but did not formally designate any official international retail dealer until 2012<sup>48</sup>. Hence, none of the design products were officially sold for six years.<sup>49</sup> Year after year, the NTCRDI received numerous orders at international trade shows and design fairs, but none of them were actually processed due to a bureaucratic accounting dilemma. On one hand, the NTCRDI kept reporting to the media and government officials, along with their supervision institute, the CCA, that their products had attracted great interest from international buyers, justifying NTCRDI requests for more government funding. On the other hand, the NTCRDI could not manage international transactions due to its limited staff and restrictions that they had to observe as a government institution. They were not allowed to allocate the high salaries needed to hire professionals as these exceeded government limits. However, the greatest difficulty the foundation faced was how to create commercial receipts for international buyers. For these reasons, they had to authorise an official agency to solve these problems. However, it was not easy to convince a local agent to invest the money required to market these products due to potential operational risks. Therefore, the whole investment for the Yii project is unique not only because of the designs but also because it was supported for reasons other than simply creating profits.

Kevin Chou, a designer who participated in the Yii project from the beginning, told me that he joined the project not for profit or fame.

*I knew this project would not make me rich. It was not profitable for me, at least not yet. I did it for fun and to promote Taiwanese design... The result has been beyond my original expectation. Those craft makers are*

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<sup>48</sup> The NTCRDI formally designate the Han Gallery as the official international retail dealer in 2012.

<sup>49</sup> Some pieces were commissioned and presented as diplomatic presents to political leaders and foreign museums as pieces for permanent collections. However, none of these objects can be considered as a commodity available on the market.

*amazing. They don't know how talented they are, and I learned a lot from working with them. Of course, we argued a lot and the craft makers did not understand my requirements in the beginning. However, I needed to earn their trust and understand their skills and the materiality of their craft materials in order to create a suitable new design for this project. This has definitely been very different from what I designed for Phillips or for other industrial design cases. I have to remind myself that they are human and dealing with 'handmade' objects. I cannot ask for the same level of accuracy that I am used to.*

The designers were usually trained to do their work on computers and relied on CNC or CAD CAM to produce their design. However, this was not how craft makers work. For example, according to the designers I interviewed, the tolerance for inaccuracies in size or the angle of a curve for industrial jobs is usually under 0.05 mm. However, the accuracy in the process of craft making is much more unpredictable and works need to be adjusted all the time. Some designers became very disappointed when they were unable to assemble different parts from different makers to complete their designs as they did not get an accurately standardized product from craft makers. As a result, the relationships and sequences for each step in the crafting process was more closely connected than that seen in industrial projects. The materials were sent back and forth among different craft makers, designers, and factories. This journey of unfinished objects created a flow among these professionals, and the designers became a hub that connected these different craftspeople. Even though the different makers who were responsible for each process had each other's contact information, they preferred to send objects back to the designer to process the next step in the process.

Designers had long been considered as coordinators in a design project, especially those who were working on more complicated projects like those for architecture. They needed to promptly respond and adjust for unexpected events, which happened during the fabrication of their design while making sure all the details were carried out according to their design plans. However, most craft

makers were not used to this kind of intensive working mode and constantly complained during their interviews about how the designers treated them as printers not humans.

One bamboo weaver, Silk, shared her thoughts on the matter one hot and humid afternoon when I visited her studio to observe the progress of her celebration project with the designers.

*I cannot change an object's design overnight like he could on drawings or a computer. The process of making objects has to be done in certain sequences. Adding a line on a drawing may be seen as a minor change on the page, but it means to start the whole thing again from the beginning. They can change it on the computer and click the Print button then have their work done right away. However, I cannot. I am not a printer. I am a human being who works with my hands.*

The biggest problem between the craft makers and designers was communication. This problem was obvious during the Yii project and such issues often arose during development of new designs. Designers were trained to express their ideas since they were trained at design school. They were encouraged to question everything they encountered and find new ways to do similar functions. Designers usually started their sentence with 'I' when they were talking about their work, such as 'I want to have a ...,' or 'I want this to be like ...' In other words, their personal subjectivities and consciousness were always the most important factor when they talked about their design works. However, craft makers usually referred to the materiality or the techniques when they described their work. When a craft maker was asked about their work, she would usually say: 'This is a pin leaves pattern vase,' or 'This is a hexagon woven basket.' When I asked the bamboo carver, Yeh, about how he decides on how to start a piece of work, he replied: *"I usually look at the material and see what I can feel in it. The material will tell you what it can be made into, and I just follow what comes natural. I do have some thoughts, but follow what comes natural. You cannot have a good piece of work if you work against the nature of the*

*material.*” The nature of the material is essential to crafts makers whereas the design concept imagined is paramount to designers.

Claims similar to that of Yeh about following and obeying the nature of the material were mentioned in Chuang Tzu (Zhuangzi) two thousand years ago in ancient China. The master craft maker Xincheng (梓慶) told a king about how he could make such a stunning craftwork. He said: ‘I went to the forest to see the trees in their own natural state. When the right tree appeared before my eyes, the bell stand also appeared in it, clearly, beyond doubt. [...] If I had not met this particular tree there would have been no bell stand at all’ (Zhuangzi 1965).

The quality and nature of the working material is not only important to carvers, but also to the weavers. When the bamboo weaver, Silk, started to make an object, she would first prepare the material, whose qualities varied according to the weather and seasons. She explained to me how the season is related to her working cycle, and that is the reason why the period between Chinese New Year and June is not a good time to make woven bamboo crafts. She said:

*If you want to have good quality work, you cannot force me to make an object for you during this season because it is the time of year for bamboo shoots for Makinoi bamboo, and the bamboo will change its character to bring nutrition to its shoots. Therefore, the bamboo becomes softer, less flexible, and sweeter so it will crack and bore through. In order to make a proper piece of work, I need to have the best quality material. However, the designers cannot wait, and the project was not scheduled according to the seasons. I have to accumulate the material in advance if I know I need to make some important objects during the bamboo shoots season.*

Certain designs require particular lengths or diameters of bamboo, and the object cannot be made without accessing the proper materials. Thus in many cases the material comes first in craft makers’ mind even before their personal subjectivity or expressive concepts. The accessibility of the appropriate or required material was a limitation for craft makers’ designs. The importance of

the actual potential within the material and its quality and nature could not be over emphasized in the craft makers' mind. It is the beginning of the technical process that we usually recognize as the beginning of *chaîne opératoire* of making. However, this traditional starting point in the sequence of making can and should be stretched and rewound if we involve design into the process.

The general understanding in many design guidebooks is that the process starts with the concept instead of the material. This was the fundamental difference for designers and craft makers when they start their work. Therefore, from the beginning, designers and craft makers were approaching projects from different starting points as they were speaking in different languages when discussing their work. Furthermore, the five senses: sound, sight, touch, smell, and taste, were not fully developed in the designer's professional training, and most did not make full use all of their senses in the conceptualisation process. Designers were very often working through drawings and communicated with these drawings visually, while the craft makers usually worked through experiencing and handling the materials with many other senses such as touch, smell and hearing, in addition to their sight. Their conceptualisation processes were grounded in the materiality, the perception of which relied on all their senses. This has been observed for many kinds of physical efforts, from craft making to martial arts. For example, for martial arts practitioners in Japan, as anthropologist Rupert Cox (2011) writes, they feel themselves to be 'seen and caught in a sticky web of tactile observation.'

Bunn (2011) illustrated how a Cuna man makes a basket, 'looking down at the work, while his fingers are engaged in a delicate tactile manoeuvre, the maker's eyes are as much caught up as his hands in the intricacy of the intertwined strands from which the form of the basket is beginning to emerge' (Ingold 2011:6). However, vision may not be a compulsory ability for weaving. There are many blind basket weavers who can make flawless baskets but their eyes can never get as 'caught up as his hands in the intricacy of the intertwined strands' because they cannot even see their hands. If we can recognize different qualities in materials, such as roughness, smoothness or warmth by only looking

at an object, as Ingold suggested, then vision could be as haptic as touch<sup>50</sup>. It is also possible that, ‘touch can be “optical” as vision, where it becomes (as in looking at rather than working with) not so much a modality of engagement with materials as a vector of projection in the conversion of objects to images. Such is the difference between the practitioner's handling of materials in making and the curator’s of the finished object’ (Ingold 2011: 6).

In addition to emphasizing a focus mainly on the visual and not the other senses, many designers lacked knowledge about specific materials. Thus craft makers often rejected designers’ initial design, telling them their proposal could not be done. Although a great painter or musician is not characterized by his sensitiveness to colour or sounds but by his power to elicit from his static material a dynamic life of forms as Cassirer (1956) suggested, it would be problematic and difficult to ask a composer who could not play an instrument to create a masterpiece. This was a major challenge for the Yii project. Designers would try to conceptualise a ‘craft design’ involving materials or methods he was not familiar with. Communication problems were usually the major issues whenever a collaboration project failed in the Yii project. Often the breakdown arose from the different ways of thinking. Tang, a young craft maker, said to me when we having tea in his workshop,

*We craft makers do things following our fundamental basic working rules, such as the fixed sequence rules, but the designers don't. They are tien-ma-shin-kun (天馬行空). They don't know much about our techniques, and their thoughts and ideas fly everywhere; there are no rules for them. We have to use our experience to tell and convince them not to proceed with certain designs and see how we can modify them. We do things according to the Taiwanese saying jiao-ki-gan (照起工).*

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<sup>50</sup> There will be further discussion about how could vision can be as haptic as touch will be mentioned again in 4.3 in the paragraphs about sketches.

The Taiwanese phrase '*jiao-ki-gan*' describes the essential spirit of Taiwanese craft makers. It means to follow the sequence of making something from the beginning and is the foundation for properly completing all works in Taiwanese society. In a master's workshop, the apprentice has to do his part according to the master's instructions and methods before the material can be handed over to the next member to finish the work. Thus *jiao-ki-gan* is the orthodox and standardised ways of creating objects. This term also partially represents the *chaîne opératoire* of creation, but it focuses more on the correct starting point as the beginning of everything than on the quality of the end product. It is believed if one creates objects with the correct starting point and under the proper rules, she will have a good result. The beginning of the sequence is the foundation of the success at the end. The Taiwanese use the word '*ki*' is complicated. It means 'the beginning' but also refers here to the idea of building something. Thus the phrase *jiao-ki-gan* can be translated as 'follow the rules of making from the beginning to build up'. *Jiao-ki-gan* is contrasting to the Chinese idiom *tien-ma-shin-kun*, which literally means the horse of heaven (the Chinese version of Pegasus) flying over the sky without the limitation of routes or boundaries. *Tien-ma-shin-kun* is usually the most common phrase (may also be a polite criticism) that I heard from the craftspeople to describe or criticise designers.

The fundamental ideology of *jiao-ki-gan* focuses on techniques and sequences and echoes the French interpretation of *chaîne opératoire*, which allows for the creator to zoom in and out of different perspectives when creating his design. As James Elkins (2008) observed, many approaches to materiality in art history neglect this capacity and look at it from perspectives either too far away or too close up. The approach of *chaîne opératoire* allows us to be active and mobile enough to transition between different viewpoints in the process of creation. However, the *chaîne opératoire* converts the flux of movement from a singular event into fragmented sequential actions. This approach may factually describe the essential step-by-step ideology of *jiao-ki-gan* but also limits the designer's thoughts and path to creation by fragmenting it. Furthermore, when it

came to the idea of making new things, the designers' flexible working and use of a more free *tien-ma-shin-kun* train of thought usually challenged the pre-existing knowledge regarding techniques, traditions and styles.

On the other side of controversy of blaming designers for lacking better knowledge of craft making and its traditions, designers could be providing opportunity for innovation. Since most designers were not aware of the rules and traditions surrounding craft making and only had limited understanding via visual comprehension, they were also free to make bold assumptions or assertions about new styles and design possibilities. In this way, neither designer nor craft maker were superior to the other, they were just different and this difference helped the creative process. Designers and crafters had two distinct structural modes of thoughts. Borrowing Levi-Strauss's words, their differences are 'certainly not a function of different stages of development of the human mind but rather of two strategic levels' (Levi-Strauss 1966: 15). However, instead of distinguishing the two by whether they adapted to or removed from perception and the imagination as Levi-Strauss did since they both needed these qualities to create new things, the objects they created arrived from two different routes that were not diverted by their adaptation level of their 'sensible intuition' but by their different ways to gather their concept. The comparative narratives about the inception of creation from the designers and craft makers will be further discussed in the next section on concepts.

## 4.2 The Concept: Growing/Finding the Seeds of Design

The knowledge gap between the craft makers and designers discussed in the previous section can be further discussed in how these two groups of people acted and thought differently when they started making new things. Even though many designers were unfamiliar with the crafting knowledge and skills, and these communication problems with craft makers that was sometimes a barrier to collaboration, the knowledge of making and the techniques of making was not developed synchronistically in one craft person. Thus there was heterogeneity among the craft makers. Stephanie Bunn (2011) criticised Mauss's binary division in his essay of 1934 on "Techniques of the Body" which divide all human actions into the mechanical body techniques and everything else – religious, symbolic, moral. She asserted that making should be "an embodied relationship with something outside ourselves" and she argued that we should be looking at a deeper level such as the relationships between the form to substance or whether the ideas come first in making rather than 'getting stuck on issues of technique, or of power and control' (Bunn 2011: 21). Although the common assumed goal of anthropology is 'to learn about what members of (other) societies and cultures know about the world, the manner in which people come to know what they know, and the ways that they represent and communicate their knowledge' (Marchand 2003: 30). The importance of the initial ideas of making is worth paying more attention to in the anthropological discussions about making; and is the focus of this sub-section. I refer it as the 'concept'.

Concepts, are the mental representations that 'do not acquire their content via an inferential role semantics or induction, nor do they have meanings in any definitional sense. The denial of inferential role semantics -- which claims that the "meaning" of concept is derived inferentially via their relations to other concepts - has shattering implications for structuralist theory in general' (Marchand 2003: 30). In order to further understand the differences of how people had their concept for creating a new thing between the craft makers and designers, we must try to understand their different ways of thinking, i.e. their cognition, conceptualisation, their perspectives toward things, and creating things. T. Marchand grounded his theory about the cognition on Fodor's modularity-of-mind

thesis (1983) and many other subsequent researchers from various field such as Sperber and Wilson (1986), Sperber (1994), Boyer (1996), Jackendolf (1992), and Landau (1992). He adopted Fodor's account of 'informational atomism', which asserted that lexical concepts are internally unstructured and have their content in virtue of standing in certain external, 'informational' relations to properties instantiated in the environment. For Marchand (2003), though concept is a mental representation and it does not necessarily develop via 'an inferential role semantics or induction' (Marchand 2003: 30). This denial of the inferential role semantics shattered the implications for structuralist theory in general.

Following Fodor's account of concept, Marchand argued that skills, on the other hand, as a kind of performative knowledge, is not a propositional form of knowledge so they cannot be organised and expressed with language nor lead to lexical itemisation. Therefore, the skills cannot be 'objectified' as 'those things in the world that can be named' (Marchand 2003: 44-45). Fodor also noted with "the pride and the habitus of academia who claimed that 'there are many classes of performances in which intelligence is displayed, ... [and] it is therefore possible for people to intelligently perform some sorts of operations when they are not yet able to consider any propositions enjoying how they should be performed'" (Fodor 1998: 163). Nevertheless, from the evidence from my in depth ethnographic fieldwork with the craft makers and designers in Jhushan, I would argue that it is not the different class of intelligence but merely different path of thinking which caused the result of the different creation and making behaviours I observed. Fodor (1998) and Marchand (2003) may limit their definition of language and communication to lexical expression, this neglect other ways of communication such as the visual language, notation, and the phenomenological observations that may be crucial to understanding the actual making as praxis of a work rather than sequences of processes. Concept in here, as Drazin (2013) suggested it should be 'the name given to knowledge at the interface of the material and immaterial, existing as a flux whose social life is given momentum by an iterative oscillation between research group and field site in which each alternately assumes the role of critical subject. Such processes can lead to different understandings of social

practice from traditional ethnographic processes' (Drazin 2013: 33). The flux of thinking in this interface is fuelled with creativity and materialising with the applications of techniques. Rolly May describe creativity echoes Drazin's argument of the flux of thinking, May (1976) proposed the preconscious and unconscious thinking and decisions where creativity is coming from. May as a psychologist, he focused on the inner thinking flux within individual instead of the flux within social iterative oscillation.

The way craftspeople seeking for and expressing their creativity is worth to note. When people asked Master Lee how he came up with the idea of his work, he replied, "*practical, pretty to look at, and solid.*" For Master Lee, things should be created with a practical function with a pretty look and strongly built under the right way to construct it at the same time. For him, a design concept was the element that gave the object something different from other piece of works. In Mr. Yeh's case, he kept accumulating more bamboo materials much more than he actually needed. He told me that he could not resist buying those rare and beautiful materials. In his workshops, he stored many different kinds and various sizes of bamboos. He often examined and touched those materials especially when he needs new concept for making a new piece of work. He told me that '*the new concept would rise from the material if one could constantly exanimate it and feel it.*' Yeh's claim about finding his concept to make new works matched what Albrecht Dürer (1528) described about how a real gifted artist can elicit beauty from nature (Dürer 1528). Yeh told me a personal story about finding his concept of making:

*"One day, I saw a piece of moso bamboo with very short length between each nodes, I saw the image of the ghost festival in the mid-summer. Therefore, I used the image in my mind and transform the bamboo pole at the ghost festival into a ladder. Then I carved three different frogs spending all their strength to climb up the ladder. In order to create the contrast, I kept the frogs in its bamboo original colour and paint the rest in black so to make the tension within the work."*

(Interview with Yeh, 2010)



**Figure 4-1 Stain or Gem? The abnormal material from Mr. Yeh's bamboo material stock (2014-04-26)**



**Figure 4-2 Stain or Gem? Mr. Yeh's natural patterned bamboo stock (2014-04-26)**

For Mr. Yeh, each piece of the material was unique and he was trying his best to see the best of it. A piece of moso bamboo with very short length between the nodes can be a piece of inspirational material, so did the Japanese bamboos with spots he collect them from a special order from Mr. Liu. Neither the short length moso bamboo or the bamboo with the beautiful imperfect spots would be considered as a 'good materials' for production, but these 'bad materials' for making in the factory are the precious gem in Mr. Yeh's point of view. The way craftspeople quested for new concepts depended upon the availability of the material in hand for making as the *bricoleurs* described by Levi-Struss (1966) in *The Savage Mind*; he wrote, 'The elements which the "bricoleur" collects and uses are "pre-constrained" like the constitutive units of myth, the possible combinations of which are restricted by the fact that they are drawn from the language where they already possess a sense which sets a limit on their freedom of maneuver' (Levi-Struss 1996:19). Most well trained designers usually belong to the opposite group as engineers who can use their scientific mind to theorise, generate new method and tools (Levi-Struss 1966: 19). To invent these new methods, tools, or design would possibly encounter 'something uncontrollable, not formulable when completing a piece of craft as a practice of creativity. Creativity is a vital ingredient in any kind of 'good' intellectual activities from painting, photography, ... to craft and design. It may be described as a 'combination of inventiveness, imagination, inspiration, and perception' (Peterson 1988: 9). Some people naturally born with creativity but it did not have to be innate, it could be learned. A photographer Bryan Peterson confessed that he had watched hundreds of students who initially claimed they couldn't see creatively turn into visionaries behind the camera. He suggested that we should not be misled into thinking that creativity is the privilege of the very few talented people; 'it's components can be learned much the same way you learn how to tie your shoes and to dress and feed yourself' (Peterson 1988: 9). It may be a technique of making indeed.

## The Rules and the Rules about Breaking the Rules

Another major difference between the craft makers and the designers were their attitudes about the rules. For craft makers, the rules of making represented the tradition and authenticity of the things they made. On the other hand, for designers, it was crucial to ‘break the rules’ to win in competition and get noticed in the design world. The queries from Silk about the fairness of the craft competition revealed the different value of things where the judges from the design school and fine art schools neglected the excellent techniques, time devoted, and efforts in the handicrafts preferring instead the ‘unskilful and simple’ abstract work because it ‘distinguished itself from the tradition and break the rules’ (see in Chapter 3.2). A designer was expected to create or make something innovative, original, one that has never been seen before. In order to fulfil these requirements, the easiest and the most common way was to challenge the existing understanding of things, or twist the already existing affordance of things. The rule about breaking the rules became a promising path to success and recognition for designers.

However, for craft makers it was the opposite. Craft masters trained their apprentices with the traditions, and even if the craft makers are trained in craft workshops, they would usually be taught the ‘authentic way’ of making things. Besides, many distinctive craft makers found their design concept by following the Taoist perspective that has been summarised by Bunn (2011) and Knapett (2011) as: “follow the materials”. The story about the craftsman in *the Way of Chuang tzu*<sup>51</sup> made clear statements of this spirit of craftsmanship. The craftsman said to the king:

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<sup>51</sup> There are two spelling of the same person’s name. The book title was used the *Chuangtzu* and the author name was using the spelling of *Zhuangzi*. The inconsistency in Romanisation was because when this translation was originally published, the *hanyu pinyin* is not invented yet. The original translator used an earlier spelling system more similar to *tongyong pinyin* which Taiwanese is using now.

*‘I am only a craftsman; and I have no secret. There is only this: When I began to think about the work you commanded I guarded my spirit, did not expend it on trifles that were not to the point. I fasted in order to set my heart at rest. [.....] All that might distract me from the work had vanished. I was collected in the single thought of the bell stand. Then I went to the forest to see the trees in their own natural state. The craftsman then went on to say that he met the particular tree that inspired the bell stand explaining that: ‘My own collected thought encountered the hidden potential in the wood; from this live encounter came the work which you ascribe to the spirits’ (Zhuangzi 1965). This ancient Chinese story about the craft maker echoes the language tendency of craft makers in Juhshan who usually talk about their work with the materials instead of their personal subjectivity. It is the necessities of forgetting in order to be able to create. As Master Lee taught me in the bamboo-weaving workshop which I personally practiced in this craft skill, he asked me not to memorise the pattern and not to ‘look at’ the bamboo stripes I was weaving all of the time: ‘You need to feel the rhythm of weaving routines by your body and your eye just glance at and follow your movement. Not looking at it all the time. You read the pattern when you reviewed the work or when it is necessary. If you keep memories the movements in your head, you can not make it well,’*

Good craft makers not only needed to ‘forget’ about the fragmental sequences of the techniques of making in order to make well, but also needed to forget about themselves and the social world in order to see the materiality and create things. Mimicry and practice is the core training of the craft maker, this is emphasized to apprentices, and is part of building up the craft makers’ hard-earn concentrated focus and ability to reflect holistically on the multiple aspects of the project(s) at hand (Marchand 2003: 36). These kinds of training also established the rules of making which we usually referred to as ‘tradition’; and these rules are the barometers through which authenticity and the value of a piece of work was gauged. Designers’ training on the other hand were more focused on develop their individuality and uniqueness, and one of the most obvious ways to achieve this was to challenge the pre-existing cognition of how things were done and what

things ‘should be’ like. In other words, to be successful, designers are meant to ‘break the rules,’ and craft makers are meant to follow them.

When comparing the initial concepts of the crafts makers and designers I met during the fieldwork in Taiwan, it was clear that they both had very distinctive tendencies when it came to describing how they came up with the ideas of creating their works. During several interviews with the participants of Yii project, I constantly asked them ‘*ni shi ze mo xian zuo jhe ge de (how and why did you want to make this?)*’. I purposely used the word ‘zuo’ because I wanted to understand their individual opinions about the things they ‘made’. I tried to avoid using the word ‘*shegi (design)*’ as a verb since it was an imported modern term from Japan that can be traced back to the western idea. In Chinese, *zuo* mainly means making, but there are some devious difference between the words “作 (*zuo*)” and “做 (*zuo*)”. However, there is no difference to tell in the oral conversation unless you carefully consider the whole sentence context.

These two words are pronounced exactly the same both in Mandarin Chinese and Taiwanese. I would translate *zuo* as ‘create’ in this thesis in order to maintain the dual level of intelligent activities and the technical/mechanical obtained in its original meaning instead of just translate it as ‘making’.

“作 ( <i>zuo</i> )”	“做 ( <i>zuo</i> )”
1.to get up; to rise	1.to make; to produce
2.to make; to do	2.to do; to work; to engage in
3.to write; to compose	3.to become
4.writings; work	4.to give (a party, reception, etc.)
5.to pretend; to affect	
6.to regard as; to treat as; to take...for	
7.to act; to be	

**Table 4-1 The different meanings in the Chinese word ‘zuo’**

Designers usually answered my question confidently and usually started with the word 'I'. They would answer, 'I want to make/create a chair that carries the beauty of Taiwanese bamboo crafts,' or 'I want to make/create a feeling of lightweight and see through'<sup>52</sup>. Sometimes they also answered as: 'I want to challenge .... Because of the existing objects were ....' However, when asked the same questions, craft makers, usually responded as: 'this is how our ancestors made it,' or 'this is what I learn to do it from the masters,' especially if I was asking about a more traditional design they made. Even when they were asked about the new work which they created instead of made by following traditional customs, they would respond: 'this material (may refer to bamboo, clay, or wood...etc.) is ...,' or 'This piece is the woven bamboo vase with pine patterns.' Sometimes, the craft makers would tell you the actual operational sequence of making an object if they trusted you.

The different perspectives of designers and craft makers towards creating their works were apparent from their different ways of answering the same questions. Also, it was very common for designers to talk more comfortably about their work and explain their ideas, while it usually took some time and familiarity for craft makers to be able to talk about their work comfortably. Craft makers usually preferred to 'let the objects talk' rather than give too much lexical explanation about their work. Even when they talked about their work, they usually talked more about the materials and the techniques and not their personal creativities.

In a project which I applied for Silk and was successfully awarded £10,000+ funding to develop new designs with bamboo weaving techniques, I confirmed my earlier observation about many craft makers' behaviour in the Yii project when I closely worked with Silk, trying to find out how she worked to come up with a concept for new designs. In this project, I set up two categories of project outcome: lighting and accessories. I picked these two categories for her because

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<sup>52</sup> I kept the original grammar order in Chinese to preserve the original meaning and context regardless the grammar mistakes in English in the translation of their interviews in Chinese.

they are two types of objects which were firstly practical but with little limitation in terms of function. Secondly, they were two types of objects for which designers were famous for their personal iconic pieces. Thirdly they did not require too much mechanical or technological requirements to be functional. In this project, I tried to reverse the designer led collaboration relationship to a craft maker led model in half of the outcome objects. Silk needed to come up with an original idea and then ask the designer to modify it. One day, she told me that she had an idea about the light design, so I asked her to tell me her concept:

*'I want to make a sailboat,'* she said.

*'What?? A sailboat? Do you mean you want to use the sailboat as the concept of your light design? So... which part or which concept of the sailboat you want to make?'* I asked.

*'well... just the sailboat. I want to make a lamp with woven bamboo which got a sailboat shape,'* she answered and she didn't understand why I looked so puzzled.

I hesitated to tell her that making a sailboat in woven bamboo didn't really count as a design concept, because a design concept should normally be original, unique, and have some meaning in it. I asked her if she had an image of what the object would look like in her mind, and gave her some papers and a pen.

*'well,... (she tried to draw some lines on the paper.) I can't really draw. I want to make a lamp of sailboat, you know, a sailboat,'* she wave her hands in the air and try to draw a figure of boat and the sail in the air.

*'About this big,'* she said when she use her hand to show me the size, *'and I want to make it with the smoked bamboo, this material should make the lamp look very elegant,'* Silk told me.

The way Silk describe her design 'concept' is very different from what I used to hear from most of the good designers. Silk is no doubt a talented craft maker and she had made several wonderful craft objects in the past. She is also very popular among many designers for collaboration, but the way she came up with a new idea is, in a common term using in design education system when a

student or designers say was: ‘not smart and no sense’. In the designer’s world, it is acceptable to use the sailboat as a concept but the outcome must not be a sailboat-like thing. This kind of direct image borrowing approach would not be recognized and would be looked down as a design concept. Therefore, I asked her to spend some more time and think of some other ‘design concepts’ and discussed with me in the following week.



**Figure 4-3 The first two prototype lamps Silk made for our project**

A week after, I returned to Silk’s house from NTCRDI for a weekend bamboo craft event. I asked: “*So, did you come up any new ideas?*” She replied: “*Well, I want to use this spread out technique and combine that techniques to make a lamp,*” she said and pointed at two of the objects in her display cabinet in her shop. At this point, I decided not to intervene in her working process and just let her make the thing she wanted to make. She could not draw but she had the idea in mind. I decided to let her just start making whatever she wanted to make.



**Figure 4-4** The outcome of our project along with Silk’s previous works were displayed in the gallery at the NTCRDI

I refused her request to draw something for her to make in this part of the project and want to see how she was gathering ideas and finding her ‘concept’ of making. The outcome was that she revealed my previous hypothesis that craft makers may be restricted by their techniques and would have difficulties to invent unless there was a ‘problem’ for them to solve. The first lamp she made was a combination of her pre-existed weaving techniques and that technique was usually used to make bamboo torches in the old days. The second lamp she made was called ‘Love Taiwan’, which she made as a woven vase with a shape of the map of Taiwan Island on one side and a heart shape on the other side of the lamp. She directly ‘executed’ what she thought without any transformation of the concept, or in the first lamp, she only combined some techniques she was already familiar with and turned the combination into a new object.

Although Fodor did not really address what skill actually was, he argued that ‘skills are not concept,’ Marchand further explains that what Fodor means is

that skills do not constitute beliefs. In other words, the ability to practice a series of *chaîne opératoire* or acquiring the knowledge of techniques may be conducted without ‘concept’ in the definition of the design world. Skills can be practiced or applied with other skills, but not the mental particulars such as abstract thoughts or beliefs, which we describe as ‘concept’ (Marchand 2003: 33).

Silk borrowed the image of sailboat directly and made her new work according to this objective image. However, her decision brought her harsh criticisms in the mid-term review at the NTCRDI for the project funding. The committees criticized her work and saying “*We are looking forward to seeing new craft designs, not handicrafts. Didn’t you have some designers as your consultant?*” The committees was criticizing Silk according to the value of the art tradition whereas the true value of art was not about copying or documenting the visible, but ‘eliciting’ the beauty from the visible. For most craft makers, it is true that ‘form-giving is movement, action. Form-giving is life,’ but form is not the end and death as Paul Klee commented (Klee, Norden et al. 1973: 269). However, the committees from the design and fine art academia stood on the same side with Klee and believed that ‘Art does not reproduce the visible but makes visible’ (Klee 1961: 76).

Albrecht Dürer (1528), commented on the interpretation of landscape painting in a similar way. He considered that the real gift of the artist was to ‘elicit’ beauty from nature (Cassirer 1962: 151). That is to say, one should not seek to replicate finished forms that are already settled, whether as images in the mind or as objects in the world, a gifted maker should seek, in Ingold’s words, rather to ‘join with those very forces that bring form into being’ (Ingold 2010: 2). However, this pro fine art value that the design world has adopted from its beaux-arts tradition under-estimated the value of techniques that is highly valued in the traditional craft making. In Mauss’s definition, ‘I call technique an action which is effective and traditional (and you will see that in this it is no different from a magical, religious or symbolic action). It has to be effective and traditional. There is no technique and no transmission in the absence of tradition’ (Mauss 1973 [1935]: 75). However, the performative knowledge gathered in the effective and

traditional actions of techniques may be seen as merely the operational movements instead of actions and decisions made by individual's creativity.

My interview with Allen, who is the design director of PEGA, demonstrated another perspective of making things. He believed that it was very important to create things with stories and the stories of things will have impacts on people as well as impacts in the society.

*All human beings strive for satisfaction and self-value*

*I believe everyone want to create their own story.*

*Whenever someone uses a product, their experiences with this product and its design details can become a part of the story.*

*the physical existence is not the most important factor.*

*What is important is about the idea behind the product and what it can inspire in people.*

*Creativity lies everywhere you just need to reach out and grab it.*

*If we come from a world where all products are manufactured without any design concept, this world will still be okay.*

*However, it will be cold and emotionless.*

*The importance of our role as designers is to decorate our world with emotions and expressions.*

*I believe through design that people can own their emotions*

*Through well-designed products people can release their emotions, society can have their warmth, and in every space there can be a story.*

(Allen Lee, the Design Director of PEGA December, 2012)

From the interview with Allen, it clearly shows that designers create things with a different perspective. They want to be inspired and also to inspire people/the user/viewer. He pointed out that a world with all manufacturing but without any design concept may still be functional but it would be cold and emotionless. It would just have stuff that may be able to build up their personal attachment and meaning after they were possessed. However, things were not all

made to be stuff, some would mean to be made, as he said, designers want, to bring warmth, emotions and expressions to the world through the things they make. Here, we are looking at the process of creating a thing as 'being' a concept that plays a very important role to distinguish the subtle difference in making.

### **4.3 The Drawing: Making the Manuscript of Thoughts**

Drawing as a verb is a performance and action of consciousness and understanding. Archaeologists use drawings to document and describe their excavation. In design, the action of drawing here is to archive the existed unknown reality to be able to analyse it in the future. Unlike photography, which can only capture the visible reality and the illusion of the visible world, drawing has the capacity to bring out the invisible quality. For instance, artists draw their interpretation of the world or the image in their mind rather than the objective vision of the world. Cassirer took a story from Ludwig Richter's memoirs to further distinguish how the difference of individual reflected on the outcome of their work. When young Ludwig Richter tried to paint the same landscape with his three friends at Tivoli, they ended up with four very different pictures even though they all firmly agreed not to deviate from nature. Richter concluded that objective vision does not exist in art, and individual's temperament will influence the form, colours, and textures of strokes in their individual interpretations on even the same landscape.

However, if comparing drawing with painting might lead to 'reflections on the difference between marking a surface and covering it or between line and colour' (Ingold 2013: 125). Ingold (2013), pointed out that drawing also is a way of telling by hands just as writing. He referred to drawing as the non-verbal inscription and writing as the verbal inscription by hand. It is neither an image nor the actual substance left on the media, drawing is not an image, nor is it the expression of an image; it is a trace of gesture. Ingold (2013) discussed the gesture and quality of lines as well as the act of drawing itself. He consciously neglected the whole class of drawings, if more specifically, the technical drawings, which are not intended to tell but rather to specify and articulate, though he did

acknowledge the importance of this type of drawing and recognised what Patrick Maynard observed, that: ‘it is hard to see how there could be a modern world’ (Ingold 2013: 125-126). Without this kind of technical drawing because anything gets made and everything manufactured in our world today, must first be drawn (Maynard 2005:7).

Maynard defined drawing as what happens when ‘an object such as fingertip, piece of chalk, pencil, needle, pen brush ... having something like a tip, which we therefore refer to as a “point”, is intentionally moved (drawn) over a fairly continuous track on a surface. This action leaves, as the trace of its path, a mark of some kind and is done for that purpose’ (Maynard 2005: 62), and this action of drawing is what Ingold is more interested in and referred as a way of telling. However, Ingold tended to focus on the act of drawing as a way of telling and discussed about the quality, gestures and traces of lines but not the ability and capability of bringing things in the mind to the pages. The main theme of this section is to fill in this gap.

Drawing as a noun, on the other hand, is the visible output of the process and also result of mental activities. It includes the sketches, technical drawings, and the rendering. Moreover, drawings are also the media for communications. Architects and engineers usually sketch collaboratively in the process of working out an idea. Sketches and drawings are the basic components of communication and words are built around them in the designers’ and the engineers’ world. Visual representations are so central in their working processes that people fetch drawings from their office or sketch facsimiles on white boards. In design, visual representations shape the structure of the work and determine who participates in that work and what its final products will be. They are a central component of a social organization based on collective ways of knowing (Henderson 2007: 1-8). It is a vital part of the design process.

Henderson (2007) uses several examples to demonstrate how drawing took a great part in design thinking, communication among people speak who different languages, and the return to papers despite the convenience of computer screens

to analyse and correct errors. Therefore, designers think through and with drawings; they drew the unseen and imagined things in their mind (or brain?), using drawing to transform abstract thoughts down to visible lines and dots in front of our eyes. Sketches can plot out the creativities in the brain, sketching is also a haptic exercise as Juhani Pallasmaa points out, ‘as I sketch a contour of an object, human figure or landscape,’ he writes, ‘I actually touch and feel the surface’ (Pallasmaa 2009: 89). It is a vital part of the design process. Technical drawings provided all the references of the design of the object; they include many details of the object that define the shape, the curve, the material, the scale, and the composition of the object.

Leon Battista Alberti suggested the idea of the architectural drawing as an assembly of ‘lineaments,’ this kind of underlay the sense of drawing as *disegno* in the writing of such Renaissance author as Giorgio Vasari (Ingold 2013:51). Compared with the conceptual sketches and assembled technical drawings, the third type of drawings, which is rendering, gave a complete specification of the form and appearance of the designed objects or buildings as conceived by the mind in advance of the labour of construction. Renderings are usually used as a suggestion for the possible visual appearances for the final product and created for presenting to customers or clients. While rendering contains many details, it is only capable of providing a less accurate detail compared with technical drawings, so it is often used for communication with the clients or customers only.

In the design and manufacturing businesses in the modern society, most of the agreements and requirements on the contract of making among the client, designers, and makers were usually settled and regulated with the technical drawings rather than the other two kinds of drawings because those are less reliable for making. However, technical drawings cannot play such an important role when designers want to commission a design to the crafts makers. The bamboo craft maker, Ann, told me that he preferred having the 3D rendering pictures than the technical drawings from someone wanted to commission something from him: “*I cannot read those technical drawings, I have no idea what it will look like when I read those line drawings. If you give me the object or*

*just the pictures, no matter if it is from the catalogue or the 3D rendering, and you gave me the size of the object, I can make you what you give me on the pictures”* Ann is the actual maker of many award winning bamboo designs even though he has not received recognition for it. He was working under another craft maker who used to be a manager of a bamboo factory and was able to read the drawings was thus capable of negotiating with the designers.

Ann shifu can make all sorts of things according to the client’s request, but he cannot read the technical drawings. He didn't understand how to read a 1:20 furniture design drawing and enlarge it to a real life size. In order to make sure he did the curve in the way the designer wanted, the designer had to print out the full scale drawings on the large papers and cut them as the real size template to let Ann shifu make the design with the actual material. This template was the guideline for him to reproduce this design. He always kept these cardboard templates for multiple design orders for future production requests. The ability to read the drawing is the skill need to be learned for craft makers to be able to ‘read’ the material world of designers.

A similar situation existed with untrained customers. When viewing plans of property on sale, they saw the lines and symbols on the paper, maybe the size and proportions of each spaces, but they could not see the flow of the space as the architects and interior designers did. The difference of reading a drawing and looking at the drawing is like what Ingold (2013) argued was the curious blind spot of many analysts, were merely “looking at”, and ignored the situation of “looking with”. For the untrained eyes, vision can only be optical but never haptic in this assumption and ‘there is no vision other than the spectacular’ (Ingold 2013: 130-131). They see the drawing and look at the drawing but are not able to ‘read’ the drawing.



**Figure 4-5 (from the left) Silk, designer Liao, and I are discussing our collaborative craft and design project**



**Figure 4-6 Designer Alfa was explaining his concept to Silk by drawing and he used different colours to identify the different materials for making**

### *Draw the Lines of Thoughts*

Ann shifu's difficulties of reading a drawing rings brings to mind an interview with Master Huang in the bamboo-weaving workshop. Master Huang said that he was a 'student' not an 'apprentice' in the craft workshop in Jhushan because he learn math, Japanese language, and also had drawing and sketch class in the morning in addition to the craft making class in the afternoon session. He also said he was popular among his Japanese clients because he could understand and discuss the clients' requirements via the drawings they presented to him while most other craft makers needed to see the samples in order to make the object. Therefore, he became the one who made the first sample for the other makers to copy and mass-produce the design later on. That is also why he was recruited by the NTCRDI to assist with developing the new designs that allow him to stay in this industry for his life and obtain his status as the national living heritage of bamboo weaving techniques.

Master Huang's learning experience was an exception. Most of the other craft makers were lacking training in drawing or knowledge about how to read them, to the extent that drawing always took a great status in the design education. I can still recall my first class in the architecture department when the professor asked us to complete a A0 paper (size 841mm × 1189mm) with different kinds of pencils lines. This exercise was asking the designers-to-be to practice how to create different line gestures and volumes. Then we were asked to draw the plan, section, and elevation of an object. These techniques of drawing were the fundamental skills for a designer to bring the ideas out of one's mind especially before the computer-aided design drawing applications became popular. In addition to these 2D drawing techniques, it is also essential to learn how to create the 3D expressive rendering to present one's design. However, if one only made good technical drawings and beautiful rendering, one may probably be a draughtsman but not be considered a designer.

While technical drawings included the regulated details and the rendering provided the objective vision of the possible outcome, it was the sketches that

determined if one could be considered a designer. As Rock Wang, the design director of Qiao Studio and the participate designer of the Yii Project said:

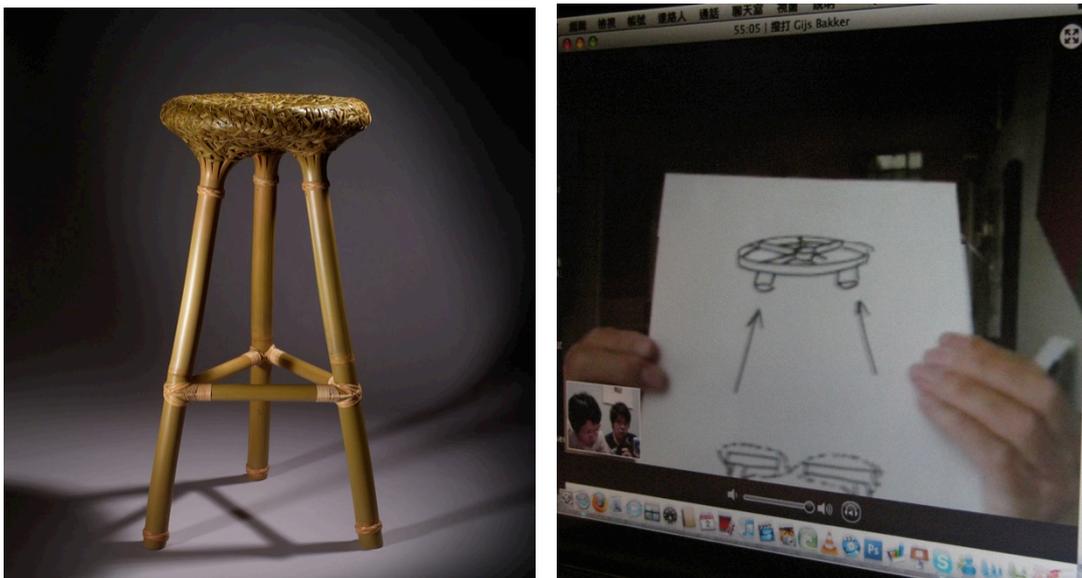
*“Making sketches of design for designers is like the handwriting of the writer; the most important thing is the article, the content, but not the aesthetic of each word characters. One may have good handwriting but cannot write properly. On the same token, a beautiful sketch may not be a good design. The point is what you want to express and the content, not the aesthetic of illustration. Many design guru’s design sketches are not typically as beautiful as what we saw in those guides for illustration styles of design drawings. Most of their sketches carried their native characters and ‘naïve touches’ in the drawings. In my opinions, a good sketch is about its efficacy to communicate with whom you want to communicate with.”*

Pili Wu, whom I knew from the Yii project team, is an award winning independent designer of his own start-up design studio. He also told me the importance of sketches and the real value of sketches:

*‘Good design drawings should be expressive and capable to communicate. Sometimes you can even tell the characters of each designer in his or her drawings. [...] making a design drawing is a serious process. The perspectives, colour, reflections, and even the circles on the surfaces need to be neat, stylish, and accurate which require good drawing techniques to accomplish that result. Therefore, I did once get lost in the drawing techniques when I was a young student, and I thought the most important thing of making a good design is the drawing technique. It was like the whole design will go wrong if I drew a circle in the wrong way. However, now I realise that it is more important to draw in your own way - searching for the individual’s communicating ways by the lines and methods.’*

Both of these designers took drawings, especially sketches, as a way to express themselves. Things were not only drawn as a way of telling or communicating with others, but also a way to communicate with the designer’s

own thoughts in their mind, with themselves. Designers use drawings as tools to analysis and examine their thoughts, and they also constantly use drawings as the visual aids to communicate with each other. In the following pictures, Gijs Bakker, the design director of Yii projects was telling the Yii project designer, Kevin, how to modify his design via showing his quick sketches on the video chat screen. In the left image, Bakker promptly drew some sketches that showed how the unseen inner structure of the stool on the right should be changed. Drawing for designers is not meant to be a masterpiece or beautiful painting. It is the language that they use to communicate with each other to break down language barriers. Drawings don't have to be pretty; its efficacy to tell and to communicate one's thought with lines on the pages is much more valued for the designers than its aesthetic appearances.



**Figure 4-7 Design director show his drawings about how to modify the bamstool to the designer via online video chat**



**Figure 4-8** The Yii project designers were discussing their designs with drawings via skype with the Yii design director Gijs Bakker (2010)

Nevertheless, drawing may have a special quality and techniques of designers. Kevin was recently supervising the Bamboo Research Group at NTCRDI in the Technical Division. He used to be a star designer at the Yii project with the Design Division at NTCRDI. He received requests from the students in the training workshop of teaching them how to draw. Then he surprisingly found out these craft makers could not draw, and many of them also could read the drawings. Kevin revealed:

*“They basically did not and cannot draw. They think of something then start making it directly. The process of making such as the sequence of certain techniques or the preparation of materials instead of design thinking defines the proportion of the object. They make their design according to their operational sequences and add the decorative pattern on top of their work later on. This would be the ‘design’ for them. They neither examined the proportion of the*

*works they were working on nor played with the possibilities of the contour. When I asked them to create a work by their own, they would either adapt a style from their previous work or borrow another work they saw somewhere else then think they are 'designing' and 'creating'. Sometimes, when they come to the workshop in the following week, they would bring an already half done project to me, and they want to discuss about that but it is usually too late to do any major changes but only some minor modification if possible.*

*I try to teach them how to draw after they requested. I teach them the basic idea about the plan, elevation, and sections. I also teach them how the perspective works in sketches. However, they might be very shy to draw, because they afraid they cannot make a beautiful drawing, a good drawing. For them, drawing should be pretty to look at, and it should be complete, just like their craftwork. It is so difficult to tell them how drawing is a way to think, a way to communicate, and also an examining process prior the actual making process. With drawings, we can examine the lines, curves, and the proportion of the things we are going to make before it is made. They are keen to know how to draw in order to have it accomplished with their material craftwork on the exhibition panels or portfolios, but they saw the drawings as a definite result of their work, like an end. However, we designers usually took drawing as the beginning and the actions that continuously performed when we are fostering new ideas. Sketching your concepts is the beginning of making a new design, not the end of the design. It allows you to look forward to develop and look back to review your thoughts.*

Kevin pointed one of the fundamental differences of how craft makers and designers took drawing differently. Drawing for designers was more about the creative mental activities; it was more a tool for thinking rather than a document to define or present the aesthetic to the viewers. Drawings for designers were like it is for the architects which made a 'bridge between the imagining mind and the image that appears on paper' (Pallasmaa 2009: 17). It is the bridge between the immaterial concepts in one's mind to the material world. It is like what Bryson has asserted 'the mark on paper leads as much as it is led' (2003: 154, in Ingold

2013). These marks on the paper were ‘alternately sewing the line into the mind and the mind into the line in a suturing action that grows ever tighter as the drawing proceeds’ (Ingold 2013: 128). When you are reading a drawing instead of looking at a drawing, it is not like just reading the specific instruction in the technical drawing or reading a map for seeking the directions; it is reading a dream, a dream wait to be realised.

## Chapter 5 Crafting Objects and Crafting Selves

*‘There is a difference between the creative contexts of the East and West. We Asians have something that is rather unique; we go with the flow of Nature.’*

Ming Ju, Taiwanese Artist. (Chen 2013: 2:12-12:24).

The relationship between an artist and the object of their creation is closely linked, with each influencing the other. We discussed the *chaîne opératoire* in Chapter Two, detailing the elements, sequences and techniques of craft making, and this chapter further illustrates how craft making, when performed within social and historical contexts, impacts both crafters and designers since they both carry out ‘skilled innovation’ (Gunn, Otto et al. 2013) or ‘innocent innovation’ as discussed in the previous chapter. As Edmonds (1990), Schlanger (1994) and Martinon-Torres (2002) point out, following the work of Mauss (1872-1950) and Leroi-Gourhan (1911-1986) on the *chaîne opératoire*, the act of creation may be part of the process of self-making. In this account, ‘when man creates and transforms he is at the same time creating and transforming himself,’ (Schlanger 1994: 144). The object is not only the result of cognition and the practice of creation, but also constitutes the agency affecting those who create them. When one is creating original craftworks, in this view, the practice of creating is in itself part of a strategy to innovate. The Taiwanese bamboo craftspeople and designers described in this thesis experienced this innovative and revitalising process of making while working on the Yii collection. This chapter discusses how people can invent, locate and structure their selves through such creative processes, specifically how these theories affect the processes of Taiwanese bamboo design. In other words, this chapter focuses on how the on-going process of making may influence or even shape artists’ awareness and recognition of self-identity.

## 5.1 Crafting Me and We: discussions about ‘wo’ in the Taiwanese context

In order to further discuss the intimate relationships of makers and the objects they make, as well as the consequences of the development of their own designs and the practices of hands-on making, this core section of the thesis about ‘crafting the self’ borrows from the definition of three different levels of people, defined by Harris (1989) as the *individual*, the *self*, and the *person*, to discuss how the process of creating objects may shape people and even structure a collective awareness. In her work Harris argued that conceptualisations of these three levels in anthropological and other works are often conflated. It was ‘theoretically important and not merely terminological’ to differentiate the three, and thus Harris defined the *individual*, *self*, and *person* as biological, psychological, and sociological modes, respectively, of conceptualizing human beings. She differentiated ‘individual as member of the human kind, self as locus of experience, and person as agent-in-society’ (Harris 1989: 599). Following this thread, the concepts of individual, self, and person are interrelated, sometimes hierarchically so. However, in Han Chinese culture and society (which influences the Taiwanese population greatly) the biological and psychological modes (i.e., the individual and the self) of mankind are usually suppressed. Only the sociological mode, the person, is praised and encouraged. This following section adapts Harris’s three different levels of people as a framework to compare and contrast the identity making / forming phenomenon I observed among the craftspeople and designers during their creation experience with the bamboo designs.

My close and in-depth participation with craftspeople and designers at the Yii project created a rare opportunity to observe interactions between designers and craftspeople, and study how they dominate or subordinate to one another. Moreover, their selfhood and identity also arose and transformed when the publicity and fame achieved by the Yii project designers and craftspeople stimulated the transformation of the two groups of people. Their patterns of reciprocity, redistribution and exchange when making their own designs struggled

through presumptions of four different concepts: *zhen-wo* (true me), *xiao-wo* (petite me), *wu-wo* (no me), and *da-wo* (grand me and the collective me), which I present as another system of categories, in Taiwanese culture, for understanding mankind. In this chapter the term ‘me’ is used to describe the Taiwanese concept of people instead of using equivalents of *individual*, *self* or *person*

### ***Xiao-Wo (the petite me)***

This Han Chinese perspective on humanity is not individualistic but considers one’s body and flesh as a gift from one’s parents. Thus it is not acceptable for one to deface one’s own hair or skin, such that the determination and modification (e.g. plastic surgery) of one’s biological body (as by plastic surgery) is subject to moral contestation. It might be considered to be not fully decided upon by the individual, or as violating traditional ethics. Regarding the psychological *self*, people believe that the heart should dominate the body and mind. The heart should supervise all reasonable judgements, knowledge and techniques. Contrary to Harris’s ideas that people look to an ideal of ‘normal’ human characteristics regardless of their culture, traditional Chinese ideology holds that everyone is born as an incomplete ‘normal’ individual and should seek completeness as a life goal. People should share one moral goal as the standard for decision-making instead of each individual creating their own value (Huang 2011). Both Chinese literature and traditional moral attitudes praise this kind of collective uniform ideal as the true quality of a ‘*wen-ren*’ (translated as *literati*, which literally means a cultivated civilian person). The expression of individuals’ creativity is encouraged in several fields, from poetry to painting, within reason. The word ‘*wen*’ has multiple meanings. It usually translates as ‘culture’, but literally means literary composition or writing. This significant idea of self-improvement in Han Chinese culture is commonly found in different kinds of crafting. For example, anthropologist Yen Yuehping (2005) also came across the idea of self-improvement during her research on the practice of calligraphy in China.

*From this state of polished or cultivated delicacy [the original meaning of the word wen], the character [or word wen, 'culture'] later acquired yet another layer of meaning – to paint over or to veneer over the authentic and raw material of one's given nature (zhi). Naivety is coated with layers of sophistication. What lies at the semantic core of the character wen is precisely this slow process of polishing, carving, refining, waxing and glazing of self. To be more precise, wen means to transform the natural or raw self into the social and cultural self that glistens with the gloss of accumulated heritage (Yen 2005: 46).*

Therefore, the concept of being described as a 'wen ren' places emphasis on being a cultivated person through self-improvement, instead of finding, establishing, or inventing a unique individual self. The tradition of *wen-ren* ought to moderate this creativity, maintaining it within traditional frameworks. This ideology entails the belief that people are unified for the general good, working to achieve completeness as a social agent within Han Chinese culture. According to Cheng-sheng Tu, a noted Taiwanese historian, the Han Chinese usually 'skip' developing the self, but focus instead on how people transition from being an individual to a person (i.e. part of the collective) through obtaining social status through the civil service examination system (Huang 1993: 13). The self is not an important part of humanity in the Han Chinese Confucian society, in which the development of self usually is not encouraged but instead constrained. However, in the work of Tu, a historian researching the history of the Chinese political system, there might be some neglect of the importance of the individual's self-development. Even so, this traditional point of view still influences many Taiwanese people, and especially in public influences Taiwanese society to value one's achievements, from school to jobs. The family of Mr. Yeh (the bamboo carver mentioned in Chapter 2) for example disregarded his talents and forced him to work for the government rather than 'play with bamboo', because it was not a 'decent real job'. Even Mr. Yeh referred to himself as a 'bad' student because he did not do well in 'useful' subjects that are tested in the civil servant and college entrance exams, such as Maths, Science, and Literature. One should be 'good enough' to meet the qualification standard in order to separate one's self from others and be seen as 'somebody' or as a person, not just one of the normal crowd. His own creativity and self expression was not much valued in this qualification

process and it became more important as person to be an agent in society rather than to develop his self. If we view the creative process of Han Chinese craft through this framework, then it is not surprising that even though an object could be made by a famous person, the narratives of that object are usually defined only by the physical actions of the techniques and the interpretation of the material, rather than as an expression of that person's self.

### ***Wu-Wo (the absence of me)***

As discussed above, some theorists would argue that Han Chinese generally suppress the concept of the self. However, this is not to say that they lack the ability to develop the self. On the contrary, they achieve '*Da-Wo*', the next level of mankind, by *reducing* if not giving up their biological and mental consciousness as an individual.<sup>53</sup> The process of accomplishing the next level is part of a stage called '*Wu-Wo*', the absence of me (self). The Han Chinese craftspeople and designers I interviewed and observed in Taiwan all displayed, with varying degrees of mindfulness, anxieties about themselves. As craftspeople were always encouraged to fit into what society considered a 'qualified standard' and thus aligned their work to the 'standard' qualities of craftsmanship. Although the individual as a human unit is the subject of divergent roles cross-culturally, the craftspeople did not see it as such. They usually worked as part of a team and were responsible for an individual part within the production process. Thus they did not have the freedom to be different. They even had to separate themselves from the physical pain caused by long-term repetitive movements required by crafting techniques. In many cases, the crafters had to 'forget' the actual sequences of the technique in order to properly practice and perform it. Just like what Master Huang told me in his weaving workshop: 'Stop using your brain to memorise the weaving patterns. Follow the flow of your finger movements.' In order to make good-quality craftworks, I should first learn how to prevent my brain from giving orders to my body and instead passively sense the flow of

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<sup>53</sup> A more detailed explanation of the *da-wo* is provided in later sub-sections of this chapter.

techniques and ‘let this rhythm (flow) lead’ me. The linking of the individual’s hands and the objects one makes is reinforced through the practice of creation and continuous adjustments guided by feedback from the material. During my apprenticeship in the woven bamboo craft workshops, I was forced to shut down my brain and let the flow of the movements complete the work. This experience was genuinely novel to me because it contradicted the usual negative connotations a designer associates with mind and body separation.

Unlike many craftspeople who are trying to negate their individual significance and differences and let their body movement follow the flow of the materials instead of letting their mind instruct the body, designers are usually known for their active minds but lack of hands-on experience (Sennett 2008: 37-45). Many designers working on the Yii projects revealed to me that they felt they had to reconnect their brain to their body because they witnessed and were often directly involved in the project from the prototyping state to the final development of the product. ‘You learn about the material’s strength, texture, toughness, smell, sound, and flexibility, not just its shape and colour. Our brains respond to the things we make through responses to its materiality and the haptic feeling of the curves in the form instead of a curve on the paper or computer screen,’ said Kevin, one of the Yii project designers I interviewed. These kinds of claims are very different from designers’ usual habit of starting most of their sentences and narratives about design with the word ‘I’. They still often start in the first-person singular, but now when they discuss design they more and more frequently withdraw their personal subjectivity and take a step back. The actual process of making a piece of work reconnected the individual and that piece of work through the act of creation, although this journey affected craftspeople and designers differently. This is because most designers rely upon visual stimuli while most craftspeople use their phenomenological senses to approach the materials. The makers and the objects of their creation connected via what Marchand describes as the intimate relations of the performer and the performer’s knowledge, although the designers do not always physically perform but conceptually perform in the process of making where the ‘knowledge was

manifested in the performer's practice and objectified in the world for public scrutiny' (Marchand 2003: 46). As Kevin said, *'When I was an industrial designer, I set up contour outlines on the drawings and had plastic or metal injected into the moulds or used a 3D printer to form them as I wished, But this does not happen when I work with craftspeople and natural materials, especially bamboo. I have to pull myself back and think about the bamboo's qualities first in order to create a good bamboo design. Without the proper materiality of the specific material, my design will never be realised.'*

When I accompanied Kevin on a visit to Su-su, the craftspeople serving as his partner, to check on the result of Kevin's new design, we found it to be not as good as he had expected. Therefore, Kevin politely asked (*bai-tuo*) Su-su to try again using different dimensions. He said, *'If I create a good bamboo design, it is not just my achievement; it is our achievement, me and the craftspeople, a testament to our town's crafting heritage, and the pride of Taiwan.'* Then Su-su replied to him, *'Yes, of course I am aware of this. Otherwise, I would not keep trying. I know our work is going to be presented at several exhibitions in many international fairs and galleries to represent Taiwanese design. So I keep trying, regardless of the time and efforts devoted in making it.'* Similar claims are very common among the subjects I interviewed in Taiwan, both during our conversations as well as in their media interviews. To create an original design is not only a personal fulfilment for their *xiao-wo* (petite me). For these Taiwanese designers and craftspeople, it is also a chance for them, their town, and the island's 'pseudo-nationality' to be recognised. Making original designs under their own name provides them with an opportunity to create their *xiao-wo* (petite me) but also to develop a more community-based *da-wo* (the grand me and the collective me), bringing recognition to their towns and to their nation.

### ***Da-Wo (the grand me): the narrowed concept***

Many bamboo crafters are not trained as apprentices when they are young but acquire the required the necessary skills as a hobby once they are adults. Some of them previously worked at other jobs, but many were housewives who

took craft workshops after their children were all grown up. They revealed to me that one of the most pleasant achievements they found in making these crafts is that they finally find themselves creating something new. In addition, being a bamboo crafter also allowed them to find their place in their family and in society, more specifically, to be seen within the two. *‘When my name...is printed and displayed next to my work in an exhibition or book,<sup>54</sup> I feel that I am not just someone’s mother or wife; I am finally a person, an individual person; I mean, I can finally be me, just me. These craft works are evidence of me as a person, even when they are here in my living room,’* a female bamboo weaver told me. Her husband owns a motorcycle parts shop, and he cleared up a display space in his shop window to display his wife’s craftwork. *‘I did not know my wife was so talented, and I am very proud to let my customers see her works and know that she can make these beautiful baskets,’* the shop owner said. I then asked them if they display these baskets with the intention of selling them. The male owner of the shop said, ‘No, we display them because they are pretty. If someone wants to buy them, they better offer a good price.’ Then the wife added, ‘Our teacher (Silk) told us not to sell them easily or at too low a price. We need to keep our prices at a higher range in this town so that we don’t hurt each other with a price war. As a member of one training course, we need to maintain set prices among us<sup>55</sup> for the benefit of the whole bamboo weaving community on Jhushan.’

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<sup>54</sup> Most craftspeople I interviewed could not differentiate a book and an exhibition catalogue and referred to most printed and bounded publications as books.

<sup>55</sup> The ‘us’ this woman referred to here means her colleagues at Silk’s bamboo weaving workshop in the Jhushan Township.



**Figure 5-1 The glass case in the motorcycle parts shop with bamboo baskets**

The woman from the motorcycle parts shop revealed her satisfaction at being recognised as a ‘person’ through her works, occupying a space in their shop and displaying her bamboo weaving techniques to the public. According to Harris (1989), to be a person is ‘to have a certain standing (not “status”) in a social order, as agent-in-society’ (Harris 1989: 602). In many ethnographically-recorded ideas about the person, being a person or not is not a naturally given recognition. As Harris (1989) pointed out, not all human beings are persons and not all persons are living humans because some deceased humans may be conceptually endowed with attributes of personhood. Research conducted by Hallowell (1963, 1976) differentiated person from selves, stating ‘Some societies live in a world full of non-human entities conceptualised as persons, as authors of actions affecting human life’ (Harris 1989: 602-603). Defining the concept of being a person or not depends on whether the human or other being can be conceptualised as an agent, the author of action purposively directed toward a goal (Smith 1974: 140-145; Harris 1989: 602-603). Thus, whether one can be the originator of purposive actions becomes a key to distinguish if one is a person or not. If we then apply this definition of being a person to my findings in the field with these craftspeople, it can explain the reason why it was important for them to constantly improve themselves after an apprenticeship that could only teach basic skills. It is crucial

for them to seek new knowledge and to learn out about new designs, methods, and techniques throughout their lives if they want to be recognised. Making objects using other people's designs brings in some income for the family but cannot establish personhood because it lacks the authorship in making. Only the practice of making material objects as an author can help people not only find their selves but also be recognised in society as a person. When they are creating objects for themselves instead of for the sake of production, their actions become the path for people to find their standing in society. However, the Han Chinese concept of *da-wo* is broader than Harris's definition of the person, as *da-wo* can be extended from a concept of a single person to one of the collective group. These craftspeople usually gathered together regularly for workshops and later attended many local and national technical research groups, thus finding their parts as 'agents-in-society' outside their family through their actions of creating their works. These specialised groups allowed every individual person to contribute collectively and pulled together their personal interests and skills within a group. This extended concept of people as *da-wo* is further illustrated at the end of this section after the discussion of *zhen-wo*, the concept of 'true me'.

### ***Zhen-Wo (the true me)***

As discussed above, traditionally Han Chinese generally suppress the concept of the self. However, it is worth restating how self as a concept was gradually developed among the Yii project crafters. To work with a concept of self is to 'conceptualise the human being as a locus of experience, including experience of that human's own someoneness' (Gowlland in press.). The self is sometimes stimulated by experiences from the outside world. For example, according to Leinhardt, the Dinka view the self as passively experiencing the impositions of external agents, especially mystical ones (Leinhardt 1961). The self acts as the core of mankind where suffering is 'imagined,' objectified, and projected in something in the world outside it (Harris 1989: 601). Maslow (1968) found that all mentally healthy people who can achieve self-realisation are capable of being creative, so the ability to create is 'not exclusive to a small numbers of artists but any healthy human beings who can make self-realisation'

(Liu 2001: 170-172). However, creating one's own style in design without the recognition of self might be problematic. This is unfortunately one of the most common problems among crafters and even some designers. The following case of design school graduate crafters, Peggy and Ting, points out this common fallacy among the Taiwanese crafters and artists.

Peggy and Ting critically examined some usual mistakes that they felt restricted creativity, and they provided the following five suggestions based on what they learned from their own experience:

1. Do not try to find inspiration from commercial magazines and catalogues.
2. Learn to appreciate others' work with the right attitude.
3. Thinking is as important as making. Your brain and your hands are equally important.
4. Do not hesitate to experiment with new objects and techniques.
5. Never point at other's work and say, 'I could have done that as well.'

The suggestions which Peggy and Ting gave to junior craftspeople exposed the problems of the learning process for most craftspeople. Anyone who wants to be creative should never say 'I can do that as well,' and follow others' work, but think hard about what they want to do that is different from those around them. Otherwise it is not legitimate to claim that their work is original. We are 'poisoning,' to borrow Peggy's phrase, our creativity if we are 'dishonest to ourselves'. When we were chatting online after I saw her Facebook post about craftsmanship, Peggy told me *'I always encourage my students to find their own design ideas for their work, no matter how silly the idea might sound. The process of developing a concept is much more important than the end result. If you copy other people's design, then the thing you made does not belong to you and doesn't bare your DNA. You cannot say that it is your work even if you make it with your own hands. You are stealing.'* Thus there is a paradox with copied objects, since the craftspeople might have made it with their own hands, but it is not truly theirs. If we focus our discussion on the relationships between objects and the people who made them, and temporarily put aside the consumption and possession of such objects, there should be a specific intimate link between the maker and the objects they make. However, looking at Peggy's comments about

copying others' designs, this link is not only connected by the actual haptic practice of making but also relies on the originality and authorship of the design. Objects one makes may not be truly one's own work because they may lack originality: a concept previously neglected in traditional craft training but a fundamental requirement of design training. This difference is still a most troublesome issue among the bamboo crafters and designers, and especially for many Taiwanese bamboo crafters who were so used to searching for their inspiration through modifying others' work. For crafters, it is a tradition to mimic and slightly modify other people's work as long as they know the required (ie. similar or comparable) techniques. This problem damaged the project of collaboration and harmed personal relationships among crafters and between crafters and designers.

One controversial case that I encountered during the fieldwork happened when Kevin designed a bamboo stool with a crafter. In this collaborative project, Kevin drew the design and discussed the technical issues with the craftsperson. After they finalised the design, made the prototype, and submitted the final products to the NTCRDI, who funded this project, the crafter made a modified smaller version privately without notifying the designer. Kevin was very unhappy about this issue because he felt his copyright had been violated and he was not being respected by the craftsperson. When he asked the craftsperson why he did not tell Kevin about this unauthorized version of his design, the craftsperson stated he was not aware it was a violation, responding, *'I did not copy your design. This technique was established long ago and belongs to everyone. It's everyone's property, not just yours.'* Kevin cannot accept this point of view because he treated this design as part of his self. *'This design came out of my brain. Yes, the technique existed before me so I did not invent it, but it was me who decided how to use this technique in this way. It is my design. It represented me, and it is me who decided how to apply this technique on our design.'* In the past, some crafters claimed certain techniques should belong to certain families, tribal groups or communities. However, while a technique can be copyrighted by laws and regulations, in reality anyone can 'own' it as long as one acquires the physical

skills and materials; and follows the correct technical sequences, learning from the masters of the tradition. For Kevin, the craftsman's own 'modified' version was not an original but an awkward copy of his design, but for the craftsman, the modified version was a 'new' creation. It may have been developed from the original they made together earlier, but it was a new piece with different dimensions and arrangements. This modified version is as authentic as the original collaboration work, or even more authentic and intimate for the craftsman than the previous Yii project design they created together.

For the craftsman, the modified version of the work is still authentic and is also capable of presenting his or her true self-identity (*zhen-wo*). Since craftspeople usually acquire their skills from mimicry, the physical contact when one manipulates and processes the materials links them with the objects they make. For the craftspeople, this intimate relationship and the authorship of the artifact were genuinely established. For them, using non-Taiwanese materials to make objects or asking other people to finish a work is less authentic than copying other people's concepts and designs. On the contrary, designers may liberally switch the actual craftsman they commission work from, or change the manufacturing locations and material sources without feeling that the work is less authentic or that they are somehow cheating. However, copying or slightly modifying a pre-existing design is a crime, which not only violates the copyright of the original design but also devalues and degrades it as well.

### ***Da-Wo: The Extended concept of forming the Collective Me***

The previous four sub-sections highlighted the Taiwanese perspective of making and creativity in design as they relate to the individual. One's biological and physical petite me (*xiao-wo*) gradually transforms into the grand me (*da-wo*) through the development and expression of one's individual self in order to construct one's status in society. *Da-wo* on one level can be considered similar to Harris's definition of the 'person', which requires a person to be an agent-in-society (Read 1976; Harris 1989). *Da-wo* also symbolises the general good of the whole community. In addition to Harris's definition of the person where 'No

social activities, no identity' (Harris 1989: 604), the meaning of *Da-wo* also contains another level of meaning similar to the Latin motto 'Unus pro omnibus, omnes pro uno,' which means 'One for all, all for one,' in English. However, the latter's 'one' does not mean the individual but a collective unity.

Although it is very important that one has to be original and skilful in order to be a distinguished craftsperson or designer, these people do not usually work alone. During the Yii project many individuals regularly participated in some specialised workshops and formed their own group<sup>56</sup>, and the results of their works were usually exhibited in different public galleries, local fairs, and local and international bamboo museums. When the Yii project was exhibited annually in Milan, London and Paris, the NTCRDI usually selected equal numbers of craft makers and designers who participated in the project, and fully sponsored their travel abroad. When I went to the *Mansion et Object* design fair in Paris with them, I was surprised to learn that the director of the NTCRDI did not require these government funded crafters and designers to stay at their exhibition pavilion, but instead preferred that they walk around and see other designs. Lin Jeng-yi, the director of the NTCRDI at the time, did this to help stimulate and inspire his people by allowing them to see the differences and new creative possibilities.

The institute also funds crafters' and designers' travel and exhibition expenses when they are given the opportunity to exhibit their works in international galleries and museums. The NTCRDI supports these artists to exhibit internationally if their work is labelled as being designed and fabricated by Taiwanese artists. This policy is not limited to design but also applies to other creative industries such as the movies and music industry. These government funding bodies thus support Taiwanese creativity, allowing them to be seen and recognized internationally so Taiwan itself can also be seen internationally. It is likely that the NTCRDI provides these funds for cultural, political and diplomatic reasons more than for economic ones. As we mentioned in Chapter Four they did

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<sup>56</sup> It was more like a research group focused on the creation of bamboo objects, rather than a professional guild.

not sell any works due to legal issues, although they received literally thousands of requests at design fairs. These designs became Taiwan's advocates of Taiwanese culture, and were not just about innovation but were also held responsible for presenting the culture and identity of all Taiwanese people. The desire to create designs for the promotion of Taiwanese-ness is not only a concept promoted within Taiwan's design community but is also embraced within the island's society as a whole. As the founder of ECHO Magazine, Yung-Sung Huang, declared in the 2016 World Design Capital Taipei Bid Video, many Taiwanese designers and crafters bore the responsibility to create new traditions for the next generations. *'To design is to think on a human basis. We must build on our cultural and historical life experiences. And pass on these design contexts to our next generations. Because sometimes we need to change. But then we need to change for the better. We need to build on our own foundations and use our own abilities to create better life-enhancing design for living'* (WDC 2016 Taipei Bid Video 6:17-7:04).

Creating new designs is not merely seeking innovations but understanding the cultural and historical context of people's lives. It is an opportunity for people to recognise and remember who they are and what Taiwanese traditions and identity are about. These objects from the Yii project are qualified as an 'integral part of the process that socialise people into ways of seeing things that inculcate beliefs and create meanings and understandings about the world' (Rowlands 2009: 149-150). Through the embodied participation in making their own unique design, these individuals have defined and reinvented their selves, acquiring standing in society as a unique person, instead of being an anonymous link in the production chain. In addition, this design and fabrication process also created in people an awareness of their identity issues, for example in the case of Mr Bamboo. He calls himself Mr Bamboo when introducing himself to foreign guests, and did the same when talking to me. He said he gave himself this title because he 'knew' the totality of bamboo, not just the techniques but also the history and culture of bamboo in Jhushan. Mr Bamboo used to be a manager at a bamboo-ware factory. His primary responsibility at that time was to meet the

designated production targets and institute quality controls for the products his clients wanted. *‘I was making for others then, not for myself. I have been familiar with bamboo since I was a young boy. But it was the opportunity to work with Konstantin Grcic on his design, Chair 43, which made me realise how wonderful our Taiwanese bamboo is and made me so proud of it. These efforts helped revitalise a once depressed industry, making it glorious once again,’* Mr Bamboo said, when he took me on a ride to look around the historical sites surrounding bamboo in the Jhushan Township.



**Figure 5-2 Chair 43**

We visited the bamboo clumps<sup>57</sup> that were harvested to build a pavilion in the Pingtung sugar plant for the Japanese Crown Prince Hirohito to rest in when he visited Taiwan in 1932. Local people in Jhushan are still proud that they have the original mother plant of this ‘auspicious bamboo’. Today, they have named the whole area where this bamboo clump was originally grown after it. The memory of bamboo in the past still maintains its impact on the Taiwanese people. According to historical data from a pro-Japanese nationalist association, Taiwan Gokoku Jinjya<sup>58</sup>, the Japanese chairman of the Taiwan Board of Sugar Trade gave President Chiang Kaishek a bamboo stick made by the stem of the ‘auspicious bamboo’ as a gift, engraved with the Chinese character ‘Rei’ which means auspicious and is also part of a childhood name the president was fondly called. As a result, while the nationalist KMT demolished most of the history of Japan’s presence on the island, this bamboo clump was protected and taken good care of.

This practice may ‘experience itself as a unique unity, achieving a sense of personal identity...Yet the precise nature of self is disputed as various psychologies pursue their own theories of the self’s development, dynamics, and pathologies’ (Harris 1989: 601). These crafters and designers are ‘socio-cultural beings that incorporate the structural features of their society as it is locally alleged to persist from the past and will supposedly persist in the future’ (Harris 1989: 604). Making, as an action in the present, actually links the memory and tradition of the past and generates possibilities for the future. The creative activities of making new objects and designs are at the same time forging people’s identities as individuals as well as forming a collective identity, such as the one for bamboo craft makers, Taiwanese artisans, and Taiwanese people in general.

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<sup>57</sup> According to the oral history data, Crown Prince Hirohito found some green sprouts on the bamboo column of the pavilion. The Japanese officials considered this a good sign, so they cut off the bamboo sprout and transplanted to in the sugar plant and named it ‘rei-zhu (auspicious bamboo)’.

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[https://www.facebook.com/permalink.php?id=190669964381628&story\\_fbid=345925918856031](https://www.facebook.com/permalink.php?id=190669964381628&story_fbid=345925918856031)

## 5.2 The Woven ID: the Ideas of Making and the Making of Identity

From debates among the social and political elite to people's daily conversations, Taiwanese people have often found that they, at least subconsciously, struggle with identity problems. People have differing nostalgias about the island's former colonial ruler, Japan; its current China-centric government the Republic of China; and the ambiguous definition of being Taiwanese. Who Taiwan's people are, where they came from, and where they will be in the future can be puzzling questions. The historical context laid out in Chapter One illustrates how the trade and exchanges between Taiwan's original Chinese settlers and its indigenous population, and between these settlers and Chinese traders, blended and transformed the different styles and designs of bamboo crafts in Taiwan. In addition to the infusion of material culture through trade and exchange, the Japanese bamboo craft training school of the 1930s and post-World War II export-oriented handicraft productions imported new techniques and knowledge about bamboo crafting to Taiwan. These bamboo crafts represented the designs of 'others,' which people copied following pre-existing designs to make duplicates and respond to market demands.

This kind of passive, infused, and adaptive production model is now embedded in Taiwanese culture. When Taipei was bidding for the World Design Capital 2016, the team for the competition proposed a concept of Taipei as 'The Adaptive City' in their official document bid.<sup>59</sup> In these kinds of bids between cities for international events, it is crucial that each city defines itself and comes up with a clear collective identity. The proposal concept of 'The Adaptive City' reflected the essential crafting culture in Taiwan, which reacts and adapts to outside influences and changes quickly. However, it also meant that taking the term 'adaptive' as the characteristic identity of design in Taiwan could mean 'no identity' or in a softer phrase 'always redesigning'. Questing for identity remains the most contentious issue in the domestic arena of Taiwanese politics. This issue

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<sup>59</sup> <http://www.taipedesign.org.tw/en/about.aspx>

bothered not only government officials when they were marketing Taiwan internationally, but has also proved troubling for much of Taiwan's population, who are looking for clarity in where to place the island's culture and people within the global community.

### ***The Meaning of and Reasons for Making***

This phenomenon of searching for an identity has also been found among the indigenous Taiwanese. Christy DeLair conducted her research on Taiwanese crafters as well, focusing on Taiwanese indigenous crafters and collecting contemporary indigenous craftwork for the Haffenreffer Museum in the summer of 2011. She argued that 'most dominant narratives suggest that to be indigenous is to be stuck in the past, tied to tradition, and antithetical to ever encroaching development. In this view, indigenous cultures will disappear unless they are preserved in their historic forms and sheltered from the changing world around them... Yet indigenous artists in Taiwan are constantly challenging these preconceptions through their revitalisation of local culture and the development of craft industries' (Harris 1989: 600). Those indigenous Taiwanese crafters she observed were crafting traditional material culture using new materials, forms, methods, and designs. While tradition and history remain significant, to be indigenous may also mean to be creative. DeLair's observations of the Taiwanese indigenous crafters echoed my own fieldwork research about Taiwanese bamboo crafters, that their actual daily practice of making was 'involved in ... creating new meanings and shaping new perceptions of indigeneity' (DeLair 2012).

The evolution of Taiwanese bamboo design can be seen as the epitome of Taiwanese cultural changes. In other words, the historiography of Taiwanese culture over the past one hundred years is projected and engraved on these bamboo designs. However, the exercise of craft design and making at the Yii project opened up an opportunity for the designers and crafters as well to seek their own identity through the creation of the project's work.

When people created goods for others in factories or in their own homes under the 'living rooms as factories' policy of the 1970s to 1980s, they only made

or assembled parts of the whole. In this kind of Fordism production model in Taiwan, every person was only responsible for a small part of the process and many of them did not know (or did not bother to learn) what the end product was or what exactly they were making. However, these production lines did not take place under one roof due to the lack of sufficient capital to invest in big factories. Thus production lines were divided into several sections, and unfinished products travelled among these small and medium scale family run factories for the completion of the manufacture processes. As a result, most of the people participating in this kind of production line only had access to a fragment of the whole production process and had only limited opportunity to learn every step in the process. Those craftspeople I interviewed from the bamboo industry in Jhushan, like Fuma and Mr. Lo mentioned from Chapter 2.3, often rejected the idea that they started ‘learning’ bamboo weaving when they were making small bamboo objects, such as woven bamboo loops or bamboo parts for the export dealers coming to their town. Fuma recalled that, during her time as a child in such an environment, she was picking bamboo pieces and organizing them into batches of twenty pieces into a batch. She did not know what she was doing until she saw the end product at the NTCRDI and finally realised that she was making a bamboo fan. In this working model, the maker is alienated from their work even though they own their own tools and equipment.

Fuma said, *‘We were zuo gong (doing manual labour) for others, not for ourselves. I did whatever they told me to do. It wasn’t difficult, just a lot of work. I was an agile young girl then, and the bosses liked to give work to me. I made so many things then, more than I can remember. I didn’t know what fatigue was, I just wanted to make more money for my family.’* I then asked her if making bamboo objects nowadays is more fun and interesting for her. She replied:

*It is not really more fun and interesting. To be honest, it is more difficult and sometimes more painful because I have to think very hard in order to come up with my own ideas about what I want to make. It must be different from other people’s work. I prefer going to the bamboo weaving workshop because the tutor gives us some samples to look at from which I can make alterations of the design and create my version of it. Sometimes I feel that working from*

*others' designs makes me happier than making my own work, because I know what I will make. I can sing or chat with others while working, but I need to be more focused when I work on my own design because I am not sure if things will turn out well since I haven't yet seen the final result. I need to use my imagination, need to engage in trial and error, and need to connect myself with the object I am making, because it's coming from my thoughts and my design.*

She mentioned to me that, in addition to technical guidance, she and other bamboo weavers (i.e. Su-ru mentioned previously in the section of the “Recent Transformations” in Chapter 3.3) often ask their tutor, Silk, to *ho-mian* (literally translated as ‘give a name to’) their final work if they intend to send it to a competition. These craft competitions are the main motivation for local craftspeople to come up with their own designs. On the contrary, Suru, another student of Silk mentioned in Chapter 3.3, enjoys the process of thinking more than the process of making. It was not that she did not like the labour-intensive work of the weaving process. Instead she saw it as a comforting and healing experience. However, she felt more challenged and excited when facing the prospect of an uncertain result.

*When you know what you are making, you see the end of the journey. There is not excitement in this unless something goes wrong, and that is not exciting at all because it means you have to do it all over again from the very beginning. I really like the parts requiring thought. It is like you are facing an uncertain destiny, an adventure. When I see something interesting in the books or an exhibition, I want to make a version of my own. However, if I want to submit my work to the exhibition, I need to be different.*

Interview with Su-ru in 2010, Jhushan.

Being different is a new concept for these craftspeople trained in traditional craft courses. There they learn the step-by-step process of making exactly the same object as others in their class and receive praise when they reach the quality and standard of the sample which their master made and placed in front of them. Making as an act is always a process of transformation and is ‘fluid and improvisational’ (Ingold 2010; Gunn and Donovan 2012). However, for many craftspeople the fluid and improvisational concepts involved in making usually

give way to functionality, and design is a process of continuing modification of pre-existing designs. Like Su-ru said, when the design of an object is decided upon, there is only the fabrication process left; fluidity and improvisation stop. Furthermore, when one is making works from others' designs, it is purely the physical act of making and is alienated from the maker's personal will and emotional attachments. The objects are completed and finished at the moment the fabrication process is complete. These objects are thus ready to transfer to another person such as traders and consumers. As we discussed in Chapter 3.1 about the distinction between personal attachment to making *work*, *product*, and *utensil* for individual crafters, only the first type of making fits Ingold's statement that, 'finishing is never finished.' The level of freedom allowed in the process of making enhances the dynamism and fluidity of mental activities and the originality of design.

All these immaterial processes of creation thus burden makers but also bring them joy and fulfilment during the journey. This is the path of creating a new object almost every designer has been through, but it is not a process familiar to many craftspeople trained in traditional apprenticeship customs. If we separate out an act of making into merely its physical processes, we miss out on the essential ingredient of making itself, which is creativity. Baxandall and Morawski assert that the pursuit of creativity, with one's energies especially focused on the activity of art, is 'continually sustained by the undying and evolving human wish for freedom from coercion, injustice, hunger, and chaos' (Gunn, Otto et al. 2013: 5). However, in the case of these earlier Taiwanese craftspeople, craft making is more a handicraft than an expression of humanity. If the maker cannot freely inject their personal thoughts, emotions and feelings into the objects they make, they eventually lose their driving force towards creativity. In addition, when makers create 'products' which do not bear their name or other personal identifiable marks on them, the makers are only anonymous producers without authorship or even proof of existence in the making process. The measure of freedom to make may be small, but if members of society view all humans as automated actors, they will fail to consider anyone an 'agent-in-society' (Harris

1989) because being a person creating objects and being simply a tool for fabrication, are two contradictory concepts of what creativity is. Therefore, such production-based crafting alienates the maker and the objects, they make instead of binding individuals to their work. In short, these products lack human agents conceived during the process of making and are created with goals of standardisation and uniformity instead of uniqueness and individuality. Moreover, craftspeople usually have more emotional attachment to their individual works than they have for the standardized products and utensils they make.

I once accompanied the bamboo weaver Silk to a collector's office in Taipei to sell a piece of her work. It was a little pavilion-shaped woven bamboo sculpture. She told the buyer that she would bring the piece to Taipei personally because she wanted to clean it first and see how her work would be displayed. She said to me, *'Selling a piece of my work is like giving my daughter in marriage to another family. I want to see where it will be displayed and I look back many times as I leave the piece with the buyer.'*

On that day, we woke up at 7:00 AM and drove 250 kilometres to Taipei City. The buyers were a couple who owned a successful 'bushiban' (after school program) business. They showed us their office and where they would place the piece. They said they were not extremely rich, but wanted to collect things which could bring back memories. They called themselves 'the fourth grade', which refers to people born in the 'Minkuo' forties (1951–61). They said, *'Today's world lacks the same atmosphere and values we enjoyed growing up. We would like to collect objects which have some links to memories of that era.'* Although this piece was made of a common and familiar material that they recalled from childhood, it was now presented as art instead of as an everyday utensil. Bamboo, which was frequently used as an everyday material during their childhoods, has now largely been replaced by plastics. This couple felt comfortable having artwork made of such a familiar material in their office. For them bamboo is attached to their childhood memories. Collecting this kind of material artwork is thus like collecting a part of their immaterial memories.



**Figure 5-3 Silk and her work “the Zen Pavilion” in the buyer’s office**

After we placed Silk’s work in the collector’s office, Silk asked me to take a picture of her and her work before we left. She seldom asks others to take her picture. She chose to wear a Western tweed jacket to see the buyer instead of the traditional Chinese style outfit she wore on other occasions within the craft making community, or when performing bamboo weaving technique demonstrations. She wanted to have a picture with her work as a souvenir before she left the buyer’s office. I never saw this kind of expression from her before, and I realised that she did distinguish her creative works from other objects such as the products and utensils in her shop. Products, utensils and commissioned pieces are things that she made for a living. She does high quality work, regardless of what she is making, but is able to successfully complete these objects without much time or excessive thought. However, for the creative pieces or *works*, she will plan out the technique, shape the object in her mind, and decide what materials to use before she finally starts working. Usually, she only has a rough image in her mind when she begins. She will work on it for a few days and put it away for a while before she picks it up again. There is a very special moment for a piece when the craftsman decides it is complete and requires no

further work. When I asked her how she knows when a piece is finished, she said to me, *'I put it away and wait. I have to put my hands down and put some space between myself and the object I made. If I don't stop working, I will be too close to the object and it will still be part of me, myself, so I cannot see it clearly because I am still in it.'* Since she considers the object as an extension of herself, this 'hands off' moment might be a period of time for her to re-examine her work and a process of alienation between the creator/maker and the work.

This disconnection between the maker and their created object not only affects the crafters but designers as well, though through a different trajectory. Designers usually have more personal attachments with the objects they design even though they do not usually fabricate the works themselves. They normally have more physical and intellectual involvement with their 'product' they design during the prototype stages but will pass their designs and prototypes onto the factory for production later on. They usually feel the need to make a statement in order to make their design unique, have it stand out from others' designs, and to have it truly represent its designer. This statement becomes the statement of their intimate relationship with the designs they create. Since most of them are trained to 'think through a drawing' at design school, as we discussed in Chapter 4.3, they tend to rely on visual concepts rather than haptic experience of the materials. As a result, they focus more on the aesthetic in shapes, forms, colours, and styles that later evolve into design trends and fashions, instead of more pragmatic objects.

The famous Japanese industrial designer Sori Yanagi, who is also the son of the founder of the Mingei Movement, Soetsu Yanagi (1889-1961), once said, 'things that are easy to use survive, regardless of what is fashionable, and people want to use them forever. But if things are created merely for a passing vogue and not for a purpose, people soon get bored with them and throw them away. The fundamental problem is that many products are created to be sold, not used' (Curtis 2012). This problem in design echoes back to the three categories of things that crafters make: utensils, products and works. It also points out a common design problem crafters have when trying to make an original design. If personal will and attachments can be elaborated liberally in the process of making,

regardless of whether the maker is the designer or crafter, in Yanagi's terminology the object will be born from its creator instead of made. This free will in making and the intimate touch of a *person* instead of an *individual* brings beauty and value to these anonymous designs in crafts.

### **5.3 Worthless or Priceless: the Twofold (Material) Value Question**

Bamboo as a natural substance originally did not have very much market value. Its material value slightly increased through different material transformation treatments, such as caramelising, charcoaling, and lamination, but was never a precious material for consumers in China, Vietnam, India, and Indonesia where bamboo is an abundant natural resource. However, bamboo's status changed gradually via its interaction with Taiwanese people's everyday life and resulting inculcation of the island's collective identity. Rowlands (2009) asserts that cultural transmissions depend on context, though they can be grounded in various material and immaterial forms. In the previous chapters we looked at how bamboo is inscribed with the cultural values of Taiwan, and how Taiwanese designers and craft artisans inject their personal creativity and their individual and collective identities into their bamboo designs, which adds value to the bamboo beyond its basic material value. Design as a noun describes both the plan and the material outcome that had impacts on the value; while design as a verb can be the ritual and performance of adding value. In order to illustrate how the material value of bamboo has changed, this section focuses on its material value by looking at its practical value, aesthetic value, self-fulfilment value, and display value.

#### ***The Practical Value***

Although bamboo is versatile and useful, its commercial worth is relatively low compared to many other materials. Two of the main reasons why it is such a cheap material are its availability and lack of durability. Firstly, thanks to how rapidly it grows and spreads, it is easily accessible. Secondly, although it is a tough yet flexible material, it decays much faster than wood in humid

environments and easily cracks in dry environments. Thus it needs to be replaced often when used for building materials. These issues create a sense of temporality and a contrast with more durable materials. In addition to its lack of durability, according to the carpenters, wood carvers, goldsmith, and silversmith I interviewed during the fieldwork, bamboo as a material is too cheap and humble to be used for religious objects. It is, however, closely conceptually linked with mankind and with ghosts and spirits.<sup>60</sup> It is such a useful ‘good’ material that it is *not good enough* to be considered appropriate for religious occasions.

The dilemma of usefulness is not only found in bamboo’s value but also observed in the pragmatism of the design and build of the craftwork itself. Sori Yanagi tried to counter the common trend of people’s perceptions, criticising objects created for passing trends instead of for more substantial purposes and praising the beauty of objects with practical use (Curtis 2012). However, many crafters are constrained by their object’s functionality and have difficulties coming up with new design concepts because their imagination is limited by the stereotypical purposes associated with the material. For example, one crafter may say they want to make a woven bamboo vase with a particular pattern, and they literally make what they said they would make. There is no concept transformation, and they have great difficulty expanding themselves beyond previous design concepts. The way they divide their craftwork also falls into this pattern of balancing efforts between useful utensils and ornamental craftworks. Useful utensils such as the *cha-ze* (Chinese tea scoop) are usually sold for a more moderate price compared with less useful art decorations. It is not about anti-functionalism but is a common situation observed among these crafters and is even described by an old Chinese proverb, ‘*Wu yong chi yong shi wei mei* (The use of useless is where the aesthetics lay.)’

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<sup>60</sup> More details about Taiwanese local religious and cultural customs about using bamboo is provided in Chapter One.

### *The Aesthetic Value*

The aesthetic value of crafted objects is usually judged by its material quality, form, and shape and its elaborative design that takes great effort, experience, and skill to create. The aesthetic value of bamboo, as mentioned at the beginning of this thesis, lies in its visual and symbolical aesthetic, not necessary its materiality. However, for many Taiwanese designers and crafters, they try to make material aesthetics evident through their design. In Chapter 1, I described how fake bamboo is commonplace, and often appears in everyday Taiwanese culture. The visual aesthetics of bamboo were highly appreciated among the Taiwanese and it became a representative material for Taiwanese-ness, even as two dimensional printed patterns on package designs (see images of the tea caddy package design and the gift box design made by cardboard with bamboo patterns printed on them). Unlike the previous examples demonstrated in Chapter 1, the current adulation of bamboo has evolved from appreciation of the symbolic visual figure of bamboo into the use of the material itself.



**Figure 5-4 Bamboo Tea Caddy and Tea gift set designed with a laminated bamboo pattern.**

In addition to the ‘skin-deep’ beauty of bamboo where the grain of bamboo was printed on the object surface, the aesthetic of bamboo was appreciated for its material flexibility. Many new bamboo designs have won awards in design competitions, with the winning pieces showing not just bamboo’s visible material

beauty, such as its contour outline, grain, and nodes, but also presenting its invisible materiality such as its flexibility and toughness. Instead of printing the picture of the bamboo's contour figure, leaves, or the Chinese character of 'Jhu (Bamboo)', it is common to print the texture of bamboo, as shown in the above image. Designers also play with the flexibility of this material as shown in the images below. Bamboo as a signifier still retains its original representation of gentility and elegance, but it is no longer simply an alternative material for the poor because of its humble material price. Instead, it embodies the pride of Taiwanese design and the belief designers acquired from these crafters in Jhushan that Taiwanese bamboo is the best bamboo in the world.



**Figure 5-5 'Bamboo Explosion' from the Yii Collection. Design by Camo Lin ;Crafted by Mr. Yeh.**



**Figure 5-6** Bamboo chandelier ‘Yellow Cross’ design by a young Taiwanese designer Mercury Lai.

Many of these new designs are created by new graduates in different design schools in Taiwan, and the senior designers who participated in the Yii project supervised them at these schools. These ‘Yii generation’ designers create the connection for their students to meet the crafters and adapt craft techniques into their designs. The NTCRDI also funded these student graduation projects with a special grant called the ‘*Ko yi shin chiu* (the new delight of craft)’. In these projects, teachers at the design academies submitted a proposal to have their students work with a particular crafter, and this special grant allowed the design school students to create their design work along with the crafters. During this annual project, both the crafters and tutors at the design school will supervise the students. Students need to learn craft skills in the craft artist’s workshop for fifty hours before they officially proceed to their design. The crafters are not ‘hired’ just to make things for these young designers or give technical advice only, but to serve as their teachers and teach them the basic skills of craft making as well. These young designers thus became the crafters’ students, and the crafters started to refer to these young people as their students as well. This new power

relationship changed so that it was neither the traditional patron-artist, nor the commissioner-contractor relationship.

These young Taiwanese design school students are taught to appreciate the materiality of bamboo as a subject and to follow its natural character. They feel 'laminated bamboo' techniques should be used carefully because it is easy to lose its natural character and make the material become a block of alternative wood. Laminating bamboo removes or homogenises its natural material qualities and the variations of its material nature.

Natural materials usually have material variations even when lumbered from the same bamboo forest. The direction of sunlight, the amount of rain, seasonal changes, and even the transportation of the bamboo all impact its physical materiality. Therefore, it is very difficult, if not impossible, to produce exact identical craftworks even if made by the same artisan. This unavoidable condition is normally a problem in production. At the beginning of the Yii project, many designers struggled with the comparatively large engineering tolerances caused by the artisan's handiwork. Kevin complained that the engineering tolerance when he is doing industrial design is less than 0.02mm, but the craftspeople gave him products with 5-8mm variances, which is 400 times the engineering tolerances he is used to dealing with. On the other side of the coin, craftspeople often complain about how designers treat them inhumanly as if they are a printer or type of fabrication machine.

However, after two years of working with craftspeople I was surprised to hear Kevin ask one craftsperson to retain some variations between one object and another when he moulded the shape of his design. Kevin said, '*It is not necessary to make every piece identical. It is fine to have slight differences among them. If they are all the same, they will look like they were made with a machine and not handmade.*' Through the collaboration project, designers and artisans influenced each other and tried to appreciate each other's values and perspectives. The slight variances in works of the same design are more than just acceptable imperfections but have instead become the mark of handmade craftsmanship.

A famous carver Mr Chen once demonstrated to me the paradox of the roundness of a circle. He showed me two bowls, one machine made and one handmade, and asked me to identify which was more round. I touched both bowls, noting their smoothness, and examined how round each was. I then examined them with a ruler. I could tell which one was machine made because of its smooth and even ring. However I did ‘feel’ the handmade one was somehow more rounded. I was tricked by this paradox of roundness, how could I *know* A is rounder but *feel* B is rounder? Mr Chen said it is the ‘magic of handmade works.’ You don’t just *look at* the object, you *sense* it. The curves of the handmade bowl were constantly adjusted and evaluated with both the eyes and hands of the craftsman making it. Our haptic experience assists our sense of the object; the making process of the machine made object, in contrast, was decided by visual guidance only. It was more dull because it lacked the constant and continual revision and adjustment in response to minor variations of the material and did not possess any feelings but only a visual understanding of the object. Because of man’s ability to create such objects using multiple senses, craftspeople are able to inject feeling and spirit into the objects they make. Mr Chen is like many other artisans I interviewed, such as Mr Yeh, and Silk, in that they all believe that industry-rejected odd, uneven, non-standard materials are the best forms of inspiration for their creativity, and this imperfect quality often helps them make a one-of-a-kind piece of work. However, these non-standard materials usually create great difficulties in factory production environments because they bring imperfection and failure to the manufacturing process. The beauty of the objects does not only come from their fidelity to the design but also from the nature of the material. This reminds us of the Asian philosophy of making mentioned by Taiwanese Artist Ju Ming about going with the flow of nature. When one connects with nature, no matter if one is dealing with everyday routine or creating art, one feels calm and better enjoys life; this is why most Taiwanese have been taught that ‘*Zi ran jiu shi mei* (being natural is being beautiful)’. However, what is meant by *zi ran* is not the primitive, native, and raw form of nature, but humanity’s response and deference to various conditions of nature. In the case of the aesthetics of bamboo in Taiwan, it transcended its limited symbolic graphical

aesthetics and became appreciated materially as an intimate material for Taiwanese use.

### ***The Self Fulfilment Value***

Making as an act of self-fulfilment is not new. Handling and playing with materials may bring pleasure through allowing one to experiment creatively upon the material. This is what crafters working on their own do. Bamboo tubular furniture maker Lee Recco told me that making bamboo furniture was a relatively new career for him. He attended a bamboo craft workshop when he was young but planned to learn it only as a hobby, not a profession. He used to own a tea farming business and grew betel palms to harvest betel nuts. However, he lost most of his land after the major earthquake of September 1999, and went out of business. He needed to take care of his family so he did not want to move to a larger city for work. Therefore, he started to use his skills to make bamboo furniture for some shops and restaurants looking for custom-made ‘*Taiwan wei* (Taiwan style)’ furniture. He made whatever his customers wanted, from food stands to karaoke booths.

*I made everything. You tell me what you want and what size you want it, and I can make it for you. These are jobs I take to make a living; to earn money to buy food to eat. I am not well educated, and I cannot use a computer. There is no job for me in an office, and I need to feed my family. My wife sells baked yams and pastries next to Jhushan’s high school, but that is not enough to make a living for the whole household. I never intended to attend the bamboo craft competition, but Director Huang of the Jhushan Township Library saw the bamboo rocking horse I made for my forthcoming grandson. He persuaded me to submit it to the 2007 competition where I won first place. That was totally a surprise, and I thus needed to make another bamboo rocking horse for my grandson because they took my original one on the touring exhibition.*

*I sometimes jokingly blame director Huang for his bad idea that resulted in my grandson losing the first bamboo rocking horse I made for him. But I actually do appreciate him very much. Without his encouragement and ‘bad idea’, I would never know I could do something good enough to be appreciated. He also taught me to engrave my name on the objects I make in order to be distinguishable for my clients. I do that all the time now. Even after*

*people pay me and take away any piece of furniture, my name is still on it. It is still mine; I am always the author even though my customer paid me for it. I made that bamboo rocking horse for my grandson because I remember my grandfather made me a bamboo car when I was little. I in turn wanted to make something for my grandson, but did not expect to win a prize for it, and certainly did not expect to win first place.*

*I make many things according to people's orders and their needs, but this is something I made from my own idea for my own grandson. This gave me an opportunity to change the way I see my work. I am no longer making bamboo furniture simply because I need a job. I am good at it, and other people know that. Since 2009 I have been teaching bamboo tubular furniture making at a community college. I am a lao-shi (tutor) now.*

Recco looked a bit shy after he proudly stated he is a 'lao-shi' with a timid smile. During the fieldwork in Taiwan, not just Recco but many other Taiwanese could recall from their childhood bamboo toys made by a family member (mentioned in Chapter 1.3 and 2.1). The cheapness of the material can make it a veritable playground for individual experimentation even for those with limited financial means. In such an environment, people had the freedom to make something functional or abstract; to create an original piece or modify a pre-existing idea, following their personal will and enjoying a level of freedom rarely experienced at the time.

If we consider these outcomes of personal creativity as a kind of art in people's everyday life, as explicitly argued by Yanagi for the Mingei movement, we can also consider how these acts of creation followed personal free will as an expression of art through self discovery. However, making in Taiwanese society is usually in response to others' orders, from a small-scale handicraft production to original equipment manufacturers (OEMs). Making is too often an act in response to a foreign request, not self-motivated creative behaviour. In an economic environment where export-oriented original equipment manufacturers (OEMs) are prevalent, these self-motivated acts of creation that we call design are the rare moments when Taiwanese people can make something for themselves in an economy which is usually focused on exports. Furthermore, as a hands-

on, empirical maker, and as witness to the birth of crafted objects, each maker, whether one was a designer or crafter, was the author of creation that provided evidence of the existence of the person, especially when these objects were displayed in public domains.

### *The Display Value*

Shaping the material in one's hands can be self-fulfilling for a crafter. Seeing one's work on display is also no doubt fulfilling as a kind of recognition, no matter whether one is the collector (as seen in Chapter 3), the crafter (e.g., the women who ran the motorcycle parts shop with her husband), or the designer. We noted in Chapter 2.1 how the collector Mr Wang<sup>61</sup> complained about how the government and NTCRDI ignored his collection and thus his taste and pride as a famous bamboo craft collector, discounting the foundation on which he established his social standing in society as a person/collector. The curator at the NTCRDI explained that Wang's collection is too Chinese and too traditional; the complicated patterns and traditional styles do not attract contemporary Taiwanese visitors to their galleries. *'His collection is good, but too dull and too Chinese. We are trying to promote Taiwanese crafts to our visitors, especially the younger generation. We need to show our audiences something new, something they can relate to their lives now, not just nostalgic or even Chinoiserie aesthetics.'*

When I showed a series of bamboo craft photos to random visitors in the NTCRDI galleries and asked them which craft works they would like to possess, if cost were no object, not many of them preferred Mr Wang's works because his objects were too serious and complicated. One visitor said, *'The design of these woven baskets with dragons is a bit too much for me. I know it is very difficult to make such complicated patterns, but I don't want to have it in my house or office. They are too traditional and formal. They might look good in a temple or palace-like restaurant interior, but not my space.'* Mr Wang's taste and valuation of his

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<sup>61</sup> There are more details about Mr Wang's complaints and the anxiety regarding his collection not being displayed at the NTCRDI at the end of Chapter 2.1.

collection was based on the complexity of the delicate works, which represent the amount of labour required to create the object. His perspective is similar to what Gowlland (2008) found among consumers of Chinese pottery, in that once they see the complexity of the traditional methods, they appreciate the years an artisan might take to master techniques of the craft, and days or weeks to craft the work. However, the general public's aesthetic values may have changed from a more formal design style to a more self-indulgent, intimate and relaxed design style, which is more natural. Like the bamboo carver Mr Yeh once said to me, *'If you cannot show the natural character of the bamboo in your work, what is the difference if you make it with wood or rattan? If you want something that looks expensive, there are many other materials you can choose. I can carve other materials too, but I choose to carve bamboo. I have tried bamboo from other places, but I mainly prefer to use Taiwanese bamboo, because as a Jhushan ren (Jhushanese) from Taiwan, this material is special to me. It represents us.'*

In Mr Yeh's studio-front showroom, he displayed his own work along with the works of his students and other Taiwanese craftspeople. He told me, *'Many people ask me to sell cheap souvenirs, but I refuse. I cannot compete with the cheap bamboo crafts from China. I always redirect them to the shop in our town that sells that kind of product. I want to present finesse and creativity to whoever visits my shop. We have a lot of Japanese and Chinese visitors in addition to Taiwanese visitors in our shop. Why should I show them something they can find elsewhere? I should show them the beauty of Taiwanese craft.'* Recently, his insistence on maintaining the Taiwaneseness of his work was recognised by the Chinese. Mr Yeh was invited to open a new bamboo craft store at a luxury resort in Suzhou, China. The Chinese developer offered him free retail space and promised to promote his 'Taiwanese Craft' to the Chinese consumers as a featured gallery for wealthy customers. According to the Chinese developer, displaying Mr Yeh's carved bamboo works in the galleries could satisfy both the rich Chinese tourists, who are keen to buy more original art work than the traditional yet repetitive Chinese works often seen, and also foreign tourists who want to buy quality oriental souvenirs.

Both Taiwanese craftspeople and designers constantly try to distinguish their products or works from Chinese ones. They also make clear distinctions between themselves and Chinese people. Although it is inevitable for larger scale bamboo factories, such as Bamboola, Mosia, and Pu-yuan, to create low-profit, mass-produced standard products such as bamboo floors in China, they all maintain their more profitable craft production in Taiwan and only use local Taiwanese bamboo. When the ‘Yii generation’ designers or their students tried to commission their work to the local production teams, such as the small-scale craft production team operated by the local social enterprise Townway, both the designer and the production team insisted on using local materials, especially when it comes to bamboo. Judy, a Yii generation designer and founder of the brand Cuckoo, commissioned these local craft makers to produce her popular chopsticks products. Besides bamboo, this product also includes a fabric case for the chopsticks. The fabric was sourced from the Taipei fabric market, whose products are often imported. However, she insists on using Taiwanese bamboo for making the chopsticks themselves. *‘The whole point of my design and the concept of Townway will be lost if I source Chinese bamboo for my product. I am a Taiwanese designer, and this product is proudly made in the hometown of bamboo in Taiwan. There is no reason that I should use imported bamboo, especially Chinese bamboo as long as I can still source the Taiwanese bamboo,’* Judy said.

Many people I met in the field, including designers, craftspeople, and local farmers, emphasised this insistence on using Taiwanese bamboo, and the intimate relationship between bamboo and the Taiwanese (especially people in the Jhushan Township). As Mr Ho, one of the bamboo farmers I met at a conference in Bamboo Cultural Park, stated, *‘The importance of bamboo to we people in Jhushan is clear. We grow up with the bamboo, we play with it, we dwell among it, we sit on it, we sleep on it, we cook with it, and we even eat with it. We live with bamboo for our whole life. Bamboo is always with us, and we are partnered in everyday life.’* Mr Ho’s statement pointed out the strong bond between

Taiwanese people and bamboo, as a kind of plant, as a kind of material, and as a kind of icon for their lives and identity.

The craftspeople amplified the meaning and symbolic cultural resonance of this humble material by presenting their bamboo crafts in both public and domestic spaces. Furthermore, since bamboo is considered a local, iconic material representing Taiwanese identity, bamboo objects that won acclaim locally and internationally were often exhibited in many international exhibitions representing Taiwan. Even though the displays in the motorcycle parts shop and at the international exhibitions have different goals and contexts, bamboo crafts play the role of embodying the daily life of Taiwanese and endowing display spaces with local identity. These exhibitions also influence the local weavers in their domestic space; many bamboo weavers collect the display tags of their works after the exhibitions and even keep the display panels at home as the evidence of their participation in the exhibitions. They usually display the tags along with the objects as they were displayed in the galleries. Many of them even build glass cases in their sitting room where their guests can easily notice the pieces of work.



Figure 5-7 The display glass case in Xu-ru's living room



Figure 5-8 The display glass case in Silk's workshop

One can often see similar woven bamboo crafts in different weavers' homes as well as in the studios in which they do much of the work. This is because they attend workshops led by the same instructor. Visiting these studios one can often see similarities in the woven objects, except those that are submitted to premier national competitions, which must be more distinctive to be accepted. Once a piece wins a competition, the competition organisers, such as the NTCRDI, a museum, or a gallery, keep the objects. Therefore, the artisan remakes a new copy for displaying at home. Sometimes a visitor might want to purchase one of these pieces of work. The object's exhibition tag becomes evidence and proof of its quality for the consumer. Once the object is gone, they make another copy if they have time. The former exhibition tags then became the index of specific designs and an honour badge of craftsmanship even if that piece was submitted to a more local competition and was a practice design from workshops they attended. The exhibition tags, leaflets, catalogues, and newspaper clips become essential to these craft makers, and the artisans preserve these printed materials very carefully, with many of them using clear folders or film lamination to preserve the documents. *'I can always make another basket as long as I can still weave, but these documents are precious. They put my name and my work on these printouts, where visitors can see them. These are the recognition of my achievement,'* Xu-ru told me.

In the SMN (Sun Moon New) bamboo shop, there is a sign stating that the shop is a bamboo museum. This shop is owned by the Lo family. Mr Lo and his son are both bamboo craft artisans. Mr Lo specialises in making tubular bamboo furniture and is one of the most famous tutors of this technique. His son went to Silk's workshop and learned bamboo weaving. I first visited their shop when I happened to pass by it and was attracted by its sign 'Bamboo Museum.' For me, it is more a shop than a museum, but he did have hundreds, if not thousands, of bamboo pieces. I noticed he had several display panels in his shop, but that they did not come from the same set of designs and some were aged and faded. I could tell many of them came from various former exhibitions he attended in different galleries. When Mr Lo showed me around in his shop, he differentiated clearly

his own work, his son's work, other Taiwanese bamboo works, and those works that were imported. After I got to know this family better, after several months of living in the town and meeting them in different workshops, I asked the son why they kept these unmatched tags in their shop while they could make more uniform new tags to make the shop display look better. He replied, *'For us, these tags from former exhibitions are proof of our genuine craftwork and skills. They have our names on them. We Taiwanese were 'nameless' for a long time. Take my family for example. We ran bamboo factories for three generations and made numerous bamboo baseball bats and tennis rackets for different name brand companies like Keynes, Mizuno, and others. We did very good business until the MLB banned bamboo bats in professional games, which hurt our business. However, no one knew we made these products. We were nameless; no one knew the products they saw in the shop came from our dim factory.'* Having their work officially displayed is recognition of personal identity for Xu-ru and the Los. They want to be seen and be recognised, and these tags and panels from the former exhibitions stand as witness and evidence that they have been seen.

**Figure 5-9** A former exhibition tag was displayed with Mr Lo junior's bamboo woven basket in his



The anxiety of being Taiwanese society, at every level from the per Bamboo crafts and designs have become a valuable resource for the Taiwanese government to display Taiwaneseess. National institutes like the NTCRDI and TDC both

accumulate their own collections of Taiwanese bamboo works. The collection at the NTCRDI covers many categories, from the traditional folklore tools and export samples, to the latest Yii and other institutionally sponsored collaborative projects. For the NTCRDI, it is important to document the transformation of the bamboo industry from traditional designs to the latest works. This institute has supported crafting communities since its establishment in 1932. In contrast, the TDC collects only the latest and most iconic Taiwanese design works that may put Taiwan on the map of world designs. They present these latest bamboo designs in different international fairs and exhibitions. With the newly opened bamboo cultural park in addition to the three bamboo museums in Nantou, there is a collective promotion of the 'aesthetics of bamboo' and its popular designation as the material of Taiwan. Under the influence of new museology studies, museums have emphasized the Euro-American tradition that encapsulates a culturally distinctive way of managing and presenting a fabricated world through the display of objects (Barnett 1953).

From the novice domestic mini display of individual artisans to the bamboo installation at the national pavilion at the World Expo and design fairs, this humble material has become iconic for Taiwan and Taiwanese people. The goal of these bamboo designs and collections is the representation, within a wider category of displays, of a Taiwanese desire to define or even brand its national and regional identity with bamboo.

### ***Interim Summary***

Bamboo craft design collections are not chosen to be displayed for their fancy looks or the massive time and labour invested in them. Instead they have been shown in galleries as pieces of art or as celebrations of craftsmanship, as nostalgic displays in cultural business offices, or as part of family achievement displays in living rooms. Objects are displayed (or not) because of the inherent power of their possession, not because of their representational qualities (Rowlands 2009). This humble material used to be appreciated visually only and was not considered appropriate for display. However, today it has a sense of

prestige within Taiwanese society. As Marx commented about works of art (and design), they are not ‘isolated phenomena, but are mutually dependent with other cultural activity of predominantly social, political, moral, religious, or scientific character’ (Baxandall and Morawski 1974: 8). Objects have value not as fixed numbers defined by price tags, but are defined by transforming, and interactive factors.

Demanding the opportunity to create their own designs, instead of fabricating the designs of others or simply mimicking traditional styles, has awakened individuals’ critical consciousness about themselves. This, as Edward Said (2000) suggested, is ‘an unstoppable predilection for alternatives’ (Said, Bayoumi et al. 2000: 217). However, this humble and unworthy material, which is seen as a more sustainable alternative for Western consumers and designers, is not only praised for its usefulness, aesthetics, and applicability in Taiwan, but is also capable of representing the pride in Taiwaneseess.

## Chapter 6 Conclusion



Figure 6-1 The bamboo woven QR Code of the Jhushan Bamboo Living Culture Association

In a recent cultural exchange in Nantou, between Jhushan township and a bamboo crafting group from Paizhang Township in Zhejiang, China, the Jhushan Bamboo Living Culture Association (JBLCA)<sup>62</sup> gave their mainland counterparts a very special local bamboo souvenir, a QR code woven from bamboo. People from the JBLCA also taught the visiting group's members how to create their own bamboo QR code during a DIY session they prepared as part of their welcoming program. These woven bamboo QR codes were originally created for the local tourism industry by Townway, a social enterprise founded by the same group who organised the JBLCA. Local temples, shops, B&Bs, craft artisans, and restaurants, as well as the tourism centre, display these codes as signs in the front of their shops for tourists to link to their location online, and access other service information. QR codes are usually considered a technology linked with modern conveniences, such as smartphones and the Internet. However, these Taiwanese bamboo artisans in Jhushan used QR codes to create new patterns with traditional bamboo weaving techniques to make tangible digital signatures. This research has drawn a clear picture of how bamboo, a low tech and traditional material, can continuously generate creativity among people in Jhushan and other parts of Taiwan.

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<sup>62</sup> There are more details about the JBLCA and the social enterprise Townway in Chapter 3.



**Figure 6-2 Presentation of the custom-made bamboo QR code for a bamboo crafting group from Paizhang Township in Zhejiang, China**

This woven bamboo QR code is a good example of the result of the praxis of the creative process, which I observed during my research and have discussed throughout this thesis. Starting in Chapter One, I provide an introduction to the basic botanical and physical properties of bamboo as a plant and material and discuss how the use of bamboo is rooted in Taiwan's material culture. Following this introduction, I go on to illustrate how trade and exchanges between Taiwan's original Chinese settlers and its indigenous population, and between these settlers and Chinese traders, have blended and transformed the different styles and designs of bamboo crafts in Taiwan. In addition to the infusion of material culture through trade and exchange, the Japanese bamboo craft training schools of the 1930s and post-World War II export-oriented handicraft productions imported new techniques and knowledge about bamboo crafting to Taiwan. Taiwan's crafting styles, designs and techniques, as demonstrated in Chapters One and Two, arose as part of this pluralistic cultural background. Thus, to properly understand Taiwan's bamboo design, it is important to gain an understanding of the design histories and cultures of the Han Chinese, the Japanese, and Taiwan's indigenous peoples, although this thesis focuses primarily on the Han Chinese and Japanese cultures while offering some basic details of indigenous cultures as well.

Acts of creating and fabricating new designs have helped meld these three traditions and create a collection of Taiwanese designs for many within the artisan community, which are perceived as possessing a sense of the genuine or the authentic. The post-2000 craft revival may have started as a political strategy, but it has given the Taiwanese people a chance to observe and understand their own material culture, and the cultural resource it affords. Moreover, these new craft designs have also given Taiwanese makers a chance to have their own say, to have a sense of authorship over things they have made. Through the action of making, people are able to make their own discourses of self as well as develop perspectives on their own culture.

This thesis provides ample evidence regarding how the qualities of this cheap material have been copied by scientists and engineers, using more expensive materials, and it demonstrates the immaterial value of bamboo within Taiwanese culture. The traditional symbolic meaning of this plant have given it a noble and elegant status in many cultural and artistic forms, but it was also looked down upon in terms of its ‘actual’, physical form, as a useful but not very durable material.

Therefore, this thesis has explored the down-to-earth material application used in crafting techniques to further understand the cultural and technical issues of bamboo in Taiwanese culture. From the ethnographic fieldwork in Nantou with craftspeople, material suppliers, factory owners, material scientists, and business and retail people in the bamboo manufacturing chain, I collected data on various local bamboo treating methods and techniques, such as boiling, preserving green, smoking, carbonising, caramelising, and laminating. All of these can be applied to raw bamboo to change its appearance and materiality, and consequently influence its material value in the market.

In addition to these treatment processes, this thesis introduces four kinds of basic bamboo crafting: bamboo weaving, bamboo tubular furniture, bamboo carving, and laminated bamboo techniques. These crafting techniques were traditional techniques that were later adopted into contemporary bamboo craft

design during the collaborative Yii project between craftspeople and designers. After briefly discussing these four types of bamboo techniques, and my own personal experience as an apprentice, I have focused on weaving as the main technique to systematically study, largely because it most pertinently presents the significance of the materiality of Taiwanese bamboo. Weaving was also influenced by the cultural, social, and political changes of the past century, and so reveals more about the historical cultural mappings which have developed around bamboo. The different co-existent practices of splitting the bamboo I had observed among these Taiwanese bamboo craftspeople (such the Holo Han Chinese style, the Hakka style, and the most commonly taught Japanese style) are the intangible evidence of the influences of multiple, changing cultural and economic influences from the past.

The research for this thesis was conducted using ethnographic fieldwork carried out through visiting museum collections, galleries and exhibitions, private collectors, studios and workshops, and individual artists' homes. These ethnographic observations have documented the elements of the process in bamboo weaving, providing detailed descriptions and data sets including the step-by-step process of material preparation and an operational sequence for traditional weaving. This research has also categorised different types of weaving techniques for making woven bamboo objects, and provided the individual *chaîne opératoire* of each different type in order to map out how each is done. These operational sequences provide structural understandings of how woven bamboo-ware has been made. Designers can in theory create new possible designs by using this data set. Although there are many publications and tutorial DVDs available on the market for learning purposes, it is impossible to master a technique through reading the *chaîne opératoire*. As Colin Tennant said (in the *Modern Heritage Craft project*), 'the best way to become a skilled maker is to learn from one' (Tennant 2014). Although I did not expect myself to, I became a skilled bamboo maker, and my personal experience as an apprentice in the workshop meant myself collecting the attributes of crafting.

In order to further empirically understand woven bamboo crafts and how they are crafted, I personally participated in three different bamboo weaving training courses and conducted over one hundred hours of interviews with three generations of craftspeople about their experiences with these techniques. Learning from Master Lee at his NTCRDI workshop was the most traditional way to learn the craft. However, it was also the most challenging way to learn because of the time and effort required to prepare the materials prior to weaving. The students at the NTCRDI workshops are also of different ages, have varying degrees of skill and knowledge, and come from different social backgrounds, which makes the learning process challenging unless one has learned to properly prepare materials for oneself prior to weaving.

The bamboo-weaving workshop with Master Huang at the National Yunlin University of Science and Technology (YUNTECH) was the easiest of the three workshops and allowed me to think of different applications and possibilities of the technique I learned. However, it was also the shallowest way of learning this technique because we used readymade materials and followed a series of steps to make an object, along with everyone else in the room. The disadvantage of this method was that the techniques we learned could be easily forgotten, as the learning process did not require much thought. The advantage of this technique was that we received a basic introduction to the whole process without needing to acquire too many complex skills.

Silk's bamboo weaving workshop is a mixture of these two but is more systematic and stable because her students are either returning students who want to learn how to make a new object, or are in a separate beginner group with prepared materials. The students in Silk's workshops are mostly retired middle-aged women or people with some experience crafting bamboo.

By visiting these three workshops and through other encounters with craftspeople at professional seminars, I met various kinds and generations of respondents. My eldest respondent, Master Huang, was born in the 1920s and has devoted himself to the promotion of bamboo crafts, while the youngest were some

college students born in the 1990s who wanted to learn bamboo-weaving techniques to make their design projects more interesting. Their different reasons for learning, and their experiences doing so, are a part of the changing learning processes being witnessed today. To learn most kind of crafts, mimicry is always essential in learning to make crafts, as was demonstrated in Chapter Two, but the sense of individual freedom to inject personal 'will' into one's crafted objects is changing. Such changes affects the emotional attachments which people feel towards such objects, and enhances the personal bond with things they have made. For craft making, it is not whether one owns crafting tools that defines whether they are connected with the objects they make. It is rather the freedom to modify, design or redesign with one's freewill, and feeling of creativity, that connects a person to the object they make.

The evolving learning process of these traditional craft skills reflects the social and cultural changes in Taiwan. It also reveals the transition of the hierarchical master-apprentice relationship, to a teacher-student one, through all the different pedagogies being practiced in different settings. Recent craft competitions and collaborative design projects for the craftspeople have had huge impacts on the craft making community. They cannot submit copied practice pieces to such events and expect to be rewarded for it. Instead they must submit their own designs and create meanings with their work in order to explain the design or creation concepts. Unlike engineers or academy-trained professional designers, who usually generate concepts in response to a problem or an observation from society or a specific situation, craftspeople usually came up with their concepts from visual observations of objects within natural and manmade environments, such as flowers, animals, landscapes, patterns, and symbols. This kind of decorative approach to the craft concept is not appreciated or encouraged by the art and design academy-trained 'professional' judges, who might not recognise the difficulties associated with techniques that create such 'shallow' decorative patterns.

After conducting this fieldwork it became clear that arguing about the definition of authentic, traditional Taiwanese styles and designs might be in vain,

since most of the knowledge and styles are either imported, borrowed, or adapted, then modified with the intention of representing one's identity. The reverse learning model of famous Han Chinese bamboo weaver Silk, and the famous indigenous bamboo weaver Awai, both revealed this tendency to seek and strive to re-create people's understanding of their culture and identity through the weaver's own personal interpretations. It is this personal interpretation today that creates the 'standard' of what the tradition is. Actions of constructing and reconstructing material evidence of intangible cultural memories are constituted in what we call design. Local traditional knowledge and techniques surrounding making bamboo crafts, have nurtured creative drives to invent new designs. Similarly, as Mark Dziersk (2014) suggests, the effect a work of design can have on culture is huge. These new Taiwanese bamboo designs have established a tangible material culture for people to recognize their own cultural identity.

This interactive transforming process of crafting between people and objects needs to be further analysed, in order to see how these Taiwanese designers and craftspeople make their objects. In Chapter Four, observation of the collaborative Yii project, with both its craftspeople and designers, provided a comparative case study to further understand this question. Differences between craftspeople and designers mainly originate from the training they received to create works, which includes how they see and treat materials, how they develop their designs, how precise they are during the creation process, and how they approach one fundamental technique - namely drawing - which allows the concept to be developed, examined and communicated. Industrial designers are used to a high level of accuracy and precision and usually work with standardised materials so they minimize the variations in their work materials. In contrast, such variations are valued by craftspeople. The natural variations due to the seasons and weather are factored into craftspeople's designs, and they often set up their working calendar according to the seasons. Craftspeople need to be fully aware of and connected to nature while most designers often rely too much on virtual interfaces, such as paper or computer screens, to create and interact with the concepts of their design. Reading the natural material with both one's visual and haptic senses

provides information and inspiration to craftspeople. Each piece is unique even though their designs and style might be identical, because of the craftspeople's adjustments and variations in response to the nature of each piece of material.

One of the biggest differences in making between designers and craftspeople is the ability to break up the sequences and ignore the rules. In my opinion, the knowledge gap between these two groups of people is usually where creativities are incubated. Additionally, craftspeople have more sequential processes to follow in the making process, compared with designers. This may be due to their different understanding of, and techniques for, drawing, which allow all makers (i.e. the designer and craftspeople) to jump back and forth in the process, from the conceptualizing to the making of the design without the restriction of the pre-set, habituated, or familiar emic *chaîne opératoire*. This non-linear thinking ability allows them to create things in different ways and assess the originality and renewal of pre-existing styles and technologies and the potential of original new designs. Psychologist Sternberg and Lubart (1995) stated that the creative product should be novel and appropriate. In other words, they think a novel product should be original and not predictable. Designers should create concepts that are big enough to stimulate further work and ideas (Sternberg and Lubart 1995).

When creating a new design, the ability to plot out the ideas and read original design concepts is essential. Drawing is the plotting of immaterial thoughts in the mind and mapping the orientation of making. Making without drawing requires solid structured knowledge of the object's layout and the techniques necessary for the work prior to beginning the process, with the ability to make necessary adjustments to the plans during the process when issues arise. In other words, there must be an inner structural knowledge and sequence of making before any actions begin. However, when people are not merely copying others' work but creating original pieces or prototyping, the process of planning and thinking needs to go through a phase of trial and error and then be examined. This experimental process is very important, especially when the project will involve not just one maker but several participants with different specialities.

This complexity is the reason why many craftspeople prefer to use limited types of materials, spend more time developing their work individually, and create works which require only skillsets that the designing craftspeople is capable of doing. It is not because they are lazy, but is done so that the craftspeople can appreciate the techniques and decorative patterns of designs, which they are able to achieve alone and without assistance. Using multiple techniques and materials in the prototyping stages also invites more unpredictable factors into the process, and more participants into a project. It is difficult in such an environment to work without drawings. The three types of drawing: sketches, technical drawings, and renderings, provide different levels of detail and function in the communication of the design and fabrication. Drawings in this situation are tools of communication for designers, more than an aesthetic practice, which is what many craftspeople mistakenly believe it is, and thus hesitate to engage in it.

Acts of creation are not the one-way output of an individual's thoughts, but also impact upon the craftspeople. The crafting of one's self is as important as the crafting of an object during the process of making. Makers' awareness of their individuality, personal and collective identity, self-fulfilment, and self-display, eventually build up, their perceptions of their interactions with bamboo transforming their sense of value. Unlike Harris (1989), who emphasizes the development of people in a tri-lateral sense, we can see how these Taiwanese makers establish and acquire their agency in society with respect to the objects they have made. Their acts of, in a sense, forgetting of self, in order to appreciate the authenticity in making, are ironically a part of this development of agency.

Moreover, the craftspeople I worked with take different attitudes towards making products and utensils, or their more original 'works', because of the different levels of personal attachments to the objects they made. The lower the level of personal attachment they feel toward the object they are making. The lower the level of personal attachment with the object, the more easily the maker will let it go. However, if makers want to professionally establish themselves and be recognised as a craft artisan in society, they may have to actively or passively display their original works to the public. A piece of work that has been labelled

with one's own name will contribute to the maker's reputation and fame, and the tag and other associated printed materials will become evidence of being presented in exhibitions and are more authentic for the maker than the submitted object itself. The establishment of this self-identity is accomplished in the process of creating one's own designs under one's own name.

This thesis is an in-depth observation of how the production modes may influence people, if they make things anonymously or carry their own name and are aware of the whole process. Adam Smith (1776) used his famous example of the pin factory to propose the benefit of dividing production into specific processes to improve its efficiency in the eighteenth century, but Marx argued that this contributed to the alienation of labour. Manufacturing goods at the most beneficial production site has become the norm and many corporations, looking at a global level for the cheapest and most suitable production sites, before shipping the finished products to various markets internationally. This thesis has tried to take the bamboo craft making industry as an example for examining the cultural impact of this kind of Original Equipment Manufacturing (OEM) model on the individual and society. Making things under one's own name, or a brand that one can associate with, enhances one's personal attachment with such objects and gives one a sense of pride in making it. By contrast, making things only according to foreign orders and being only familiar with a fragment of the practice eventually damages one's will to excel in making and lowers one's expectations in the field of craft making. As Rollo May (1976) asserted, the discovery of new forms, new symbols, and new patterns is a source of creative courage on which a more solid society can be built. Therefore, it is crucial for any industry to be cautious about this kind of alienation in making. It may damage personal creativity and innovative progress, because the courage to create is the foundation on which society is built.



**Figure 6-3 The flourishing spring bamboo shoots**

The flourishing Taiwanese bamboo design culture appears and flourishes at different international and local exhibitions and tradeshow and can be characterised by the Chinese idiom *yu hou chun sun* (the flourishing spring bamboo shoots after the rain) which originated from the common prospect of rapidly-growing bamboo shoots after the rain every spring. This idiom is commonly used to refer to the flourishing status of certain phenomena. Bamboo is an easily bendable yet easily spoiled material, in comparison with trustworthy and durable hardwoods, which are very popular materials for designers to work with. Designing with bamboo in Taiwan is a self-motivated choice instead of a response to a search for alternative materials. This cheap material, which is usually associated with temporary and transient use, is perceived by some as sharing similar adaptive qualities with Taiwan's ever-evolving history over the past hundred years that encourages people living on the island to rarely have faith in any long term values or beliefs. The metaphorical relationship between the Taiwanese and bamboo is seen as intimate and tight. As Master Lee once said to me. *'Before, when people were born, they would sleep in a woven bamboo cradle*

*and be fed in or on a yigyuié<sup>63</sup>. When people died, their spirit was lead into a bamboo stick for the funeral. Therefore, the beginning and end of a Taiwanese person's life are with the bamboo.'*

Bamboo is certainly more than a useful or beautiful material for many Taiwanese, it has become an important material symbol of Taiwanese culture. As May (1985) asserted, both myth and symbol are our ways of organizing our experience. In his personal example the flags he saw from other countries on a ship were just signs for him, but 'the flag of my own country was a symbol,' for him because it epitomized his emotional feelings towards his own country (May 1985:155). From several interviews with local people and stories collected during my research, seeing objects made by bamboo brings positive emotions to most Taiwanese because of its material familiarity and cultural resonances.

With this humble material, Taiwanese people have found their own voice and taken a step towards their future; bamboo has become a solid material that can honourably represent these people, regardless of its physical transience and cheapness. Instead of other solid, concrete, long lasting material, it is perhaps the transience and cheapness of this material which has allowed the Taiwanese people to create their own discourse on the often-shifting political and cultural values in Taiwanese society. The OEM production model in Taiwan does have made cultural as well as industrial impacts. Creating new designs based upon traditional techniques reminds me of the German poet Goethe's *At Midnight Hour (Um Mitternacht)* written in 1818, 'Around the past, as round the future twined,' (Goethe 1923). The revival of traditional crafts to make new designs is more than a nostalgic behaviour to remember the past. It is a also future-oriented practice for weaving the possibilities of the present to create the energy for one's culture to endure and progress.

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<sup>63</sup> There is a photo and detailed description of the Yigyuié, the Taiwanese style two-way nanny's stool, in Chapter One.

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## Appendix

### Fieldwork Summery

Fieldwork Period: October 17th 2008~August 12th 2010

Main Fieldwork Site: Nantou County, Taiwan

Sub Fieldwork Site: Anji in China; London in the U.K.; Paris in France.

Timeline	Field Site	Tasks
2008 Oct.	Tainan	Visit the 2008 Taiwan Design Expo and the 2008 Cultural and Creative Industry fair
2008 Nov.	Taipei	Attending a Taiwan Cultural and Creativity Industry Visiting Tour to visit several craft and design institute around Taiwan.
2008 Dec.	Caotun, Nantou	<ul style="list-style-type: none"> <li>◆ Arrived NTCRDI in Caotun Township in Nantou County</li> <li>◆ Investigated local culture in Nantou.</li> <li>◆ Made the first visit to Jhushan.</li> </ul>
2009 Jan		
2009 March- May	NTCRDI, Caotun	Attending the 10 weeks Bamboo weaving weekend class at NTCRDI and learn skills from Master Lee.
2009 Aug- Sep		<ul style="list-style-type: none"> <li>◆ Conduct a 7 weeks fieldwork (08/01-09/20) at the Gallery of NTCRI and attend all the meetings with the bid winner (private sector) and the NTCRI (governmental sector).</li> </ul> <p><b>Exhibition Title:</b> The Past and future of Bamboo Craft: the Cultural Exchanges of Taiwanese and Japanese Bamboo Crafts            End the Bid: July 24<sup>th</sup>            Exhibition Open Date: Sept. 11<sup>th</sup>            Exhibition Date: Nov. 29<sup>th</sup>            Budget: NTD. 3,400,000 (about £ 608,000)</p>
2009 Sept	NYUT	Master Huang Class
2010 Feb.	Caotun/Jhushan	Write a design and craft proposal for Silk and successfully awarded £10,000 funding from NTCRDI.
2010 Mar.	Jhushan	Move to Jhushan
2010 July	China	Three weeks fieldwork trip in China, visited the 2010 Shanghai Expo and the biggest bamboo industry cluster in

		Anji in Zhejiang Province.
<b>2010 Aug.</b>		Return back to London
<b>2010 Sept</b>	Paris	Follow up the Yii project on exhibit at the Maison et Objet in Paris
<b>2010 Oct</b>	London	The START exhibition at the Clarence House and St. James Palace in London
<b>2012 Jan-Feb</b>		Collect more data from Jhushan and
<b>2013 Feb-March</b>		Collect more data from Jhushan and visit the indigenous bamboo weaver Awai.
<b>2013 September</b>	London	<ul style="list-style-type: none"> <li>◆ Visit my informants at the London Design Festival.</li> <li>◆ Designer Kevin came to present the 2016 Design Capital pitch for the Taipei City at 100% Design London.</li> <li>◆ Designer Judy and Skye came for the Fresh Taiwan exhibition in Tent London design show.</li> </ul>

## Map of Taiwan

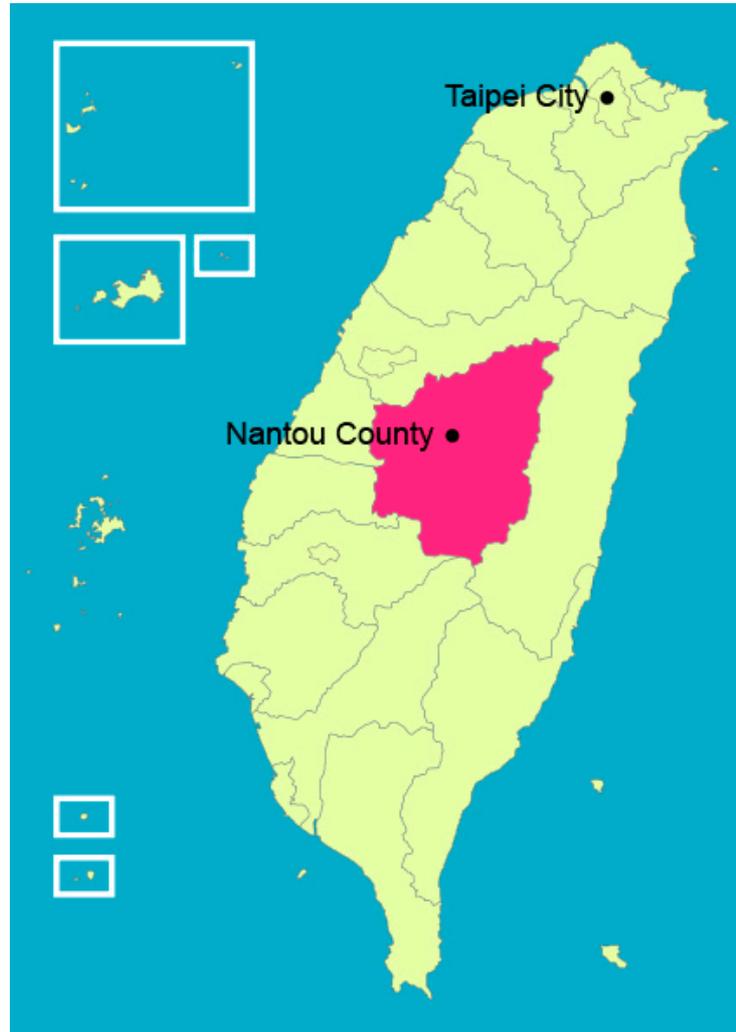


Figure 7-1 Location of fieldwork site

Facts of Taiwan Area: 36,193 km <sup>2</sup> Population: 23,245,018 (2012)	Facts of Nantou County Area: 4,106.436 km <sup>2</sup> (rank 2 of 24) Population: 521,804
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Fieldwork for this project will take place in Taiwan, a country (though it is not recognized as such by the UN) in which design has been increasingly widely practiced despite years of OEM industry. Taiwan has conflicts on how to define Taiwanese identities due to its multi-colonial history; it is well-known critiques of low quality and pirated products in the past, and well-known advanced innovative IT industry and promotion of Taiwanese by the state after year 2000.

## Map of Nantou County and the Area of Jhushan



### Facts of Jhushan Township

Area: 247.3339 km  
Household: 19,462  
Population: 57,822  
(until April,2012 )



## The Official Name Translation of Indigenous Taiwanese Peoples

Name in English	Name in Chinese
Amis	阿美族
Atayal	泰雅族
Paiwan	排灣族
Bunun	布農族
Puyuma	卑南族
Rukai	魯凱族
Tsou	鄒族
Saisiyat	賽夏族
Yami	雅美族
Thao	邵族
Kavalan	噶瑪蘭族
Truku	太魯閣族
Sakizaya	撒奇萊雅族
Sediq	賽德克族
	拉阿魯哇族
	卡那卡那富族

These names of the Taiwanese indigenous peoples are based on the official bilingual phrase book on its official website accessed on 8<sup>th</sup> of November 2014.

( [http://www.apc.gov.tw/portal/index.html?lang=en\\_US](http://www.apc.gov.tw/portal/index.html?lang=en_US) )