

Approaching Chineseness :

Investigating the cultural transfer of behavioural factors in and through Chinese industrial design

“This thesis is dedicated to the designers and researchers involved in exploring the complexities between culture and design, especially to those who are employing Chinese culture in design.”

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Author's declaration

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

The content of the thesis is the result of work that has been carried out of my approved research program. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. I also certify that all information sources and literature used are indicated in the thesis.

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Nov 3rd, 2013

Abstract

This PhD research by project is for designers investigating relations between culture and design through an experiential perspective of Chinese culture in terms of developing a new understanding of 'Chineseness'. 'Chineseness' in my work, can be re-mapped as a form of communication that deals with Chinese culture in design. It is not just along with historical stereotypes, nor a remote copy of other countries' successful cultural transfers, but rather should be inseparable from the radical social phenomena and design culture already emerging within contemporary China. Through a series of design projects, my research is ultimately allowing Chineseness to be less implied and instead, to be made manifest, in terms of what behaviours over symbolism and decoration.

New knowledge is articulated through exploring my understanding and its shifts during my approach to re-map Chinese cultural elements in design and search for the meaning of 'Chineseness'. This research remarks the stereotypes, generalisations and categorisations when designers deal with cross-cultural design from both non-Chinese and Chinese angles.

The thesis comprises three parts. The first part is a contextual review of cultural elements and appropriate methods. The second part explores a systematic approach to reflecting Chineseness from various cultural angles. These action-research method-led projects describe three ways of exploring the transfer of Chinese culture into design: symbolic, behavioural and political/philosophical. They culminate in an enabling developmental structure through which designers can deal with Chinese cultural complexity in design. The third part sees two final projects that reflect back and re-evaluate what Chineseness could be. The thesis contributes a three-layer structure that reflects Chinese cultural elements into design through methods and analysis of values in practice. Additionally, for the readers sympathetic with a systematic design approach or cultural identitarianism, this work addresses a view of critical understanding for facing Chinese culture in design.

Key Words:

Chineseness, Chinese cultural transfer, Research through design, Action research, Reflective design

Contents

Acknowledgements	008
Introduction	009
Part one: Contextual Review	
Chapter 1:	
A design analysis of culturally oriented design and its context	
1.1 <i>The issues of hi-tech and local culture reflected in design in the context of globalisation</i>	015
1.2 <i>Chinoiserie and Chineseness</i>	019
1.3 <i>The Chinese cultural reflections in design from 1949 to today</i>	024
1.4 <i>Summary</i>	030
Chapter 2:	
A Review of cultural transfer design research in a global context	
2.1 <i>Analysis of two research models in terms of culturally-oriented design</i>	031
2.2 <i>Review of HCI approaches into cultural transfer</i>	035
2.3 <i>Reviews of the Chinese design research theories in terms of Chinese culture</i>	036
2.4 <i>Summary</i>	038
Chapter 3:	
Methodological leads and rationale	
3.1 <i>A review of the relevant theories and methods</i>	040
3.2 <i>Methodological leads in projects</i>	047
3.3 <i>A summary of methods – linking to the projects in the following chapters</i>	051
Part two: An approach absorbing Chinese cultural elements into design projects	
Chapter 4:	
Chinese cultural transfer in terms of symbols:	
Chinese folk art workshop:	
4.1 <i>Workshop research questions and methods</i>	057
4.2 <i>Workshop flow</i>	058
4.3 <i>Analysis of the design concepts from the workshop</i>	062
4.4 <i>Findings and discussions</i>	064
4.5 <i>Summary</i>	067

Chapter 5:	
Chinese cultural transfer seen in terms of behaviours:	
mobile interaction design for the Chinese elderly	
5.1 <i>Introduction</i>	069
5.2 <i>A concept design project:</i>	071
<i>Mobile interaction for the elderly Chinese</i>	
5.3 <i>An evaluating and reflective workshop:</i>	076
<i>Bridging the communication gap: co-design across</i>	
<i>older and younger Chinese generations</i>	
5.4 <i>Summary</i>	082
Chapter 6:	
Chinese cultural transfer in terms of its philosophical	
and political impact: Top-secret island workshop	
6.1 <i>Introduction</i>	085
6.2 <i>Workshop content</i>	087
6.3 <i>Summary</i>	089
Chapter 7:	
A systematic structure in terms of Chinese cultural transfer	
7.1 <i>A summary of the three projects</i>	091
7.2 <i>An emerging model of Chineseness</i>	093
Part three: Reflections	
Chapter 8:	
Reflective projects: Smart Dating and Sex education workshop	
8.1 <i>"Smart dating"</i>	100
8.2 <i>Sex education workshop</i>	106
8.3 <i>Reflections of Chineseness in the projects</i>	108
Chapter 9:	
Conclusion	
9.1 <i>A definition of Chineseness</i>	112
9.2 <i>The research contributions to its two group readers</i>	112
9.3 <i>How to manifest Chineseness</i>	113
9.4 <i>A critique of the research limitations</i>	115
9.5 <i>The new knowledge</i>	116
References (alphabetical)	118
List of figures and tables	123

There are a number of people who have contributed to the writing of this thesis and without their input, this research would have been impossible.

I owe my greatest debt of gratitude to my supervisors Professor Ashley Hall and Professor Ranulph Glanville for their enthusiasm, support, guidance, and expertise in helping me to develop a convincing thesis, as well as shape my philosophical thinking. They provided thoughtful and useful critiques, which have been great help for me to reorganise my way of thinking from an engineering approach into a more critical designerly approach.

I wish to express my gratitude to my external supervisor Professor Jun Cai of Tsinghua University. This research bears on imprint of his help in China. Also great thanks to my previous supervisor Professor Paul Ewing for bringing me into the PhD area and sharing his expert knowledge on research, his thought and constructive and thorough comments. I would like to thank my English Academic Purpose writing tutor Dr. Harriet Edwards, for her patience and extraordinary help on my English writing. Also great thanks to our head of department Professor Miles Pennington for his support in my doctoral studies.

This research project would not have been possible without the support of many people, who collaborate and participate to my work. I need to thank my project design partners Yizhou Li, Elliott Montgomery and Lisa Ma for their intelligent contribution in our collaborative workshops. I would like to convey thanks to the organizations and academic groups: Better Place Co., Chinese Folk Artist Organization, Alibaba Cloud Computing, Nokia Research Centre (Shenzhen), my workshop participants from IDE 2011 graduates, students of School of Design of Tsinghua University, Beijing University of Scientific and Technology, China Central Academy of Fine Arts (CAFA), who provide their great support and creation to my research. I sincerely thank to IDE research group for conversation and comment that helped my work.

Most importantly, I owe special thanks to my family, my parents for their unfailing support for my research aspirations. Your love and encouragement steered me through the hard times.

A short overview of the whole PhD project

With the development of design industries in China, the emergence of free technology platform (e.g. Android, Arduino), freelance designers and small corporations brought grass-root design. The Chinese industrial design education began in the early 1990s and came into a boom time after 2008 Beijing Olympics with a nation pride through designing Chinese factors and re-branding “made in China” to “designed in China”. In contrast to the universal product in big brands, grass-root design more focuses on the local. In Mandarin, such grass-root design is also called “Shanzhai” design sometimes, which holds a meaning of parrot, especially indicating the style of copying associated with IT products. This kind of design also generates through China’s globalisation, which is very ‘glocal’ (Chinese local in globalisation) and consists as an important component in today’s industrial design area. This is Chinese designers’ attempt to be globally accepted through their own underlying Chinese outlook of value. “Shanzhai” design is a newly created word and well known in China. These parrots, in contrast to the fakes in the 1980s and 1990s, added its designers’ own design ideas and creative elements in design. It also marked the start of more creative freedom and commercial opportunities for small local brands and young designers. More than ‘Shanzhai’, Chinese young designers’ ambitious vision is to develop a significant Chinese style, which will be similar to mentioning “German design” “Scandinavian design” or “Japanese design”. It can draw a picture through the typical design samples and national characters. Realising such a vision relates to a big context, it is about how Chinese designers look at and express Chinese culture in design, how the outside world understand Chinese culture, as well as, how Chinese designers think about the outside world’s interests and outlooks in Chinese culture.

Initially, I attempted to answer what Chineseness is. What can we call Chineseness? Or what Chineseness is called for in design? Does it mean those Chinese cultural elements existing in design already, which we need to investigate and reflect; or cultural elements that designers can technically transfer into design?

With these above questions, this research tends not only help the Chinese designers to create a ‘Chinese style’ which may increase the Chinese design’s competitiveness in a global market, it equally can help the non-Chinese designers to understand Chinese design in China’s social context today, through comparing Chinese and non-Chinese perspectives.

From different backgrounds, an individual concerns in Chinese culture can be very different. Chinese designers may focus Chinese culture more on how to specify and highlight it in design; non-Chinese designers may be more concerned with how to translocate between Chinese culture – a foreign culture and their own – a familiar one. Culture itself is an empty vase, which can be defined into hundreds meanings through different

purposes. I form the meaning of 'Chineseness' through my research into "how we understand Chinese culture, how we express our understanding of Chinese culture through design, and how we analyse and critique those Chinese elements that we manifest in our design, when we hold specific purposes or do unconsciously". In short words, Chineseness is the communication that relates to Chinese culture in design activities.

This thesis tends to be written for two groups of audience: Chinese designers who want to highlight Chinese elements in design, as well as, non-Chinese designers who work cross Chinese culture as a foreign culture. For the first group, if they do not want to design Chinese culture just symbolically, the investigations into Chineseness and its integrations into design will not be just the schlock of stereotypes, nor just a remote copy of others' successful culturally transferred design pieces. The exploring question for this group will be how to manifest Chineseness into design through the radical innovation already emerging in the cultural context of China today? For its second audience group, this work will develop a view of how to re-map the Chinese design and its context today through understanding the complexity of Chinese culture in globalisation.

On the other hand, this research also explores in terms a Chinese background Chinese design researcher-myself's personal understanding shift of Chineseness. This shift was exploring iteratively: from researching hi-tech and cultural relevant design, to defining what Chinese culture is, then into that Chineseness turns out not to be searching for an identity for designing Chinese culture, but about how it can be manifested. Also the standpoint shifts from a very Chinese side into a in and between Chinese and non-Chinese sides. Ultimately, this work forms Chineseness is communication, assuming I or other designers are dealing with it, it can manifest specifically and add value to design.

This research is addressed as action research overall, which honed my thinking and determined its change. This thesis comprises the various explorations of Chineseness through a literature review and reflective lens respectively. It consists of three parts: Part 1 is contextual reviews. Part 2 explores projects of cultural transferred design, which deals with Chinese culture from symbolic, behavioural, and political/philosophical aspects. Part 3 depicts two reflective design projects and concludes this whole PhD experience.

In Part 1, I represent and analyse Chinese cultural transfer through design in contextual reviews. Chapter 1 is a review of different concepts relating to Chinese culture and our stereotypes of it. It compares the two concepts 'Chinoiserie' and 'Chineseness', draws cultural integration in Chinese cultural reflections from 1949 till today. Chapter 2 reviews some of the culturally oriented design research. Chapter 3 is led by research method and its rationale. In this first part, it also illuminates a critique of how designers should regard the Chinese cultural icons and re-design them,

especially for Chinese designers who want to re-brand Chinese industrial design through reflecting Chinese cultural elements. Additionally it throws up some specific challenges as the main research questions, which will become clearer from following Part 2 through projects:

How can designers characterise Chineseness that feeds into a variety design needs?
How can designers manifest Chineseness in design and through design?

Part 2 depicts three of my design projects that investigate Chineseness and transfer Chinese culture into design: ‘Chinese folk art design workshop’, ‘Mobile interaction design for the Chinese elderly’, and ‘Top-secret island workshop’. These three projects described separately in three chapters 4, 5 and 6. They also reflected Chinese cultural transferring design in three different aspect elaborately: symbolic, behavioural, and philosophical/political. Then, in Chapter 7 of Part 2, it forms a systematic, cultural transfer design structure.

However, a systematic kind of knowledge is thought to be specialised, firmly bounded, scientific and standardised (Schön, 1983). In Part 3, design itself is addressed as the path to explore and make explicit of Chineseness. Chapter 8 approaches each practice problem as a unique case. Two projects ‘Smart dating’ and ‘Sex education workshop’ give rise to some of the reflections that pinpoint the peculiarities of the Chineseness that cannot be represented through methods alone. At the end of Chapter 9, I conclude my research on characterising Chineseness and how to manifest it, as well as on the measure of my personal research experiences and shift of understanding.

Personal motivation and background

I had a solid engineering background before this PhD at the RCA. I received my engineering BA degree in Industrial Design at Nanjing University of Aeronautics and Astronautics in China and then did an engineering and science MA research at D’Art et Métiers ParisTech in France, majoring in Virtual Reality and Innovation. I had several work experiences in hi-tech related design projects, such as working in a satellite structure design project in China, and an interaction design project in which digital and virtual techniques played an important role in the design process. In these previous experiences, I felt that there was a lack of consideration for people’s cultural background and its complexity in hi-tech designs, which raised the question of what role technology and culture should play in hi-tech design. I found that hi-tech concepts were more concerned about commercial allure than technological content. The technology in a mature hi-tech product is usually not novel.

On the other hand, as a Chinese, I have a great interest in Chinese culture, especially in how culture encourages design innovation. Some culturally orientated design researchers, for instance, Moalosi (2007), asserted that design could make a meaningful impact on society if it portrays the users' culture. However, both culture and hi-tech have hundreds of ways of manifesting themselves, and are influenced by varying and complex elements. What to portray as users' culture and how to portray it in order to inspire designers? The current Chinese culture is influenced by its historical heritage, traditions, but in addition, China's huge social change together with globalization. An appreciation of the local Chinese context entails the understanding of today's Chinese society and culture, as well as how the same can be used to inform design in terms of hi-tech product innovations. Moreover, the variety local cultural orientated design research in different contexts brings inspirations as well as confusions for my researching Chinese culture into design, for instance, Moalosi's assertion about social cultural design model in Botswana, and Lin's model in Taiwanese aboriginal culture design. All of these complexities have combined to inform my initial research picture.

Part one: Contextual review

014

Chapter 1:

A design analysis of culturally oriented design and its context

Chapter 2:

A Review of design research in terms of cultural transfer in a global context

Chapter 3:

Methodological leads and rationale

Chapter 1: A design analysis of culturally oriented design and its context

This chapter deals with the case studies and criteria applied to them in terms of culturally orientated design, in order to test my hypotheses about cultural reflections. Section 1.1 deals with the relevant concepts around culture, through short criteria of relevant concepts such as technology, globalisation, and some of the general definitions of culture. This section aims to generate a characterization of culture, subsequently searching what Chineseness is. The second section first introduces the core hypothesis - 'Chineseness' - by comparing it to the form "Chinoiserie". The third section investigates recent Chinese society and the typical designs in different periods from 1949, the foundation of the People's Republic of China (PRC). It can be regarded as a tracing back of the social reparses design.

These three sections in Chapter 1 include sources that evidence particular points of view about Chinese culture and design, as well as justify the argument being developed through various design projects. Additionally they throw up some specific challenges:

How can we characterize Chineseness that feeds into today's Chinese society and design needs?
How can we manifest Chineseness in design through design methods?

1.1

The issues of hi-tech and local culture reflected in design in the context of globalisation

Before critiquing the concepts of hi-tech, globalisation and culture, I briefly introduce my first project – a minor one - in this PhD study 'Better Place hands-free charging system design' (see Figure 1.1.1, more information refers to Appendix 1). It took place at the very beginning of my research, as collaboration with three Chinese Masters students who are from the Vehicle Design and IDE departments at RCA. I promoted this project designed by Chinese designers with the intention of searching for how Chinese culture can manifest or benefit hi-tech design, and indeed, it proved successful and won the Better Place international design competition.

I expected to find what the specific is when Chinese designers do hi-tech product design. Yet, I can figure out nothing specifically Chinese from it, as we worked this project through typical industrial design steps. It increased my awareness of the complexity and implicit nature of Chinese culture, hi-tech and other culturally related ideas. The project brings forth questions:

If Chineseness exists, which is very ambiguous,
how can I manifest it through this research?
What is the value of this manifesting?

Some of my initial questions were 'What is technology?' and 'What

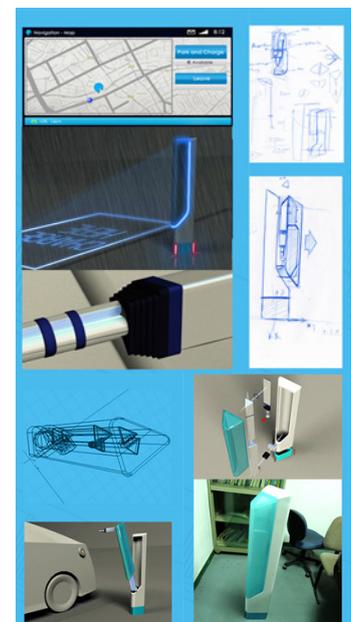


Figure 1.1.1
Better Place project design, 2009-2010

is hi-tech?' Can technology include important local cultural elements for innovation in hi-tech design within this trend for universal design in the global context? There is no universal agreed classification of the word 'hi-tech', neither is a line drawn between hi-tech and low-tech in terms of technology itself. It is indeed perceived as highly valuable because of the commercial allure of this word. Thus, even though it might seem that technology covers another sphere, separate from cultural reflections, it is a part of consumerism/capitalism culture. Culture is a concept hard to define. It almost relates to everything concerning human artefacts. It is a concept of shared values resulting in shared behaviour and artefacts, which has also been applied to other groups outside one's own group or society (Kroeber and Klukhohn, 1952).

1.1.1

Technology leads or User leads

What is technology? Where should one draw the line when defining hi-tech products? There are no standard answers to these questions. Design researcher Klaus Krippendorff asserts that every action system beyond the basic apparatus of the body is a technology (Klaus Krippendorff, 2004). Through various points in history and the development of human society, technological artefacts/products become moving targets (Wilson, 2002) In the way that ceramics, sculptural tools, and printmaking apparatus were state-of-the-art products thousands of years ago, more recently, films, and electrical goods were considered high-tech. Now, however, when people talk about high-tech products, we are not talking about these technologies. Most of the time, we are talking about our imagination of technology rather than a technology. The forms of high-tech devices are not derived from how they are produced and what they do, but from their users' ability to conceptualize and handle them, which we called the interface. Therefore, we noticed that sometimes, as most of the users hardly know the core technique or manufacture of a product, what they directly connect with the product is through its interface, rather than through the inner workings.

The most influential 'user leads' design thinking today can be traced back to the first Mac, which brought together a number of technical threads in the computer that developed in the 1960s and 1970s, sparking new movements in computing. As one of its designers, Jef Raskin remembered:

"There were to be no peripheral slots so that customers never had to see the inside of the machine (although external ports would be provided); there was a fixed memory size so that all applications would run on all Macintoshes; the screen, keyboard, and mass storage device (and, we hoped, a printer) were to be built in so that the customer got a truly

complete system, and so that we could control the appearance of characters and graphics”
(Linzmayr, 2004, p.86).

On this point, hi-tech is just an inner design element, which needs to be ‘well-packed’, to be considered comprehensively by designers, and then expressed through an interface or interaction design in the purpose of commercial attraction. The actual reason for a design being user-unfriendly is the lack of consideration of the relations between the technology and its users’ behaviours of a design, too technology-centred rather than human-centred. The users’ difficulty in adapting to those products that we call high-tech is not caused by the core technology of products being too new, but by the interface or interactivity of the products designed being hard to use. ‘High-tech’ can be seen as a euphemism for covering the design failures of those user-unfriendly-products, and as an aid for commercial allure.

Hi-tech is more like a clay people play with, and which gains different forms based on certain commercial reasons rather than a representation of the new technology. Kevin Kelly maintained in his book *What Technology Wants* (2010) that technology has its own unconscious needs and tendencies. It should be considered just as a jumble of wires and metal but a living, evolving organism. So that we should listen to what it wants. He also argued that designers have the power to make choices about how to use a technology and how to listen to it, and what to use it for (Kelly, 2010). For a reflective designer, there should be no good or bad technology, but only better or worse design choices. For dealing with local cultural related design, it is about how to represent interfaces or interactions to users, with both ‘well-packaged’ technology and local cultural consideration within.

1.1.2

Globalisation, Westernisation and Glocalism

We cannot ignore the fact that there are billions of the world’s people living in different social and cultural contexts who are quick to passively accept the exports that are full of western axiology. Today, no matter whether in terms of the image of hi-tech or the way of producing it, innovative design is taking centre-stage in the Western-World standards. Maybe from the Western side, globalisation indicates jumping out of the western culture and understanding others. However, from a non-western, for instance, the Chinese side, it means more to consider the western way, as the western world is the one outside Chinese and which leads the mainstream global market today. China has a population of 1.4-billion and a huge number of individual local cultures on top of the usual diversities of gender, age, area, education and so on. However, there exist common influences from globalisation/westernisation in today’s Chinese generations as well: the people inherit specific Chinese characteristics

such as strong consciousness of family, high respect for the older intelligence, etc., yet have experienced huge changes during the last thirty years; their lifestyles have shifted and they have had to accept western designs as well as western ways of life in a very short time. Thus, they advocate western technology as well as maintaining pride in Chinese traditions. These global influences comprise the Chinese culture today and are also the causes of estrangement.

We could argue that globalisation causes cultural homogeneity and destroys cultural diversity/heterogeneity in the process, by denying or ignoring cultural identity, or abstracting the cultural identity into a universal. A typical example is the similarity of products and shops in different countries of international brands to suit the purposes of global branding strategy. However, simultaneously, we cannot ignore the fact that globalisation has also fragmented the world landscapes into smaller cultural unites (Barber, 2011), and made culture the most important asset to work with in design's sphere (Lee, 2004). For instance, glocalism in design is a result and part of globalisation. It promotes local identity and highlights cultural values. This occurs maybe because of local designers attempts to save the national identity of products from the homogeneity of the global market; or alternatively, for the local users' better adaption. The rice cooker design in Japan in 1950s is a typical sample, which transferred the Asian cooking behaviour into electronic product meanwhile re-design this behaviour (see Figure 1.1.1, more refers to Appendix 2). This trend also leads back via the abstractions of localisation into the global market, in order to increase and attract the global users' interests and curiosities in local culture. The examples refer to the Japanese design butterfly stool, Akari light and Infiniti car design in Appendix 2.

1.1.3

Culture identity

What is culture? There are thousands of definitions of culture. Matthew Arnold defined culture as 'a pursuit of our total perfection by means of getting to know, on all the matters which most concern us', 'the best which has been thought and said in the world', and through this knowledge, 'turning a stream of fresh and free thought upon our stock notions and habits, which we now follow staunchly but mechanically' (Arnold, 1869, p.50).

Whereas the view of aspiration towards cultural perfection may not resonate completely today, the sense of culture being very broadly interpreted is one I can identify with as a designer's 'fresh and free thought', applicable to individual contexts. In another words, culture is an empty vase, a vehicle, which takes the input and output of individuals and groups of people within their surrounding environment and context.

Kroeber and Klukhohn contended:



Figure 1.1.2
A typical electric rice cooker

‘Culture consists of patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiments in artefacts; the essential core of culture consists of traditional ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other as conditioning elements of further action’
(Kroeber and Klukhohn, 1952, p.181).

Refined by Stuart Hall (1983), culture was viewed often as subconscious. It was considered as a concept that represents a set of shared values that manifest themselves in the behaviour and other artefacts of a given group. In the area of practical design, culture is more like an empty vase; it can be injected with different contents for different purposes.

Thus, through the criteria of the concepts above, considering the flexibility and trick of it that feeds into different design contexts, I cannot define Chinese culture in any one overriding sense in my research. However, I can attempt to explore my thinking process that is constructed on the understanding of Chineseness within small, specific design contexts. Similarly, I can explore the subtlety and complexity of transferring Chinese culture into design through my specific research and design work. Before the return of my own design projects, the following Section 1.2 shows how certain notions of Chinese character have manifested in history.

1.2

Chinoiserie and Chineseness

Chinoiserie, a French term, refers to a recurring theme in European artistic styles from the 17th century, since when European design, especially the luxury end, was influenced by Chinese aesthetics and designed through Chinese cultural transfer by European methods of the crafts people. “Chinoiserie is a technical sophistication of Chinese traditional pattern” (Jacobson, 1999). Chinoiserie satisfied the western curiosity about Chinese traditional cultural stereotypes. It is a quite visually symbolic format with whimsical contrasts of scale, and by the imitation of Chinese porcelain and the use of lacquer-like materials and decoration, e.g. a fairyland in fanciful mountainous, landscapes with cobweb bridges, carrying flower parasols, lolling in flimsy bamboo pavilions, dragons and phoenixes, etc., (refers to images in Jacobson’s book *Chinoiserie*) (Jacobson, 1999).

Chinoiserie was purely a western art style at its birth and flourishing in the 17th and 18th centuries. It was a visual and aesthetic reflection of Chinese culture into design from a western perspective, as well as a westerners’

Chinese cultural transfer in terms of symbolic aspects: both the decoration of 18th century and contemporary luxury design are characterized by the use of fanciful imagery of an imaginary China.

Today, Chinoiserie is still evident in western luxury products for its Chinese and oriental allure. The Cartier enamel material watch (in Figure 1.2.1) represents a traditional Chinese pattern 'a dragon breathing out incense' converted into a luxury product. This dragon pattern combined with its material of 18 carat gold and diamonds, and complex enamelling technique, undoubtedly makes this watch a luxury artwork. This is a contemporary design in terms of Chinoiserie in the global luxury market.

Local designers in China explore Chinoiserie as well, being even much more fascinated with it than in the west. The opening of the Beijing Olympics 2008 started a new wave of Chinoiserie in local design in China. It also caused pride as the Chinese elements had an opportunity to broadcast to the world. The combination of Chinese symbols with design became a trend that was led by the Olympics goods design. Lenovo was one of the biggest sponsors of the Beijing Olympics. The torch design came from Lenovo design centre. Their authority explanation of this design is that it represents elements of the Chinese ancient book, auspicious clouds, and the lucky red colour (2007). Then following commercial design, Lenovo promoted their laptop 2008 by involving the same patterns (Figure 1.2.2).

This is new Chinoiserie in China today: technical sophistications of Chinese traditional patterns, engaging design outwardly through stereotypes. It is a part of Chineseness in design as well, in terms of catering to people's impression about Chinese culture. This new Chinoiserie design tendency also raises arguments about how to create the 'depth' of Chinese elements in design at Chinese local design and research arena. There are criticisms that the design looks kitsch and shallow because it employs Chinese elements just for the sake of using them, and only as a means of making decorative patterns. Designers should design in depth, searching the 'inner' Chinese culture for design creations (Liu, 2006).

1.2.1

Ming furniture and its reflected Chinese culture

So what is 'depth' in contrast to visualising a Chinese pattern on the surface of a product? How to relate to or reflect Chinese cultural characters rather more than visual symbols? Ming furniture offers a fabulous example that reflected the thinking of Chinese scholar, and one that has also become a Chinese classic cultural symbol today. Ming furniture indicates the furniture used in the Chinese scholar class in Ming dynasty (A.D. 1368-1644). Ming is a period when the Chinese feudal hierarchy system was highly developed. Social class was clearly separated into four levels from up to low: scholar class, peasantry class, craftsman and labour class, and merchant class. The scholars were the ruling class for the past thousand years. Their



Figure 1.2.1
Cartier enamel watch with dragon pattern



Figure 1.2.2
Beijing 2008 Olympics torch and
laptop designs from Lenovo

taste was also cultivated, and worshiped by the whole empire.

The Ming furniture design concept represents the ‘medium’ of the Confucian school, which believes that there is a middle course and balance in all things. In this sense, the Confucian principle ‘Moderate’ means nothing should be done excessively, but in a subtle manner. This thinking of the Confucian school was expressed in Ming dynasty furniture, in terms of a design style which can be summed up as concise, refined, smooth, flexible, and bold; both large and small components of furniture are felt to be simple, upright, without artifice or exaggeration. What is more, in terms of the application of both straight line and curved shapes, Ming furniture has both a slim and flat straight-line form, and a curved form that is smooth and elegant, without much attached decoration. This conveys the philosophy of moderation that embodies the peaceful and gentle aesthetic ideas of Confucianism.

Moreover, the Ming’s design holds the idea that ‘returning to innocence’ is the unity of man and nature. The direct use of non-decorative natural materials is another important essence of Ming furniture. This was quite possibly caused by the impact of Taoism. As Lao-tzu insisted in *Daodejing*¹, all things receive their forms according to the nature of each, and are completed according to the circumstances of their condition. Thus beauty of an object was considered to be inherent and the ‘skill’ was in exposing the essence of the material and in minimal intervention (Wong, 2011). Following this principle, the timbers of Ming furniture are mostly hard and compact wood. For the production process, the craftsmen used more waxing technique rather than painting in order to expose the natural texture of the wood as much as possible. This is a typical embodiment of the notion of harmony within the nature of Taoism. Moreover, following the guidance of this simple and natural concept, the designs of Ming furni-

1. *Daodejing*, Chinese means “Classic of the Way of Power”, Wade-Giles romanization *Tao-te Ching*, classic of Chinese philosophical literature. The name was first used during the Han Dynasty (206 BC–AD 220); it had previously been called *Lao-tzi* in the belief that it was written by Lao-tzi identified by the historian Sima Qian as a 6th-century-bc curator of the imperial Chinese archives (refer to ‘*Daodejing*’ in *Encyclopedia Britannica*).

ture are consistent with a simple and clear identity, avoiding over-decoration. It attached great importance to both utility and beauty. For example, the grid-angle-panel mortise and tenon structure (see the right part of Figure 1.2.3) on stools, chairs, desktops, and doors, was not only for adapting to the wood swelling and shrinkage deformation, as well as the warpage of the panel, but also for covering the exposed section of wood strips, refining the sophisticated outlook of the furniture (Gure, 1957).

The simple and natural design of Ming's furniture reflected the Chinese society at this time to some extent, including the culture and the mainstream philosophy. The Chinese characters demonstrated in Ming furniture can be summed up in ways of life, philosophy, and practical wisdom in Confucianism, as well as return to innocence and unity of man-nature of Taoism. Hence, it can be seen that Ming furniture is an interpretation of the integration of design and cultural elements of the time.

Now Chinese designers have begun to search for ways to express Chinese culture in design at the same level as Ming furniture, in terms of both its elegance and reflection of the cultural intelligence and wealth. If we look into our immersed culture now, firstly, today's China sees today's politics, social status, philosophy, and behaviours influenced deeply by both mul-

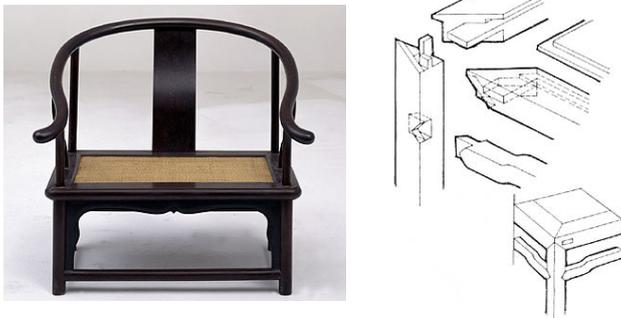


Figure 1.2.3
A Ming rosewood chair and its mortise and tenon structure

iple historical and other factors of globalisation. Chineseness today both inherits the traditions, as well as maintaining a great difference from what it was centuries before. For instance, we all know that the Cultural Revolution in the 1960s and 1970s left a disjuncture among the scholarship and scholar class. That means the emphasis of the Chinese traditional philosophies is much weaker than how it was at the much older time. Yet after the turmoil of the Cultural Revolution, starting from the end of the 1970s, globalisation brought western ways and values to Chinese people's lives. Some of the traditional Chinese elements have turned out to be little more than stereotypes, rather than the genuine Chineseness manifest today. On the other hand, it is not surprising to find some of the original and strongest elements of Chinese cultural elements, such as Taoist harmony with nature, the wisdom of Buddhism, Zen, and Confucianism, etc. that export-

ed from China and into the world, represented as much better designs in Japan rather than in China². The periphery of a cultural character and icon tends much more ambiguous with the cultural transmission.

1.2.2

Taoism, Tea ceremony and Chinese cultural mobility

Taoism pronounces ‘Tao’ in Chinese. Tao also means approach or way. The Taoism theory believes everything has its ‘Tao’. Lao-tzu insisted in Daodejing Chapter 1 “Tao that can be spoken is not the universal and eternal Tao.”³ In Daodejing, further more interpreted through my understanding, “be always subjective, one discovers the wonders; be always objective, one sees the manifestations. The inner wonders and external manifestations emerge from the same resource, but have different names. They are both mysteries and properties of the ultimate reality. The mystery hides inside of mysteries that is the door to all wonders.” To some extent, the emphasized natural links and paradoxes of universal things in Taoism led to the characters of ambiguousness and mobility in Chinese culture.

Take Chinese tea ceremony for instance. Tea ceremony in Chinese is ‘茶道Cha-Tao’. ‘茶Cha’ is tea in Chinese. ‘道Tao’ is similar as ‘道Taoism’. So tea ceremony is the approach of tea, or the Taoism hidden in tea. Tea ceremony originally came from China and transmitted to Japan at Tang Dynasty (618-907 CE). Today, in contrast to its form in China, the Japanese tea ceremony kept more traditions that generated from Tang and Song Dynasty (Song, 960-1279 CE), which focused on the mental atmosphere, sprite and rules in terms of making and drinking tea. In the period from Tang to Song, tea was the noble consumable; the action of drinking tea was decorated into an art. With the tea production and type increasing, tea tended to be life essence in China, and people discovered more and simpler ways to drink tea. If Japanese tea ceremony today reflects their ruly and attentive manner and a chasing of peace through this activity, Chinese tea ceremony states the Chinese politeness, as well as a pragmatic social value. The Chinese ‘Tea-Tao’ can be explained as the politeness reflected through tea drinking or the performance of tea making, rather than the art or manner training through tea. On the table, a Chinese usually should inject tea to others’ cup before inject self’s, should pay attention if the older or senior people’s cup is empty and drop tea for them. This is a basic politeness of Chinese tea ceremony in daily life. A relatively serious tea service in office or home shows the host’s higher friendliness and respective to guest. Some people bring their partners to a teahouse to talk business for quiet and relaxed environment. The tea ceremony in teahouses is actually the performance of tea making or a waiter’s service of tea. The modern China’s tea ceremony reconciles the new ecology, reflects a pragmatic value, as well as

2. More case studies of Japanese cultural transferring design refer to Appendix 2.

3. This English version was by David Hong Cheng, 2000

the Chinese cultural mobility and ambiguousness. Tao emphasizes its indefinable and changeable. Chinese tea ceremony today can be also regarded as a reflection of Taoism at this aspect.

1.3

The Chinese cultural reflections in design from 1949 to today

China has changed rapidly in recent history and in the boom era of development now. It maintained the average economic growth rate at 9.7% per year over the two decades to the 20th century. Meanwhile, China tended to be more and more into a spotlight of the world: joining the World Trade Organization in 2001, hosting the Beijing Olympics in 2008, holding the World Expo in Shanghai in 2010, as well as its various news about development, economy, politics, and art gaining world wide attention. Also there seems a huge gap between the traditional/historical and contemporary in terms of Chinese culture and society. Year 1949, the foundation of People's Republic of China (PRC) drew a line of division.

The Chinese culture reflected in design in the different eras from 1949 until today creates a chain of Chineseness within the contemporary Chinese social context. Even some of these cultural elements have also been already regarded as Chinese classics.

1.3.1

1949-1977, Collectivism and the Cultural Revolution

This era is the first influential stage in Chinese modern history into today's Chinese cultural and social status, which shaped the Chinese communist character through its extreme red and soviet time inspirit. It began in 1949, with PRC founded under Mao, and finished after the Cultural Revolution in 1977, when Deng Xiaoping assumed the highest power.

In 1953, the Chinese State-ownership Land Reform completed its First Five-year Plan model. This model was created following the Soviet plan of 1928, which was for Stalin's draconian push to convert Russia into a fully communist industrialized power. Due to the formulation of this plan, large numbers of Soviet engineers, technicians, and scientists were invited into China to assist in developing and installing new heavy industrial facilities, including many entire plants and pieces of equipment purchased from the Soviet Union. The government's control of industry was increased during this period. In 1956, socialist transformation of urban areas began. All private industry and commerce changed to being nation-owned (Dillon, 2012a). According to the government report, by 1956, approximately 67.5% of modern industrial enterprises were state-owned, and 32.5% were under joint public-private ownership. No privately owned firms remained. During the same period, the handicraft industries were also organized into cooperatives, which accounted for 91.7% of all handicraft workers (Li, 1956). Then the government proposed the Second Five-year Plan for 1958-

1963. This plan included contexts such as expanding heavy industry in China, furthering socialism through transferring more property to collective ownership. From 1959 to 1961, the Great Leap Forward movement in China led to a “tall tale” social trend, with an increase in the personality cult of Mao. Everyone purposed to realize their best for their great Chairman Mao (Liu, 1996). In 1966, the Cultural Revolution began. Mao alleged that liberal bourgeois were permeating the communist party and the Chinese society to restore Capitalism. He insisted this must be removed through revolutionary struggle. After the formation of the Red Guards composed of groups of youths around the country, the Cultural Revolution subsequently spread into the military, urban workers, and the whole country. People stopped their regular work and became involved in the revolution (MacFarquhar, 2006).

Until Mao died in 1976, the Culture Revolution stopped economic and educational development and even closed the country for ten years; it further nearly eliminated the intellectual class, following Mao’s dictate – the “rebuilding a new world” (Tsou, 1986).

In the sphere of Chinese art and design at that time, like the Russians in the 1920s, artist-engineers were attracted to the functional arts by political ideology. Fine arts were deemed useless in the new Communist society. In favour of Soviet Constructivism, “art for use” in the service of the nation (Mount and Kenez, 1997) was key in the evolution of design in China as well. “Art service for the polity” could be seen everywhere in China during the period of 1949-1977. It took its cue from the 1920s’ Soviet propaganda, with a very particular view of what constituted morally superior occupations, with ramifications for the new society. A most symbolist form was ‘Dazibao’ which means big character poster. For instance, the slogan ‘Smash the old world, establish a new one’ with the figure of a red guard holding a hammer was a typical example of a poster that applied the form of the 1920s’ Soviet propaganda (Figure 1.3.1 and 1.3.2). The nationally orchestrated personality cult of Mao also drove cultural features, combining with the constructivism art form, and reflected in the concurrent designs at that time. As a super hero of the new China, Mao’s figure with a ray of light background became the most popular poster (see Figure 1.3.3). Un-countable statues of Mao were built in towns, and by December 1967, 350 million copies of “Mao’s Quotations” (a red cover handbook in content of Mao’s daily words) had been printed (Lu, 2004).

The private form and concept of wealth were rescinded. All the wealth was collected and owned by country and people. At the time, the people, country, communist party were loudly announced as an equal concept in propaganda. Avoiding capitalist cauterization, individuals were required to act as equal communist soldiers, involving all their personal energy to build the new



Figure 1.3.1
Big character poster in Cultural Revolution



Figure 1.3.2
Soviet poster in 1920s



Figure 1.3.3
Poster: Chairman Mao forevermore great



< Figure1.3.4
Red Guard soldiers in military
uniforms

communist society. The military uniforms with four pockets, a brown Sam Browne belt, a badge of Mao on the chest, and a grass-green canvas bag was the typical uniform at that time (Figure 1.3.4) The classic of this era remaining to us in terms of design can be summarised as soviet constructivism, great chairman Mao, and revolutionary inspirit.

1.3.2

1977-1990s, the shift and new generation

When Deng Xiaopin took the power in 1977, he “corrected” the “mistakes” that Mao made in the Cultural Revolution. It started a new period in which the economic development became the core of the whole nation. In contrary to Mao’s time, in the period of 1977-1990s, China opened its gate and joined globalization. The national policy tended to be “capitalism”, however, explained by Deng Xiaoping’s words, it was a time to develop the “Chinese own style specific socialism” (Dillon, 2012b).

The following part briefly lists some of the milestones from 1977 to 1992. It cannot cover the complexity of the society shift at that time, but offers a general idea about the social shift from extreme communist into more capitalism, still keeping to Chinese socialist principles, as ‘the Chinese specific socialist’, in Deng’s words.

- 1977 Deng Xiaoping assumed power after Mao’s death
 - 20 million youths in the countryside who had been obliged to follow Mao’s dictate to “learn from farmers” returned to the cities
 - The university was re-established after a ten-year closure
- 1978 Deng proposed the Economic Reform. It referred to the program of Chinese economic reforms should be a socialism combining with Chinese characteristics. The goal of which was to generate

sufficient surplus value to finance the modernization of the country's economy.

The goal of the “Four Modernizations” policy was outlined (modernization in agriculture; industry, science and technology, and national defence), to upgrade China's economy and competitive national power in ambitious ways.

- 1979 Contract Responsibility was adopted in the countryside, which meant that farmers could sell the surplus crops to the open market after the rest had been submitted to the nation. Commercial advertising began to appear on newspapers and TV, Taxis appeared in Guangzhou for the first time (Dillon, 2012b).
- 1983 Coca-cola launched in China
- 1985 Private housing began to appear in Beijing.
- 1987 Private enterprise emerged in this country. The Japanese enterprise Panasonic founded Beijing Panasonic and became the first Chinese-foreigner cooperative enterprise.
- 1990 The first McDonald's outlet opened in Shenzhen.
- 1992 The luxury brand Louis Vuitton was introduced in Chinese mainland market. Increasingly, overseas products flowed into the Chinese market.

Simultaneously, the political changes resulted in cultural and social changes also. Before the middle of the 1970s, the only way to realize your personal value was to be a unity for contributing to the building of “our” communist nation. While ten or twenty years later, driven by a pragmatic value and money worshiper of the mainstream in society, holding a Louis Vuitton bag became a sign for your success. This rapid shift of the society as a whole towards pragmatic and money worshipping ends was reflected in design as well: more commercial designs and brands appeared in China; and on the other hand, most of the Chinese designs in this era came across as rough, imitated, and kitsch because they were really produced for the purpose of making a quick buck.

Under the one-child policy after the late 1970s, the new generation post 80s grew up in the context of China launching its economic reforms and opening up to the world outside. Most of them were the ‘only one child’ families; they were the centre of the family's aspirations for the future, and triggered a large portion of the family's consumption. They were dramatically different from their parents, being introduced much more to western culture, and encouraged to build their own personal characters. In terms of habits, lifestyles, and ideology, they tended to be less tradition-bound. They have a stronger consciousness of personality, as well being more eager to express themselves, in contrast to their parents' generation. Their experiences, as reflected in design, became import-

ant for the designs facing them. Also because most Chinese designers today were born in this generation, they reflect their thinking and experiences in designs following their generational way more or less, naturally, or technically. Now the new generation has grown up, and faces difficulties of employment, unsupportable high housing prices, work pressures, and cruel social competition. Their happy childhood time remained as their beautiful memories. Vintage designs inspired by this generation's memory of childhood caused an emotional resonance through design. Some of these designs are decadent or black humour meanwhile some of them also represent a kind of inspiration of China in the 1980s: its renaissance and the extraordinary hope for life, which breaks down the national stereotype.

In 1980s, the products for this generation also formed a cultural feature, reflecting plentiful positive emotions such as energy and ambition for the future. One example is Feiyue sport shoes. (Figure 1.3.5) Its brand in Chinese means flying forward. They used to be the most popular shoes among the young Chinese in the 1980s, but faded from the market after the 1990s as a result of the international sport brands occupying the market. In 2006, this brand was registered by a French design team and arrived in the global market. By a simple change of its logo, the brand was set to conquer the walkways of Europe's young generation and became one of the popular and fashionable sports brands in France. This was despite the fact that it was forgotten and had faded from memory in its homeland for ten years.

1.3.3

The 1990s until today, the commercial design

In 1992, Deng Xiaoping called for a nationwide faster economic reform. As Deng's saying went, "Let small groups of people become rich first". As a result of the rapid change of the Chinese market since 1979, demand from consumers for better-designed, high-quality commodities was growing. Commercial designs in China were encouraged to develop, especially for those more focused on the local market, such as advertising design or interior design. In contrast, industrial design developed relatively slowly until the late 1990s, before the growth of local Chinese brands. To refer to Shouzhi Wang's essay (1989), in the 1980s, there were two tendencies in the industrial design era: the maintaining of the old designs (most in this category were the old national brands), and the copying or imitating of foreign designs. China was a non-signatory of most copyright treaties. It was difficult for foreign manufacturers



Figure 1.3.5
Feiyue sports shoes, Left: brand registered in China in 1950s, 28 yuan/pair; Right: brand registered in Europe in 2006, 50 euro/pair.

to protect their copyright in China (Wang, 1989). However, the importance of national design began to be noticed. In 1981, the China Art and Craft Association were set up. In 1987, China's Industrial Design Council was established. Design education was also set up in universities after 1980s. The Chinese commercial design appeared to be in a booming trend.

After the 1990s, Chinese brands began to sell into the global market, such as Haier and Lenovo. Meanwhile, as a result of the ten-year design education in China, awareness of the value of brand and design were strengthened by local enterprises. Chinese brands began to put more focus on design. Through a perspective of the pride of the nation for local or the curiosity to a foreign culture for the non-Chinese as priorities when choosing a Chinese brand, some Chinese brands noted the importance of associating products with Chinese factors, and therefore began to enhance the identity and competition of their products by emphasising Chineseness. On this point, like the Japanese, designing a product with local features could be a strategy to create a product identity in market, through the emphasis on its cultural value. The Chinese culture for design became a more critical issue that included the growth of Chinese consumption requirements on local brands, as well as the quality of local design (Swystun et al., 2005).

As it mentioned in the Introduction, with the development of design industries in China, the emergence of 'Shanzhai' design brought a fresh design trend in China. (Figure 1.3.6) Shanzhai indicates parrot and grass-root. However, these parrots, in contrast to the fakes in the 1980s and 1990s, added their own design ideas and creative elements in design. It marked the start of more creative freedom and commercial opportunities for small local brands and young designers.



Figure 1.3.6
'Shanzhai' mobile, a parroting iphone style, 2009

1.4

Summary

Chapter 1 is a review of cultural elements in a historical perspective through critiquing the concepts that relates to culture. It represented and analysed cultural transfer into design by means of a review of Chineseness in design, and the Chinese cultural reflections in design with the insights of social development from 1949 till today. These directions bring up evidence, which support a point of view about Chinese culture and design: In terms of design, Chineseness should be a reflection that shows up the current complexity rather than historical influence about China. It can emerge unintentionally in the design process because of the cultural and social impact. Also it can be a concept abstracted or emphasised for design through designerly ways due to different purposes.

Chapter 2:

A Review of cultural transfer design research in a global context

Focusing an exploration of Chineseness, this chapter addresses a discussion of literature on cultural transfer with analyse relevant research, design models and methods. A good design can be evaluated from different standards, for instance, user-friendly, commercial success; rather than from its local, cultural influences alone. Following a comparison of various research approaches, such as Lin's (2007) and Moalosi's (2007) culture-oriented design models, Human computer interaction methods, and Xin's (2007) and Liu's (2006) design research in China, this chapter considers how we might address local cultural considerations in design through research approaches, and how to evaluate such cultural transferring design through a synthesis from different theories.

2.1

Analysis of two research models in terms of culturally-oriented design

Designing local cultural features into a product appears to be important in the global market where many mass produced products are losing their identity because of the similarity in their function and form (Handa, 1999). Globalisation has sparked off an awareness of local cultural identity. Design-fostered local culture has become a way to diversify away from homogeneity and to make products popular. Objects arise from means, motivations, skills and material opportunities that diffuse through a population. Then unavoidably, a common feature or consumerism products fade out of popularity with time. However, as Sterling asserted, in this natural process, cultural factors can act as an efficient stimulation for a new product to become popular (Sterling, 2005).

Featherstone maintained that culturally orientated products can be used to mark the boundaries and differences between figurations of people (Featherstone, 1995). For instance, design with cultural symbols, on the one hand, due to their foreign nature, can be a reflection of interest and stereotyping of other cultures; an exposure to those cultures. On the other, embedding local cultural features into a product for the enhancement of product identity in the global market can be considered to contribute a unique character. As there is no one standard for aesthetics in a multi-cultural arena, cultural symbolism is apparently much more valuable in terms of its market allure.

In the area of local culturally oriented design, Moalosi's research asserted that symbolism is consciously employed in the design and imagery attached to the products in the production process and symbolic associations are employed in using products to construct differentiated lifestyle models (Moalosi et al., 2007).

How to transfer local symbols into design? Lin's research created such a bridge. It contended that cultural value-adding creates the core of product values, design is the motivation for pushing cultural development forward

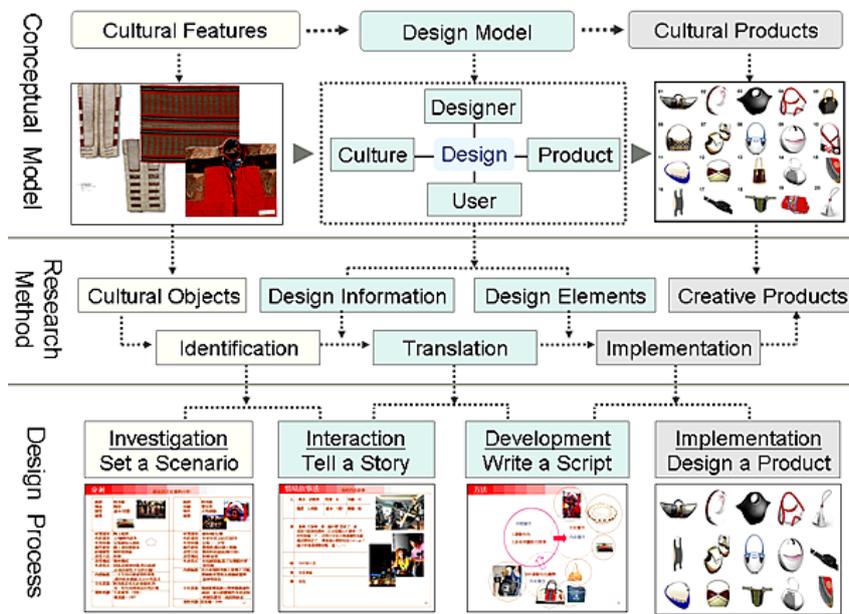


Figure 2.1.1
Lin's Cultural Product Design Model
(Lin, 2007)

(Lin and Sun, 2007). Lin's design model illustrated how to transfer some of the Taiwanese aboriginal cultural icons into design elements step by step, and design these features into modern products in order to reinforce their design value.

forward (Lin and Sun, 2007). Lin's design model illustrated how to transfer Taiwanese aboriginal culture into design elements step by step, and design these cultural features into modern products in order to reinforce their design value.

This is a tailored general model for transferring local cultural symbols. It dealt with aboriginal symbolic transfer into design following three fixed steps: identification of cultural features from an original cultural object, translation of these features into design information, and design elements and implementation of the cultural product. In the practical design process, this model used four steps to design a cultural product: investigation (setting a scenario), interaction (telling a story), development (writing a script), and implementation (designing a product) (Lin, 2007). This is a formal structure that ignores the flexibility and iteration of design practice.

However, the understanding and expressing of symbolic culture into design cannot be really separated into steps. What is the carrier of this translation? We cannot translate aboriginal symbols without implementing them through design. Actually, translation and implementation in practice act together through iterative circles rather than step-by-step in a line.

Moreover, this design model insisted on a 'correct' approach that must be taken for a 'right' cultural symbolic transfer into design. For, as Lin stated in the conclusion to his paper, he engaged in "field investigations and

interviews with Taiwanese aboriginal people, in addition to an extended literature review, as a way to accurately understand their culture and art so as to avoid ‘incorrect interpretations’ when transforming cultural features into modern product design. Furthermore, a detailed design process needs to be developed in the future in order to provide designers with specified procedures for designing cultural products” (Lin, 2007). However, my question is, how can we define a correct interpretation of culture? An individual’s experiences generate his/her understanding; a lack of understanding or misunderstanding creates the cultural stereotypes. We cannot deny that “the image, the imagined, the imaginary are all terms that direct us to something critical and new in global cultural processes, which are the key component of the globalisation culture as well” (Appadurai, 1996). However, why ignore a lack of understanding or misunderstanding of culture that can equally be an inspiration for the generating good designs? In contrast to a fixed, correct understanding, it may bring weirdness, curiosity, or humour into design. Thus, Lin’s work covered the complexity of the cultural features application into design to some extent through simplifying it. On the other hand, it neglected the complexity of cultural features with individual designer’s creativity.

In Lin’s model, it is possible for designers to act according to a menu that gives the mannerisms of a culture. However, it simultaneously caused question about how designers define the opposition between a local and non-local, a periphery of the understanding and misunderstanding of culture? There is difference between design according to a formula and the one through its designer’s understanding. Design can be a mannerism and pure form-giving. This does not mean a design through a deep research and understanding of the local culture must be better than a design through cultural curiousness and interest. Lin’s model turns an art into a technical task.

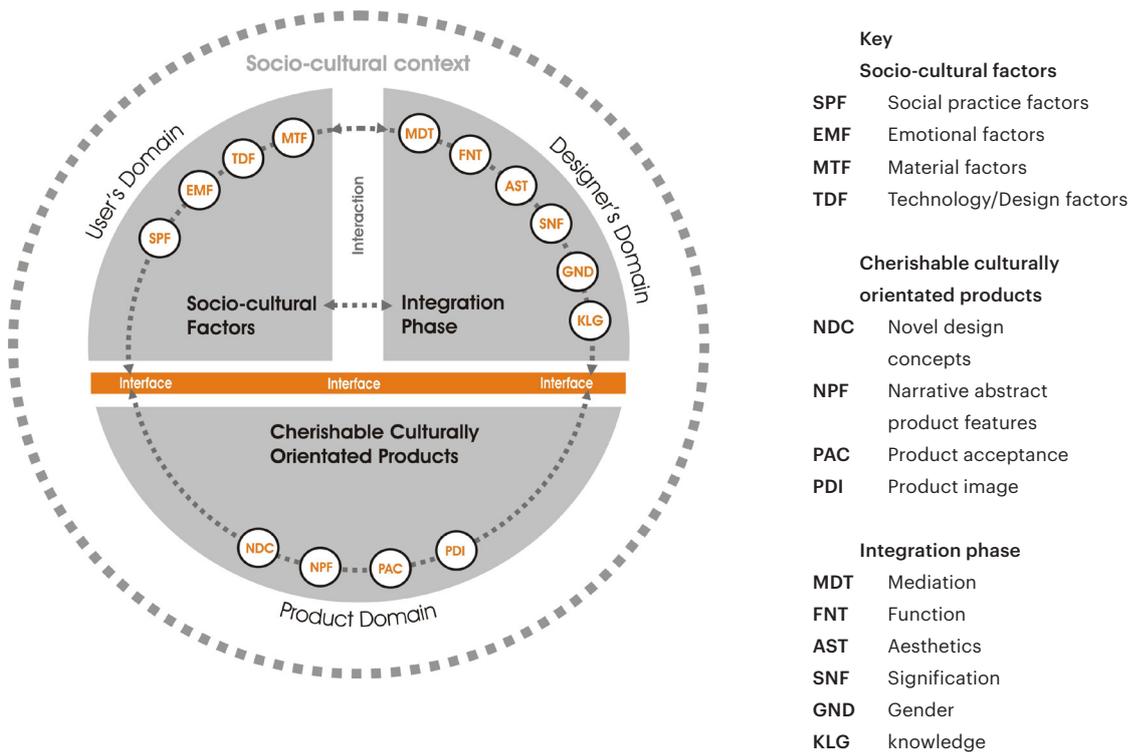
Another sample of local cultural transfer design research is Moalosi’s culturally orientated design model, which offered a view from culture and social factors. His model was based on Botswana’s transitional social factors extracted from sources such as folktales. Like the rich data of folktales around this subject area, Moalosi’s model suggested the integration of different factors such as the emotional, material, technological, as well as the investigation into design phases of function, mediation, aesthetics and so on (Moalosi et al., 2007). Moreover, regarding the complexity of culture from a designerly viable way, in Moalosi’s design model, he highlighted socio-cultural factors which form a ‘cherishable’ product design, and categorized them as practical factors, emotional factors, material factors and technological/design factors (Moalosi, 2007). Through this approach, his work tended to make the complicated social-cultural factors assessable. His research also emphasised each specific social factor rather than considering their soft-edged, links and influences between each other. In design practical processes, how do designers consciously encode the cultural elements

to the same extent as the physical or cognitive? For instance, Moalosi's material factor was regarded as a carrier, which carries and expresses the emotion factor. In practice, the factors such as emotional and material are intertwined and difficult to define. We can judge and explain what are emotional or material reflections in design when we are analysing. But when we do so, it is not a rule-following process.

Through these two culturally oriented design models, my question is:

- While it maybe easy to make a model for cultural transfer in design, how does it work?
- Who benefits from it?
- What is the value of this model, especially in practice?

Figure 2.1.2
Moalosi's culture-oriented design model (Moalosi et al., 2007)



One weakness in the two models above is that there is no corrective or learning feedback loop: there is no way that the outcome of using the model can help change and refine the model. It's a production line that ploughs on regardless.

2.2

Review of HCI approaches into cultural transfer

We can also judge a good cultural transfer design because it creates value for products through general evaluative standards for design. The cultural elements can address more usability, in which the target users are considered more in terms of their local cultural context. One of my supervisors Ranulph Glanville through conversations with helped I began to realise that cultural meaning and value in design is very close to the difference between an interface designed as an engineering solution or a user-centred solution, for instance, Windows and Mac. Briefly, one meaning concerns the logically constructed in order to be efficient, and one takes account of the users' wishes and effective allowing them choose how to use the design.

Culture can be regarded as a catalyst in terms of designing the innovative and user-friendly. Through the consideration of the socio-cultural contexts, designers can interpret and transform users' needs and wants into product features that may generate extra benefits (De Souza and Dejean, 1999). On this point, the Human-Computer Interaction (HCI) approach, promoting an 'out of box' thinking to cope with the subject's complexity, could be adopted for the cultural transfer design as well, specifically for its soft-edged way of thinking shift in history.

For instance, if we trace back the Computer Aided Design (CAD) interface design for its users in the 1990s, much of the working knowledge associated with the use of simulation was syntactic and particularly difficult to acquire and retain. All the combined projects of that time underwent developments in the area in order to service the building description requirements of disparate design tools, as well as to control the operation of those same tools against rules which define the purpose of their use. Taken together, the common aim was to evolve the prospects for a CAD by which the analytical power of the computer could better complement the creative power of its user (Hand, 1998).

An exploration of HCI design normally includes the following four design procedures:

- 1) Consult and observe users of similar equipment before designing the new
- 2) Carry out a human-machine systems analysis to define the part of the design that affects users
- 3) Observe or simulate critical aspects of the behaviour of users of the proposed design
- 4) Record limiting values (Jones, 1992)

In Parmee's 'people-centred computational environments' design model, it advocated semi-structured co-design thinking with the following ap-

proaches:

- 1) Knowledge extraction and capture
- 2) Representation
- 3) Search and exploration
- 4) Co-operation and collaboration
- 5) Enabling environment (Parmee et al., 2010)

Both Jones' and Parmee's approaches are general models for knowledge, learning and practicing in terms of HCI design. This kind of open approach can be adopted for cultural transfer design as well, especially for the research of the cultural behaviour of users, by regarding culture to the humanity elements as they are in HCI. It is a way to investigate and exploit culture for design, by engaging in activities that rely on materials from users, designers are able to approach the given design problem from different entry points or perspectives from the user's background, and come up with novel design concepts. However, how can we address the local Chinese cultural elements consistently step-by-step as it is in a HCI method?

2.3

Reviews of the Chinese design research theories in terms of Chinese culture

The following are two reviews of Xin (2007) and Liu's (2006) Chinese design research separately. Their theories are both analyses of Chinese cultural influences on design, especially focused on the impacts of tradition and social phenomena.

Through defining "cultural products as products that reflect certain visual, behavioural or philosophical elements of a culture", Xin introduced the "Cultural Product Positioning Matrix" as a qualitative tool to benchmark and evaluate cultural products based on the levels of the reflections on those cultural elements, and "Cultural Product Initiatives" constructs "all the tools into a formal process for creating products that are appropriate to their cultural contexts" (Xin, 2006). His PhD papers (at Carnegie Mellon University) explored "a formal culturally-based product development process with methods and tools to analyse both traditional Chinese artefacts and behaviours that are unique to Chinese, and to transfer the understood cultural knowledge into designs of contemporary products". His research regarded its "arising methods and tools as applicable to product development effort in other cultures"(Xin, 2007).

Xin's theory developed through case studies of traditional artefacts in terms of their social and behavioural context. He intended, through this kind of interpretation of Chinese traditions, to understand the established culture, and to decode complex Chinese cultural meanings embedded in traditional artefacts. His research developed a formal method for the interpretation of traditional artefacts and the understanding of Chinese cultural

behaviours into a process for culturally based innovation. Moreover, his theory dealt with material cultural research methods that feed into design history research and analysis, rather than into design per se – into practical and reflective approaches for innovative designs. It offered a resource for understanding Chinese traditions, as well as traditional heritages to some of today's behaviours. Nevertheless, this neither can cover the complexity of Chinese culture nor define it. On the other hand, the case studies and analyses of design are from the perspective of the author, no matter how their depth and comprehension are. As I have argued in a previous chapter, culture is a soft-edged concept (see Section 1.1). Also we cannot ignore the importance of the influence of designers' individual experiences to his/her understanding about culture and transfer cultural elements into design. Without considering these iterative and reflective factors in practice, a method can never dynamically guide culturally oriented design

Liu's book (from Tsinghua University), which, in its Chinese edition, was called *Science of human affairs* (Liu, 2006), is quite influential in the Chinese design research sphere. He explained that the concept "science" in his book follows its wider meaning in German, 'wissenschaft', which includes the area of the humanities, which goes beyond its English meaning. His theory in the book deals with 'design science' (Archer, 1995) rather than humanities¹. Liu critiqued the relationships between design and its context, emphasized the rationality of design addressed by Chinese history and behaviours. This book also dealt with design epistemology through Chinese traditional cultural and philosophic perspectives. In summary, it developed thinking about how the logical and scientific reasons generate designs through a theoretical approach, especially in the Chinese traditional cultural context. He terminated his book through a design research case study about chopsticks and Asian dietetic culture, in order to introduce how the 'science of human affairs' can guide design research. The promoted project, based on the case study, followed the general research pattern of engineering and industrial design: finding target user group, background research, research of target users, analysis and making design plan, without further more design or research reflections.

I categorise Liu's 'science of human affairs' as more of a scientific essay to introduce design methods into China, rather than a critical systematic design theory. It did not shape up an argument or a conclusion. This work made me conscious of the different understandings about Chinese tradition and western critical thinking in Chinese local or western context. It also reminded me of the 'gap' between design research in the UK and in China. Taking 'logical' and 'critical' or instance, 'be critical' is one of the most important purposes in the UK design education system, but not in China. In the Chinese language, both of these two words were introduced

1. Refers to Archer's paper *The Nature of Design*, in which Archer characterized scientific approach and humanities into separate spheres for design research.

from western culture. The logical ideology² was firstly introduced into China in the middle of the 19th century with the Chinese democratic revolution in 19th century at the end of the Qing Dynasty (Yao, 2006). Additionally, the western logical and scientific thinking has being widely accepted in Chinese culture today due to it's the extensive promotion of science and engineering in China since the 1980s (Tsai, 2009). In contrast, the notion of critical thinking is not something which today's Chinese society was culturally familiar with. The critical thinking is rarely introduced in China, maybe because it reflects a way of thinking that goes against the Chinese political centralisation. Moreover, the traditional Confucian thinking involves a respect for the wisdom of one's elders and advocates honestly following their guidance in order to learn. This aspect of Confucius does not mean that the previous wisdom is all correct or cannot be challenged. It means the learning approach is more undertaken through a follow-understand-improve way rather than the deductive-critique-synthesis method. On this point, introducing design research into China through a scientific and logical form is more acceptable than in its critical form. However, there should be some research dealing with design's critical epistemology, iterative and reflective thinking of design practice, and how to combine the Chinese way of thinking into a framework as a whole, considering and critiquing these factors in one system. I take my doctoral research as such an attempt to make a contribution towards this.

2.4

Summary

The criteria for design can be assessed from an open perspective. As Popovic observed, the following criteria could be applied to assist designers:

- 1) Support the user culture
- 2) Correspond to the culture and life cycle
which conforms to the appropriate aesthetics
- 3) Convey humour or joy of that particular
cultural set up
- 4) Evoke desirable feelings within cultural
context and relate to flexibility and adaptability of
interaction culturally(Popvic, 2002)

What is a comprehensive view regarding a cultural transfer into design? Besides the reflection of cultural stereotypes and the consideration of local users' behaviour, what more is there? It is quite possible that the design will lead to new areas, and will evoke responses that are not just about Chinese symbols or usability, but something unanticipated. How can

2. In Chinese, logic is 'Luogi', which is a direct translation from its pronunciation. The Chinese word "critique" is the same one as "evaluation" and "judgment".

we know that those elements from Chinese culture reflect in influencing design that we did not know or notice yet, and then how can we deal with them? For instance, the political influences in design, the ideological, philosophical impact of designers are very significant as productions of the process of a society's intellectual, spiritual and aesthetic sides as well as for the process of a society's artefacts' design development. Design, ideologies and politics are overlapping domains of human thought and activity, but can be taken as separate realities. Each of them covers its own principles of realization, influences while each affects the other, directly or indirectly. Surely when we look back, such influences are often very clear; such as I have shown in the Chinese Cultural Revolution period. However, I could not find an established or directly referable design model for integrating this complex level of culture. As a result, it is hard to abstract the relevant elements into design, due to the intangible and tangled nature of culture.

Culture has evolved its own answers to its problems (Hofstede et al., 2002). One of the things about culture is that it is specific. Analysing examples and reviewing the relevant areas of research methods can be inspiring. However, because of the cultural and practical specifics, how can this prior knowledge be applied to the manifesting of Chineseness? The following chapters indicate my approach that explores Chineseness into communicational through practice based design researches and methods

My research explores Chinese cultural design through critically con-

Chapter 3:

Methodological leads and rationale

sidering the different cultural aspects in today's Chinese context. Then, through analysing the limitation of a systematic based design model, this research drives design itself as the reflections of Chineseness and forms the definition of Chineseness that is behavioural communication rather than visual identity. In contrast to the previous local cultural design models, such as Lin's or Moalosi's ones, my approach that develops through the research is a comprehensive combination of a technical industrial design project with a perspective of critical thinking. I assert, transferring culture into design neither acts according to a menu, nor follows the mannerisms. It lies on the designers' understanding of its cultural and design context.

This Chapter 3 is an interpretation of how it was explored methodologically. Section 3.1 is a review of theories, ideas and methods for my research method selection, equally an explanation of the rationale in research. Section 3.2 depicts the methods involved and the shifts in the projects.

3.1

A review of the relevant theories and methods

According to Glanville, the research should study and explore 'how' (Glanville, 1981). In my case, how I develop research practice, how I analyse my practice and inform theory through practice, and how I develop in line with my analysis of the relationship between design and research, consists of the Chineseness investigating process.

3.1.1

Reflective design- how to research through design

"In an action-present – a period of time, variable with the context, during which we can still make a difference to the situation at hand – our thinking serves to reshape what we are doing while we are doing it. I shall say, in cases like this, that we reflect-in-action." (Schön 1987, p. 26)

Schön describes designing as a reflective conversation with the materials of a design situation (Schön, 1992), in which designers interact with their design representations. His view coincided with the 'learning through doing' concept (Dewey, 1916) as well as the tacit fact of human knowledge that 'we can know more than we can tell' (Polanyi, 1966). Schön argued that design practitioners, in mind, knew more than they could say, designing was tacit in nature. There was a clash between good practice and the much more explicit, analytical, rational discourse. He objected that researchers were seen as responsible for undertaking research solutions that fellow practitioners were supposed to adopt themselves in the contexts of which they were both expert and experienced. He proposed, based on his own professional experiences, that professional practice is based on the inter-

connection of thinking and action, and that reflection-in-action of practitioners is “the thinking about what they are doing while they are doing it”. (Cross, 1987)

The action is followed by reflection, which then forms a feedback loop, back into practice. Reflection allows practitioners to change the way they go. The relative and subjective were embraced. Each practitioner had his or her own set of skills and experience and a particular situation to work in. This means there was no formalised or standard method, and no more set framework than this loose description of activity. Schön called this individual knowledge professional artistry and emphasised the practitioner’s intuition and skill of adaptability.

However, in terms of functional-based design ontology, design representations can be viewed as describing an artefact through any of the following three aspects: what the artefact is for (Function), what the artefact does (Behaviour), or what the artefact is defined as in terms of its components and their relationships (Structure) (Gero and Kannengiesser, 2004). Gero and Kannengiesser (2004) formed a model situated design as the recursive interaction between three different worlds: the external world, the interpreted world and the expected world, for understanding how a designer’s interactions affect both what is designed and the designer’s experience (Figure 3.1.1).

According to Gero and Kannengiesser, in this model, the external world is the world that is composed of representations outside the designer. The interpreted world is the world that is built up inside the designer in terms of sensory experiences, percepts and concepts. The expected world is the world the imagined actions of the designer are expected to produce.

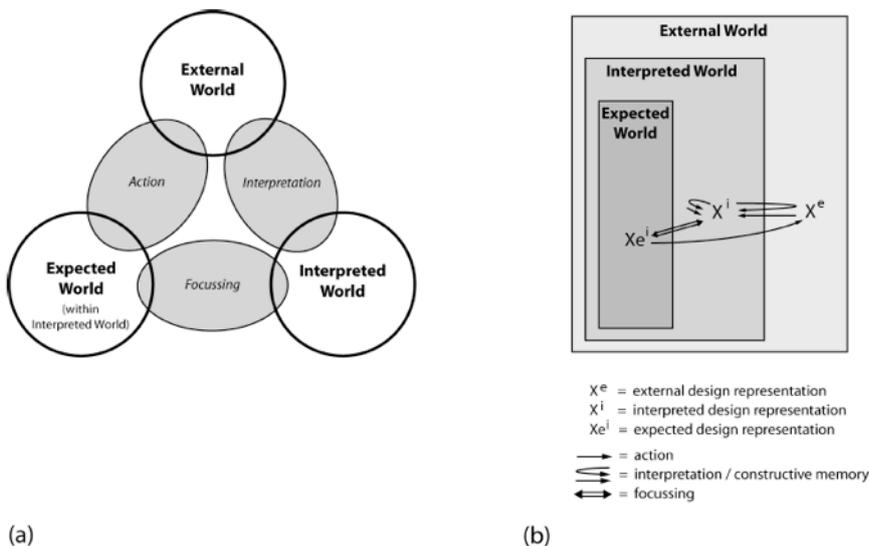


Figure 3.1.1 Situated designing as the interaction of three worlds: (a) general model, (b) specialised model for design representations (Gero and Kannengiesser, 2004)

The three worlds are linked together by three classes of connections: interpretation, focusing and action:

‘Interpretation’ transforms variables, which are sensed in the external world into the interpretations of sensory experiences, percepts and concepts that compose the interpreted world.

‘Focusing’ takes some aspects of the interpreted world, using as goals for the expected world that then become the basis for the suggestion of actions. These actions are expected to produce states in the external world that reach the goals.

‘Action’ is an effect, which brings about a change in the external world according to the goals in the expected world (Gero and Kannengiesser, 2004).

In figure 3.1.1(b), this model also presents the set of expected design representations (X_{ei}) corresponds to the notion of a design state space. This state space can be modified during the process of designing by transferring new interpreted design representations (X_i) into the expected world or transferring the expected design representations (X_{ei}) out of the expected world. This leads to changes in external design representations (X_e), which may then be used as a basis for re-interpretation, changing the interpreted world. Novel interpreted design representations (X_i) may also be the result of constructive memory, which can be viewed as a process of interaction among design representations within the interpreted world (Gero, 2010). Both the interpretation and constructive memory are represented as push-pull processes. This emphasised the role of the designer’s individual experience that constructs or pulls new design concepts to match first-person knowledge rather than just replicates or pushes what can be seen as third-person knowledge (Gero and Fujii, 2000) (Gero, 2010).

Gero and Kannengiesser’s situated designing model demonstrated how designers’ understanding is shaped in design, and how to functionally view the reflections in design actions. It revealed the key points to consider for exploring research and developing understanding through the action-and-reflection design process. It also affirmed that design could be a process of generating understanding, as well as a media for representing and exchanging understanding.

3.1.2

Designerly thinking – how to deal with the complexity

Dorst suggested as designerly thinking “a kind of design research in which the process and content of design activity are connected with a model of the designer and the context in which designing is taking place” (Dorst,

2008, p.7).

Design research tends to be attentive to the situation of designing, and to the experience of the designer, due to the centrality of design practice. The knowledge in design is tacit, but it is also eclectic. It is not only about the essential, necessary, but also the desirable. This means the design research also relates to the assessment of the possibilities and diversities that are relevant to individual desire. For my research, such desires for manifesting Chineseness can be grouped into some common characters through the different design status such as cultural transfer in different layers, with holding different purposes, as well as on the Chinese or non-Chinese side (refer to the cultural transfer design explorations in Chapters 4-7).

Jonas challenged design researchers to “claim an appropriate share of the definition of power regarding future conditions of living”. He argued that designers should be involved in design research in order to reveal the potential in designerly approaches (Jonas, 2007). The potential also means a huge diversity. For instance, studying in which ways designing has a potential for designers’ interest in the future by inclination or profession, and at the same time analyse in which ways it is at risk of not living up to this potential, is a question that design research is ideally placed to address.

If saying that Schön’s reflective design concept and its relevant models offer a view in terms of how to explore and exchange the understanding about Chineseness through design, how to evaluate design actions and reflections, and how to situate design representations, then the designerly thinking gives rise to a notion about how to regard those things in design practice that we did not do. It brings my awareness about ‘why not?’ in to my research – what are the opportunity and meaning for our ignored aspects in the Chineseness manifesting projects.

Moreover, what I can investigate in, through and out of Chineseness, is my perspective of thinking through my experiences: how I explore it, locate it and characterise it; as well as, reflected through this process, how to motivate designers working on this topic to manifest Chineseness in design practices. It is impossible to completely analyse other’s work (Cross, 2001). The design relating to my research area faces fuzzy issues, such as globalisation, technology, as well as the diversity of designers and their particular stances. This unavoidable ambiguousness and subjectivities means it is impossible to generate a pure theory through research without its design practical reflections. Designers also have much less interest to other disciplines than to the design activity itself. What designers need are sparks and spurs for creation rather than repeatable rules or a certainty.

All of these above considerations address my research into design practice, through action-and-reflection processes. This is a typical learning by doing process, which is explored through my design of research and the observation of other research participants’ work.

3.1.3

Action research – how to explore the research

My research deals with two aspects: my practice – how I design my research; and the participatory designers' work – how I organise, observe and analyse their work to ensure that my argument has rigour. The two aspects both aim to solve problems or reflect the process of issues addressing.

Action research is regarded as a method in my research. It is a combination of research that facilitates. Tracing back its history, Kurt Lewin (1946) first describes action research as a comparative research on the conditions and effects of various forms of social action, and research leading to social action (Lewin, 1946). Lewin's action-research integrates theory building and practical grounding. It assumes that "there is nothing so practical as a good theory" (Kurt, 1951, p.169), the best way to understand something is to change it (Kurt, 1951). Action research has developed into a big family in the last decades that tends to be more theoretical actionist and links with broad social movements. Participatory action research is the most inspiring one for my work.

Participatory action research overlaps the action-and-reflection learning process: "communities of inquiry and action evolve and address questions and issues that are significant for those who participate as co-researchers" (Reason and Bradbury, 2000, p.1). Participatory action research tends to focus either on solving practical problems or strengthening the interconnections of self-awareness, the unconscious in experiences (Chevalier and Buckles, 2013, pp.9-11). Developing a communicative way to bridge the gap between pragmatic experimentation and the human psyche tends to be the key to it. According to its principle, the practitioners make a concerted effort to integrate three basic aspects of their work: participation (life in society), action (engagement with experience), and research (soundness in thought and the growth of knowledge). Hence, participatory action research tends to be a pluralistic orientation to knowledge making, rather than a body of ideas or methods.

Methodologically, action research is defined by cycles of taking and giving in the form of planning, acting, observing and reflecting. There are a variety of models to reflect how such circles promote the understanding. For instance, in the information system field, Hevner's model defined science research cycles into three: a relevance cycle, design cycle and a rigor cycle (Hevner et al., 2004). Rather than a practical method in research, this model is more from an ontological aspect as a property of the design science research paradigm. This is similar to Gero and Kannengiesser's reflection-in-action model (figure 3.1.1).

Practical and participatory in nature, Kemmis and McTaggart's spiral action research model (Figure 3.1.3) consists of self-contained cycles of planning, acting and observing, and reflecting suggestions. Kemmis and McTaggart maintained that the stages are not rigidly structured; they

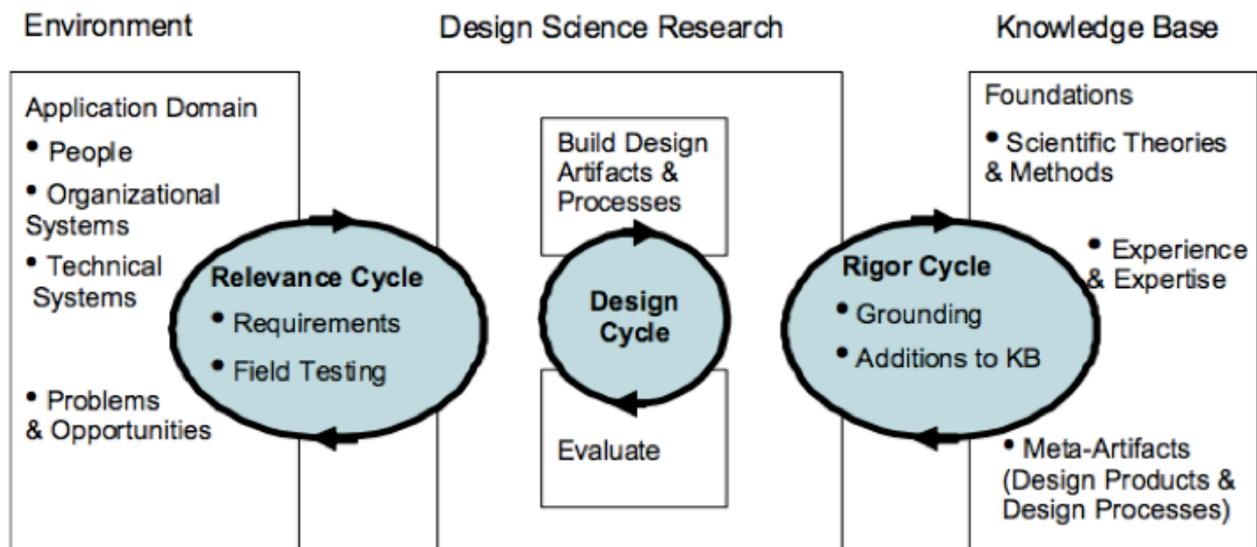


Figure 3.1.2
Design science research cycles
(Hevner, 2007, p.88)

overlap, and initial plans quickly become obsolete in the light of learning from experience. In reality the process is likely to be more fluid, open and responsive. For me, this model is appealing, because it offers more opportunities and opened-endedness to practice and attain a better understanding. The analysis and exploration of understanding can be organized more explicated in this way.

O’Leary’s cycles of action research model shown in Figure 3.1.4 is also a spiral structure, portray action research as a cyclic process which takes shape as knowledge emerges. He maintained that ‘cycles converge towards better situation understanding and improved action implementation; and are based in evaluative practice that alters between action and critical reflection.’ (O’Leary, 2004, p.140) This model sees action research as an experiential learning approach. It changes the goal continually through the circles of refining the methods, data and interpretation of the understanding developed in the earlier cycles. It can be regarded as a model in terms of the reflection-in-action concept as well. Moreover, emphasizing of the observation for understanding and changing in this model parallels the cooperative aspect of the research that emphasises the participants as co-researchers and researcher act more as an observer. The research process includes these four stages at each cycle with deepening experience and knowledge of the initial proposition, or of new propositions, at every cycle.

According to Bassey, action research is an enquiry, which is carried out in order to understand, to evaluate and then to change (Bassey, 1998). Hopkins remarks that ‘action research combines a substantive act with a research procedure; it is action disciplined by enquiry, a personal attempt at understanding while engaged in a process of improvement and reform’

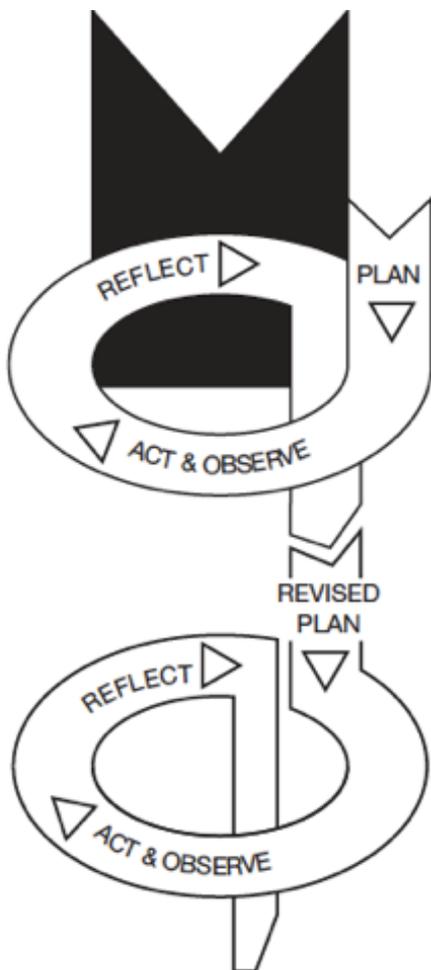
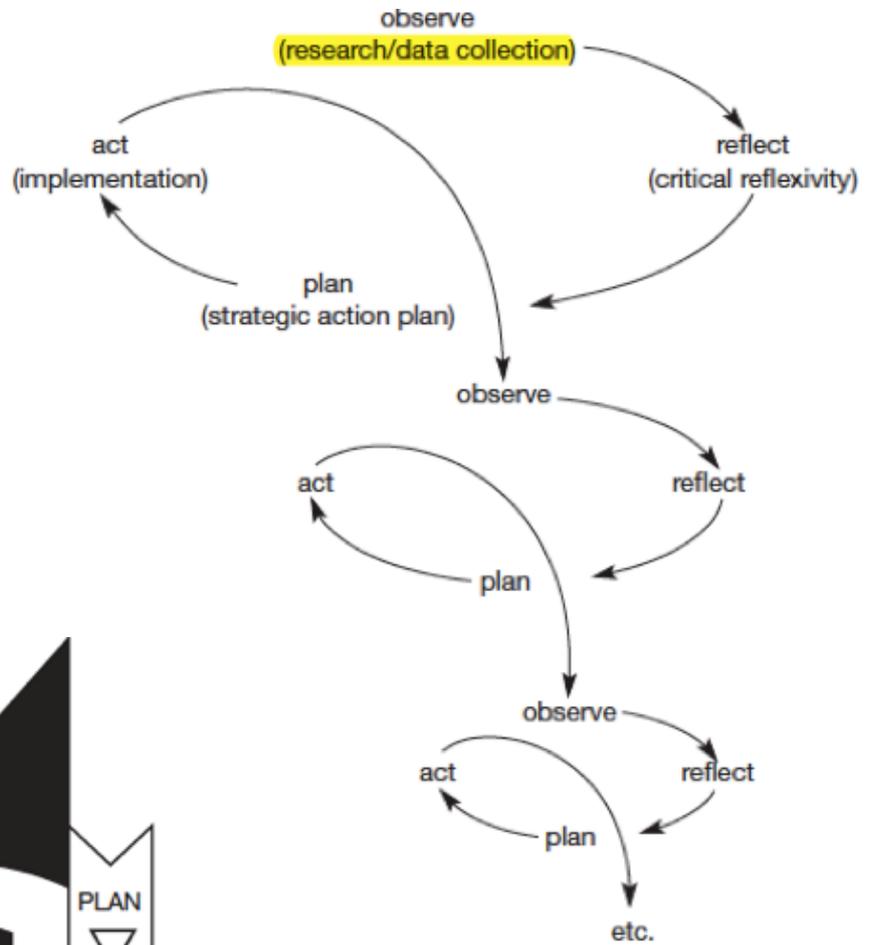


Figure 3.1.3(Left)
Spiral action research model (Kem-
mis and McTaggart, 2000, p.278)

Figure 3.1.4(Right)
O'Leary's circles of action research
model, 2004

(Hopkins, 2002, p.41). Action research tends to be a soft option in my research, as a liberally methodological approach. Because of its softness, the action research allows for more space for my search:

- 1) Involving my research with practice
 - 2) Driving the participatory and situation-based research
 - 3) Solving problems;
 - 4) Constructing theory from practice;
 - 5) Involving analysis, reflection and evaluation;
- (Koshy, 2005, p.10)

These presented models deal with design as an activity, taking design as a verb rather than a noun. My research is through design. In my whole research process, which depicts in the following chapters, I act as a design entrepreneur, sending up situations in which involve my research participants in designing Chineseness. In this process, these models tend to be research methods for me - exploring my research into practices.

3.2

Methodological leads in projects

The parameters of the study were defined at the start. The contextual review gave the insights and an initial plan for the investigation of Chineseness through action research, narrowed down the research through design in terms of locating Chineseness, characterising it and manipulating it into design.

Carrying out action research is a rewarding experience. It practically allows for a variety of methods. In this section, I introduce the methods that I adopted for developing the projects, collecting and analysing research data, and exploring the practice into theory. Depending on the nature of my research – action and reflection guided, learning by doing - the methods are initially planned; yet do not go through a predetermined set of steps. The following synthesis depicts the research method in the project that benefits from the strength of grounded theorizing, participatory design and critical design frameworks.

3.2.1

Grounded theory

Rather than beginning with any existing theory, my research started with generating, searching and collecting qualitative data first. Questions were asked and later shaped in research practice:

What are the aims of my research?

What aspects am I focusing on?
What do I need as evidence to achieve my aims?
What is realistic and feasible?

My research focuses on designers who deal with the Chinese design context. It is an interpretation of the analysis of research participants' actions and reflections in design projects, in terms of different cultural transferring aspects. Moreover, as it is driven by practice, my proposal and the available resources in real practice are the realistic and feasible factors that I need to bridge. This research is qualitative, as the data is more in the form of transcriptions, descriptions and analysis from documents. I choose grounded theory as a form of research done on the outcomes of other research. Therefore, it is meta-research.

Another key of my research is that it is developing theoretical analyses from the collected data, and subsequently gathering further data to check analyses (see projects in Chapter 4 and 5 and their relevant appendices), which I noticed after the later two projects 'Chinese folk art workshop' and 'mobile interaction design for the Chinese elderly' that are depicted in Chapter 4 and 5. Hence, at the earlier stage, this research was holistically addressed by qualitative grounded theorizing. As Glaser and Strauss advocated, combining coding with analysis to help locate and build research into 'grounded theory' (Glaser and Strauss, 1967).

According to Glaser (1978), 'grounded theory is a method to get though and beyond conjecture and preconception to exactly the underlying processes of what is going on, so that professionals can intervene with confidence to help resolve the participant's main concerns' (Glaser, 1978). It emphasises the inductive generation of theory from data, rather than the collection of data to test the theoretical value (Seale, 1998).

A simplified grounded theory model includes:

- 1) Try to generate theories through data rather than through prior hypotheses
- 2) Use a process of 'theoretical sampling' of successive sites and sources, selected to test or refine new ideas as they emerged from data, rather than identify a single site of the outset
- 3) Code data to show action and process
- 4) Raise codes into analytic categories to compare
- 5) Check and fulfil categories with theoretical sampling and integrate categories into a theoretical framework
- 6) Stop data collection when it research

- ‘theoretical saturation’
- 7) Develop these categories into ‘formal theory’, which is general analytic framework with relevant outside of setting (Silverman, 2011, p.73).

My research started with searching and collecting data first, including the previous work of contextual review, rather than beginning with any existing theory. It was explored initially as a grounded theory process - a discovery of theory from data systematically obtained from research, focusing on experimental data itself rather than logical deduction (Glaser and Strauss, 1967). Moreover, in the earlier projects, my research data were collected in episodes punctuated by periods of data analysis. The research directions were separated into different layers of Chinese culture and cultural relevant designs. These data were coded into categories later, to generate a theory (in Chapter 7).

3.2.2

Participatory design

Participatory design approach in my research parallels Kemmis and McTaggart’s, and O’Leary’s action research models, a way to bring the research into a participatory frame, involving co-researchers’ work. My initial hypothesis is that there exists something called Chineseness, and it can create value in design. The earlier projects were very based on this position. By questioning what benefits that Chineseness can bring to the different aspects of design through cultural transfer, the project processes were inspired by the participatory design.

Participatory design originates from Scandinavian software development traditions (Foth and Axup, 2006). A culture of social democracy and powerful unions encouraged the participation of effected workers in technology development processes (Floyd et al., 1989). It advocates the collaboration of software researchers, developers, workers and management produce to workable designs which help to improve the lives of those that use it.

My projects focused on the design of a specific product for specific settings about Chinese cultural transfer. This process was led by the categorising of data analysis of grounded theorising (refer to chapters 4-7). Meanwhile, it involved designers and users in projects as participants in the research process and attempted to create new ideas and directions about manifesting Chineseness from different aspect of culture. This is quite similar as the core in participatory design approach; but the difference is that creating new technology drives the later one.

Foth and Axup’s research (2006) compared participatory design and action research. Through presenting each type of case study, they showed

the participatory design and action research frameworks share a similar interest in participation, but have different strategies for doing so and different intent (Foth and Axup, 2006). According to Foth and Axup, action research is not restricted to any distinct method. It benefits from its soft methods that tend to pay particular attention to the fuzziness of research involving people. Participatory design tends to augment people's abilities in existing job functions and are often requested by the users, or workshop participants themselves, in methods such as collaborative or co-design. In my work, participatory design and action research is introduced as similar participatory traits. However, their difference is, the action research acts as the holistic method from beginning to the end of my research, as an overall strategy for exploring the understanding in my research; the participatory design concept shapes the earlier two projects (in Chapter 4 and 5), forms the collaborative workshops, and ensures the iterative communication and interaction process in the workshop.

3.2.3

Critical design

There is a gap between the analysis, interpretation and the experiences. This gap is there because my work is constructed of equal parts: what I provide to the participants, what they bring to the interaction (in experience); what the participants provide, and what I analyse as the research actions and reflections (in analysis). The critical design approach mainly led the later projects "Top-secret islands" and "Sex education workshop" which indicated in Chapter 6 and 8. These two projects attempted to promote the implication of Chineseness into communicational.

Critical Design uses speculative design proposals to challenge assumptions, preconceptions and roles of design in daily life, as a term first used in Dunne's book "Hertzian Tales" (1999). Although, according to Dunne and Raby, critical design is more of an attitude rather than a method, which uses both the design and its process as a vehicle for promoting thinking about existing values and culture (Dunne and Raby, 2001). I treated it as a method in my project (referring to Chapter 6) to unchain the Chinese cultural transferring design from a conservative product design area into a broader philosophical one, raising awareness, exposing assumptions, and sparking debate in the investigation of Chineseness. Critical design also involves probes as ambiguous stimuli that I – as the designer of project – send to the participants who then respond to them, providing insights for the research synthesis in the design process.

In summary, my research practice is shaped by the methods and connections it creates among different domains. Also its cultural interrelation prompts this research for a wide area. Pierre Bourdieu describes 'the logic of practice' as operating through strategies that are not pre-determined but emerge according to specific demands and contingencies (Bourdieu, 1992).

The field of practice-based, participatory action research cannot be established in an identifiable methodology. My method in projects comprises critical principles more than strict procedures. I began with methodological ideas that stem from grounded theorising and participatory design, collecting and analysing data from collaborative design workshops, as well as through design project relating to specific Chinese cultural design aspects, moving into the next project with the analytic questions from the previous ones. Then, with the shift of my understanding about manifesting Chineseness – both the meaning and intent – I used critical design. The research tended to be more reflective and open-edged. I addressed the design that is depicted in Chapter 6 itself as a research interpretation, rather than generated purely from data in terms of grounded theorising. In this way, method in my research is the setup for the projects, not the results that come after.

3.3

A summary of methods – linking to the projects in the following chapters

In the following Chapters 4-6, through grounded theorising and review of the relevant design methods, a set of work emphasised the creation of theoretical statements from the inspection of data, I initially attempted to characterise what the specific of Chinese culture is (referring to these chapters and their relevant Appendices 5-7). I also used the grounded theory circles between episodes of data collection and analysis, the one informing the other, to exhibit good concept-indicator links (Seale, 1998, Glaser and Strauss, 1967).

The data is the research participants' concepts, creations and conversations in the workshops. New ideas sparked in the data analytic process, arising from the data but tended to different perspectives, which neither can be coded into categories, nor grouped together to be compared, such as, unconsciousness processes at design in the Chinese or non-Chinese designers, or my personal research interest shift. But through this process, I explained how the generated questions and emergent phenomena caused 'changes' in my research. The changes are in terms of my research interest, argument about Chineseness, and how to evaluate it.

My practical work brings out questions about the Chinese cultural and behavioural complexity, as well as broadens the research file, for it is less of a hierarchical method. For instance, more than the Chinese traditions, the project "mobile interaction design for Chinese elderly" in Chapter 5 is also about the old and young generations' behavioural difference and their communication, what they can learn from such collaborations, as well as how I can tell this research story about Chinese culture. Through my increasing awareness of the tacitness of Chinese and its importance for design, in the projects, I began to notice and attempt to make explicit my understanding of Chineseness through reflections on design (Schön, 1983). That is way

I drove the later project ‘top-secret islands’ in Chapter 6 into the culture probes of critical design way.

Moreover, Chineseness can be a philosophical and psychological concept that closely links to its reviewer’s standpoint. Simultaneously, another important consideration in the initial research process was the positioning of myself as researcher in and between the Chinese and Western fields, working across design and culture. Through such comparison and analysis of different perspectives in terms of culture and design, I was also slightly shifting my research stance from a side that was crucially benefitting the Chinese (broadcasting Chinese culture for commercial purposes, for instance) to a less pragmatic and for wider understanding of Chinese culture within the contemporary design context. Returning to the data analysis, this was to become a quandary particularly in relation to experience and interpretation. In the projects, I asked the following questions:

How and why could I claim authority for producing a contemporary re-evaluation of Chineseness in design?

Where was the integrity in that and what kind of stance could I take, bearing in mind my own Chinese awareness and pride, as well as my western educational background?

Hence, it led my research into a more design reflective direction rather than one that was respectable in terms of its evidence and rationale. This is another reason for that my research tended to be critical design method leading in Chapter 6. The project “top-secret island” depicted in Chapter 6 is a shift of my research from searching conditions through data analysis for developing a Chineseness theory into raising awareness through design reflections for sparking debates, provoking actions and exposing assumptions. On the other hand, it samples how Chinese political/philosophical aspects are transferred into design.

The collaborative workshops of Chapters 4-6 involved bringing the design teams together to explore issues in three set-up situations: Chinese cultural symbolic, behavioural, and political/philosophical transferring into design. Such a classification of manifesting Chineseness is for coding data from design practice into categories, according to the grounded theorising. This identification of the core category grouped together the different incidents in design projects, so that they can be compared and analysed systematically, consequently generates the cultural transfer structure in Chapter 7.

Overall, I depict the action research in my research is methodological mixed and soft: through a process of setting statements for designing Chineseness, then formulating researchable questions for data generation;

simultaneously, the generated data and questions referring to later projects; the later findings also relating to the previous analyses. The initial data collection and analysis was driven by grounded theorising, yet can lead to different methods based on practice - critical design - in my project. Figure 3.3.1 represents the structure of my research through design. A central idea reflected through this construction is that my practical experience and its phenomena define their characteristics about Chineseness. In turn, this is associated with the concept of action research 'an interactive process that balances problem solving actions implemented in a collaborative context with data-driven collaborative analysis, or research to understand underlying causes' (Reason and Bradbury, 2000). It also enables future predictions about personal and organisational change in research practice.

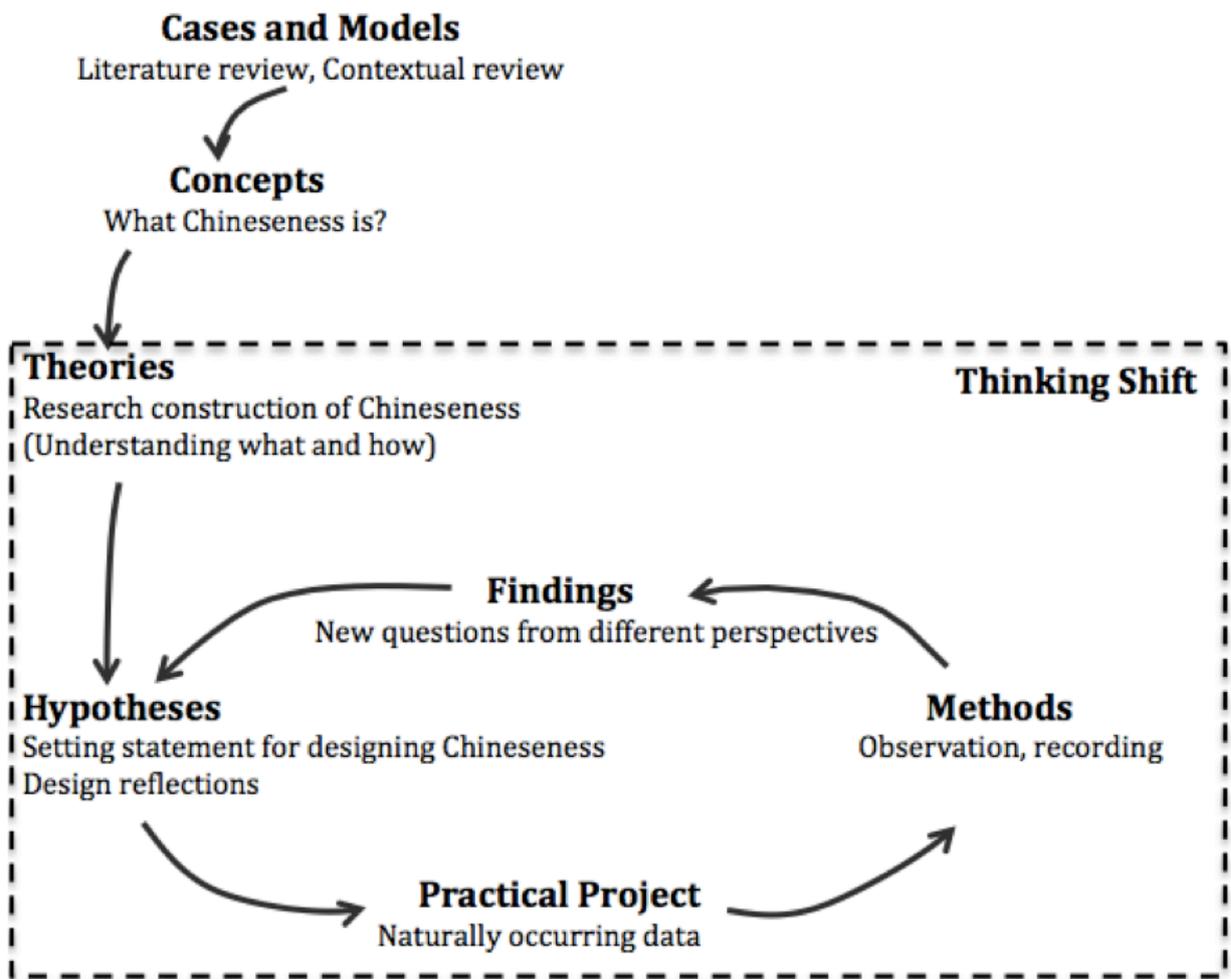


Figure 3.3.1
Research methodological construction

Part 2:

An approach absorbing Chinese cultural elements into design projects

Chapter 4:
Chinese cultural transfer in terms of symbols: Chinese folk art workshop

Chapter 5:
Chinese cultural transfer seen in terms of behaviours: mobile interaction design for the Chinese elderly

Chapter 6:
Chinese cultural transfer in terms of its philosophical and political impact: Top-secret island workshop

Chapter 7:
A systematic structure in terms of Chinese cultural transfer

Chapter 4:

Chinese cultural transfer in terms of symbols: Chinese folk art workshop

Icons and patterns are the visual carriers of Chinese culture. In relatively tangible ways, I began my project with the Chinoiserie concept, a technical sophistication of Chinese elements, with questions how to combine Chinese symbols with contemporary design? Moreover, I compare the Chinese cultural form-givers through Chinese and non-Chinese sides.

This chapter describes an exploration into the absorption of Chinese folk art elements and reveals how these can be synthesised into new concepts by abstracting these visual elements and integrating them with product designs in different ways. A workshop was held to explore my research, with students from the IDE department at the Royal College of Art in the UK and Art and the Design Academy of Tsinghua University in China. It was one part of IDE Go-Global 2010 Beijing project (Hall and Childs, 2012), which worked with traditional Chinese craftsmen collaboratively. Through multiple methods including craftwork, market observation, case studies, brainstorming and concept design, the workshop results demonstrate an understanding of the transferred object from its practical context of local traditional Chinese symbolic art and essential factors, which also produced my initial evaluation of cultural transfer through practice. On the other hand, the workshop could be seen as both a rethink and experiment to discover the value of Chinese elements in products through the interaction of individual designers and teams. Analysis of the Chinese symbolic transfer is conducted in respect of both global and Chinese designers' perspectives (Yao and Hall, 2011).

4.1

Workshop research questions and methods

Through my contextual review, I noticed that local cultural elements are an increasingly important element of the creative activity in developing economies in order to capture meaningful aesthetic and functional attributes that display cultural relevance in home markets and marketable differentiation for international export sales (Lin, 2007, Moalosi, 2007). As introduced in the previous chapter, Lin's Taiwanese aboriginal culture product design model is an exploration of a design method comprising the steps of identification, translation and implementation. This highlighted how to apply aboriginal patterns in a step-by-step approach. Lin also insisted that designers should understand and value the aboriginal culture correctly if they want to apply the patterns. There is no reflection in Lin's work about how this method works practically (Lin, 2007). In what appears to be a deeper approach, Moalosi's African folk art oriented design model was developed theoretically from analysing and focusing on culturally oriented design meeting social factors. The model introduces the complexity of cultural elements, the local symbols and their connections with the so-

cial context. His methodology is not appropriate for design practice either, for it related to many background factors for designers to be able to access while ignoring the complexity in actual design practice, including the gap between knowledge of approach and actual performance (Moalosi et al., 2007). For these two existing culturally oriented design models, there still lacks work that could bridge the gap between research and appropriate methods and design practices. How can symbolic culture be consciously integrated into design practices?

Thus, rather than analysing adaptable methods for Chinese symbols transfer into design, this workshop was discursive at the integration of principle, theory and methods with practice that gives rise to a new model. It is based on the cultural transfer design approach of group work, with no limitation on participants' creativity, concentrating on distinct routes that take place through creative steps when designers generate a cultural symbolic transfer.

4.2

Workshop flow

The workshop began with the collaboration of design students and traditional Chinese craftsmen. The venue for the workshop was the Art and Design Academy of Tsinghua University and it took place between 21st and 22nd April 2010 (the workshop brief and more information refers to Appendix 5).

The participants included fifteen dual Masters students from Innovation Design Engineering (IDE) department at the RCA and Imperial College, five MA industrial design students from Tsinghua, tutors from the RCA and Tsinghua and five Chinese craftsmen from different folk art fields including paper-cutting, clay sculpture, Chinese calligraphy, theatrical face painting and dough sculpture.

The original pedagogic aims were to expose design students to concepts dealing with folk art, a key component of Chinese traditional symbolic culture. The workshop steps included observations, case studies and concept designs that enabled students to absorb knowledge of certain Chinese craftwork, analyse Chinese cultural elements in existing products and attempt to create or improve a contemporary design using Chinese elements at the conceptual design stage. It was also a practice to better understand the importance of cultural value in design and the methods to realize it. It focused on the design students' input and output, which was facilitated via the learning from the craftsmen and communication with design tutors. The output was expected to show the different possibilities of cultural symbolic applications into design. Meanwhile, the craftsmen would have the opportunity to familiarise themselves with contemporary Chinese and international ideas about their work and receive creative inspirations through their participation.

Step one:

Workshop and relevant knowledge introduction

One, Briefing on the aims of the workshop, timing and events.

Two, The workshops: these were run in five teams of three students from IDE and one from Tsinghua with each team assigned one craftsman to collaborate with paper-cut, calligraphy, clay sculpture, theatrical face painting and dough sculpture. The following short introductions are translated from the Chinese version of the handbook, 'Chinese Traditional Arts & Crafts Show' (Hu, 2008):

Paper-cut

Chinese paper-cut or Jian-zhi 剪纸 is the first type of paper cutting design, since paper was invented by Cai Lun in the eastern Han dynasty in China. The art form that later spread to other parts of the world with different regions adopting their own cultural styles. Because the cut-outs are also used to decorate doors and windows, they are sometimes referred to as "chuāng-huā" 窗花, meaning Window Flower. In the north rural countryside in Mainland China, paper-cutting is a traditionally female activity. In the past, every girl was expected to master it and brides were often judged skilful or not by their paper-cut skills.

Chinese calligraphy

The local name for calligraphy is Shū-fǎ 书法 in China, literally "the way of writing." Chinese calligraphy is an important and appreciated aspect of Chinese culture, which is normally regarded as one of the arts

Clay sculpture

Chinese folk clay sculpture is three-dimensional artwork by shaping and combing clay. While different from the sculpture practice in the west, Chinese traditional folk clay sculpture does not limit the point-line-surface concept, but focuses on catching the abstract immaterial appearance.

Theatrical face painting drawing

Theatrical face drawing is a unique type of art of Chinese drama. The fixed and personalized patterns

make a stronger aesthetic effect because of their exaggerated colours and different lines. It has abundant colours with different colours representing different characters and personalities in the drama. For example, red represents faithfulness and bravery; blue means being resolute, bold; white is likened to cattiness and guile,..

Dough sculpture

Dough sculpture involves the making of figures, which are mainly from Chinese folk stories, with the material of sticky powder in different colours, by hand and with simple tools. These figures are usually made quite small and in a delicate style.”

Step two:

The five teams worked with craftsmen to gain these traditional techniques for inspiring design ideas that will be applied to contemporary products in the next stage of the workshop.



a	b
c	d
e	

Figure 4.2.1:
a Team1: Paper Cutting
b Team2: Chinese Calligraphy
c Team3: Clay Sculpture
d Team4: Theatrical face drawing
e Team5: Dough sculpture

Step three:

This is where the five teams visited a range of markets with cameras to gather images of products that were designed with Chinese cultural transfer or looked very “Chinese”. This was a step for students to observe the products in the consumer market, which they thought were Chinese culturally relevant. It was also a chance for them to express and share their impressions about Chinese symbols.

Teams then discussed and classified the results through insights and analysis around the question ‘how do you judge the cultural transfer of a design, visually, or behaviourally?’

**Step four:**

Brainstorming and concept generation stage

These design target products were consumer home essentials, with the requirement of combining folk art elements abstracted from the craftsmen’s session.

Team 1: Bathroom products

Team 2: Kitchen products

Team 3: Bedroom products

Team 4: Living room products

Team 5: Garden products

These products are material links to our daily life. They could be designed in a very culturally specific way but could also be globally oriented. I wanted the students to manifest their understanding of the folk art that they learnt with fewer limitations than if just copying symbols onto products. The cultural transfer could be achieved in terms of the aesthetic appearance of a product, which looked very “Chinese” or reflected only through the design process itself, and not in the appearance. .

Each team was asked to prepare design sketches in order to present the ideas of their cultural transfer concepts. This stage was an experiment in how the Chinese symbols can be transferred.

Figure 4.2.2

Photos taken by participants, Beijing

Step five:

The presentation of each team

Each team was required to undertake product analysis through recorded photographs, design sketches, and in terms of the culturally transferred concepts. The last part of the workshop was a session for discussion of the results and further thinking.

4.3

Analysis of the design concepts from the workshop

In the brainstorming and presentation phases, each team presented more than one design. In the following table, I categorise the design and their concepts (more information refers to Appendix 5.2).

	Corresponding folk art	Appointed design products	Concept design
Team 1	Paper-cutting	Bathroom	Mirror
Team 2	Chinese calligraphy	Kitchen	Stroke tableware
Team 3	Clay sculpture	Bedroom	Personal imprint
Team 4	Theatrical face painting	Living room	Emotional design products
Team 5	Dough sculpture	Garden	Garden gnome

The following three design examples reflect the different perspectives of the three teams to transfer the folk art into design: a creative process of folk art, the typical pattern of it, or the feeling it aroused in the designers.

Concept from team 1:

Bathroom product design through transfer from paper-cutting art.

This designed mirror was used specifically in a bathroom environment. Design inspiration was from two of the characters of paper cutting: “hanging one mirror” and “temporary decoration in a festival”. Applying a special varnish coat on the normal mirror, allowed the mist to rise on this mirror and a paper-cutting pattern to appear in a short time - until the mist faded.

Concept from team 4:

Living room product design through transfer from theatrical face painting.

This team’s design concept came from the idea that the craftsman introduced to them: “different colours represent different personalities” in the

Table 4.3.1
Design output of the five teams



Figure 4.3.1
the “paper-cut” mirror

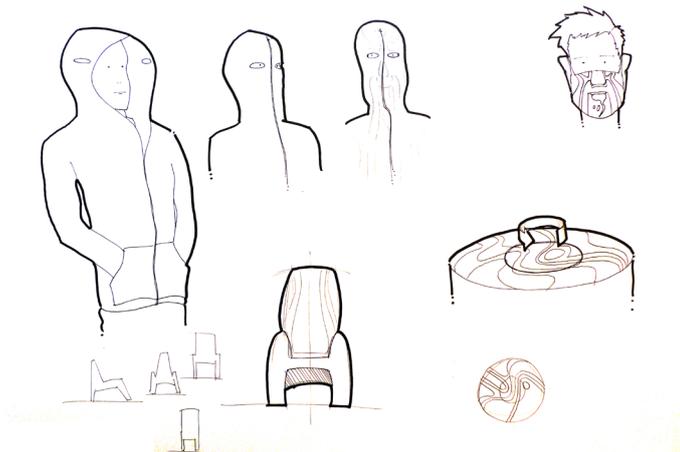


Figure 4.3.2
Living room products and emotions

face painting tradition of Jing Theatre. On this point, they designed a coat with a cap. On it, there was a mask that when you were in a bad mood, you wore as well as doing up your coat: this signified, “leave me alone”. Another example was a series of chair designs. The students learnt from the craftsman that in face painting, the core part was the form and colour that was painted onto the forehead. There were different forehead patterns that corresponded to different characters. The chair designs expressed some forehead forms directly, being used as feet and elbows. Through different feet and elbow colours and forms, these chairs expressed different emotions.

Concept from team 3:

A creative process of clay sculpture.

The members of this team reported that the most interesting and attractive part of the clay sculpture was the “communication” between creator and material, as well as the fact that it left individual imprints on it. This creation process is like a “communication” between people and product,

which they thought quite interesting and wanted to bring into their designs. For example, through adapting a clay-like material, they designed a chest, which allowed its user to impress his/her figure on the door; a pillow that could leave a pattern on your face at the last minute before you get up; a cup leaving the lips shows a figure. They wanted to choose an ideal material, which would allow these personal imprints not to last too long a time but to recover slowly. However, this “communication” is a general character of such sculpturing art form, not from anything particularly Chinese.

4.4

Findings and discussions

If a product is designed with a Chinese pattern or icon directly on it, we may immediately judge it and declare, “Oh, it is Chinese”, following our images of Chinese cultural features. Thus it seems that if the Chinese elements in a design are expected to be visible and recognisable by its users, they should follow the users’ own preconceptions of images of Chineseness. Therefore, the symbolic cultural transfer could be a strong visual identification for local products. However, when adding the question, “how do you determine the stereotypes of Chinese in others’ minds”? For instance, it was difficult to find Chinese stereotypes in team 3 and team 4’s work (the clay and theatrical face painting ones). Team 3 explained that they wanted to transfer a feeling. But team 4 indeed attempted to transfer the craft visually. Also for team 1, they said that although the pattern on the mirror is a paper-cut one, what generated as the attractive idea for this design was its appearing-and-fading effect rather than its pattern.

On this point, coming back to the beginning questions of this chapter:

- How to combine Chinese symbols with contemporary design?
- What is the value of this combination?

The Chinese cultural transfer at a symbolic aspect seems desirable rather than necessary. The design activity quite depends on designers’ personal skill and interest rather than a method.

A discovery in this workshop was the difference between the ways of Chinese and non-Chinese designers’ when dealing with the folk art elements. The participants from IDE were from non-Chinese and international background while the Tsinghua students were all of Chinese background. They worked together in the group project. Due to considerations of the possible unconscious and subconscious influences of the workshop process, I openly questioned team members about their individual contributions. The general feedback suggested that the Chinese students were more sensitive in searching for the meanings of the folk art while the non-Chinese students were more innovative in the design process. At the



Figure 4.3.3
Bedroom products design: communication with your product and personal imprint

brainstorming stage, the Chinese members could broadly imagine relevant applications, ideas and inner philosophies due to their knowledge of the wealth of Chinese cultural knowledge. However, during the design stage, they felt their design ideas were easily limited by existing knowledge, as well as their cultural transfer seemed to remain at a visual level. During the workshop, the non-Chinese design students received the relevant knowledge, e.g. background narratives and philosophies through their Chinese partners' explanation. In the design process, the non-Chinese associations were wider and less limited, combining with more cross-cultural concepts. Compared with their Chinese partners', such concepts tended to appear less culturally specific and less Chinese. Such workshop experiments also generated the following questions: Is this difference a reflection of Chineseness? Since it influences the design process, and can make the Chinese designer's design different to the non-Chinese designer's? Is this point worth exploring further? Does it manifest Chineseness? (These questions will be researched and rethought in Chapter 6)

Moreover, on the first day of the workshop, I asked these questions to participants:

- 1) How do you consider Chineseness in products? Which products do you think are traditional Chinese and which do you think are contemporary ones created through the process of cultural transfer?
- 2) How do you judge the Chinese symbolic transfer of a design and what is its value?
- 3) What is your reflection on the original Chinese characteristics in your design?
- 4) What do you think the cultural transfer way is in your design?

These questions are open, and the answers are ambiguous because of the different interest of design teams. In the presentation section of the workshop, discussions based on the above questions opened out through the two days of the workshop. I summarised as the following:

Firstly, regarding the debate between real traditional products and products created through cultural transfer, participants held that, due to globalization, in general it was fuzziier to define Chinese symbols in products in today's market. For instance, there exist a large number of products that have been used in China for hundreds of years, although today they are already made in a new material or through a technology. But the function of such products that reflected though some fixed form in its design was also a symbol to the non-Chinese, which seemed very Chinese and traditional. A typical example they gave was the electric rice cooker and

soy drink making machine. They said that although there were rice cookers designed in modern forms, they still felt such products were very Chinese. On the other hand, a variety of new products, such as digital ones like an MP3 player that are decorated with traditional patterns appeared to them to be global ones. Through their experience of learning the most traditional Chinese folk art and the observation of the marketplace, participant designers also figured out that a lot of traditional art forms remain similar as in the past. As design develops in part by following society as a whole, various elements influence product design subtly over time. That means it is difficult to investigate an absolute line from 'traditional' to 'modern' cultural transfer in ordinary products.

More discussions arose about what should be the standard to evaluate whether a Chinese symbolic transfer design was successful or not or whether there should even be a standard. As product designers, most of the workshop participants contended that an important criterion for a successful symbolic transfer could also be decided through experiences. Creating "experience" offers a new perspective for manifesting Chinese symbols into design. For instance, the "paper-cut mirror" design from team 1 and the concepts from team 3 provided such a thinking of "designing an experience" through symbolic transfer. Their design revealed that the abstraction of concepts from the paper-cut or clay folk arts could aim to add to the pleasure of using experiences. This could be an important value of the manifested Chineseness into design.

For the designers, their experiences influence their understanding of "Chineseness", judgment of a Chinese symbol, and the way of dealing with Chinese symbolic transfer into design. Similarly, for the design target group, the users, their experiences influence their acceptance of the products. This can also be considered and designed in terms of Chinese cultural transfer. Roux asserted, "in the last century, industrial designers gave form to products; in this century, they will give form to experience" (Roux, 2009).

As an ethical contribution, the other main aim of these workshops was to benefit folk art transmission for the traditional Chinese craftsmen. During the workshop process, the craftsmen took part in two phases. On the first morning, they showed their works and taught the students some basic skills and relevant knowledge. In the presentation phase, they learned the design concepts emerging from their folk arts and expressed their personal opinions. From the craftsmen's feedback, they were quite satisfied when they saw the students' design concepts. They said that this workshop helped them to think about how to express and show their traditional folk arts in particular new ways, e.g. maybe through a suitable modern and international method or medium, which in itself could offer global appeal.

4.5

Summary

It is said that we now live in a small world with a global market. While the market heads toward globalization, design tends toward localization. In many design domains, “think globally for the market, but act locally for design” has become a maxim (Majendie, 2010, Fernandes, 1994). Cultural features are considered to lend a unique character to embed into a product both for the enhancement of product identity in the global market and for the fulfilment of the individual consumer’s experiences (Fiss, 2009, Lin, 2005). If taking this stance towards cultural transfer into design, the cultural symbolism manifesting can be treated in a very pragmatic manner, namely, to add commercial allure. Designers apply the symbols or the inspirations from those symbols; combine them with their designs and in this way, manifest an understanding of Chineseness that has easy appeal.

The different participants’ voices that relate to cultural transfer generate in the presentation of this workshop. They were not just limited in symbolic or visual aspect of culture and design, but also a discussion about what a role should local cultural elements should take in a design process. Following grounded theory method, a memo was written to record this content about the excerpt of conversations and Q&A from workshop (refer to Appendix 5.3). Moreover, for coding and accessing to these voices, I attach four key elements as the label that plays a distinct part to consider cultural transfer: the designer, design, the users and culture elements (information visualised as Figure 4.4.1). These four introduced elements can also help to analyse the data into categories.

Diagramming the symbolic transfer: the designer introduces the symbolic element into design, through his understanding about the relevant cultural elements, desirably making it is attractive to its users. The design as the carrier of cultural symbols faces its users (Figure 4.4.2).

This workshop also got me thinking from another perspective, in the global market, where products are losing their identity, designing local features into a product appears to become more important. This is because of the increasing ubiquity in their function and forms created by a need to satisfy diverse markets (Handa, 1999). Localisation is one of the possibilities to increase design value and create design differentiation. On this point, its importance is not to pursue how much the design reflects the cultural elements, but to find the valuable cultural elements that make design better.

If we regard products in terms of technological mediation, design evolves through users’ experiences and users’ interactions. Comparatively, Chinese cultural transfer into design shouldn’t only be considered as a mix of functionality, local features and aesthetics together¹, but into what to design it for. Why do we regard the Japanese rice cooker as a great Asian

1. On this point, the folk art and the symbols are the visual carrier of Chinese culture. Design can be regarded as a carrier of culture as well. The transfer of symbols into design is more like to mix the elements of the two carriers together technically.

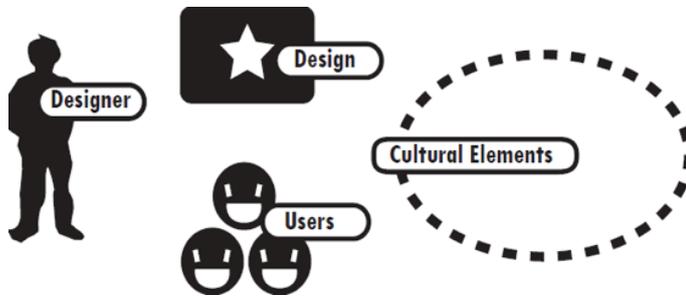


Figure 4.4.1
four key factors in the research

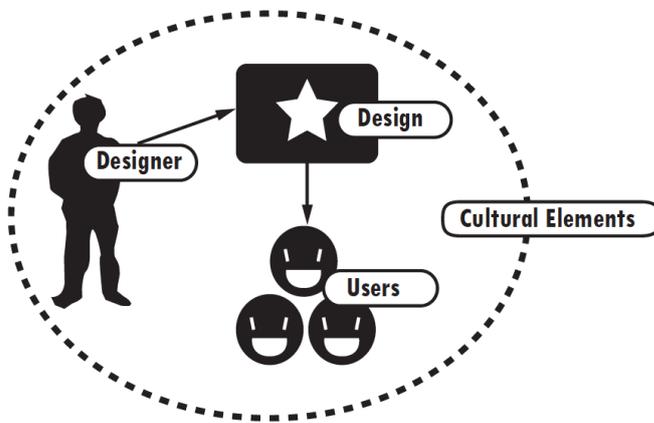


Figure 4.4.2
the relationship of designer, design, users and cultural elements in terms of symbolic transfer

behavioural cultural invention, but consider painting a Chinese dragon on a laptop shallow? For answering such questions, I moved my project centre towards Chinese behaviours, what kind of Chinese users' experiences are reflected in a product and how they subsequently relate to cultural elements.

Charmaz and Bryant put the purpose of grounded theory as a theory construction, rather than application of existing theories. They defined that the grounded theory is a method of qualitative inquiry in which researchers develop inductive theoretical analyses from collected data and subsequently gather further data to check these analyses (Charmaz and Bryant, 2011). This Chinese folk art workshop project is also the theoretical sampling to flesh out the properties of the tentative category of my research. In this project, it was manifesting Chineseness in terms of cultural symbolic layer. To develop this category, my work addressed to its following project – Chinese cultural transfer seen in terms of behaviours.

Chapter 5: Chinese cultural transfer seen in terms of behaviours: mobile interaction design for the Chinese elderly

5.1

Introduction

In Norman's book *The Design of Everyday Things*, he uses the term 'user-centred design' to describe design based on the needs of the user, leaving aside what he considers secondary issues like aesthetics. He pointed out that "user-centred design involves simplifying the structure of tasks, making things visible, getting the mapping right, exploiting the powers of constraint, and designing" (Norman, 1990). Then in his later book *Emotional Design*, Norman divided the approach in this text into three levels of design: visible, behavioural and reflective (Norman, 2004).

In the previous chapter, I described an exercise with students' group work in which I asked them to transfer Chinese folk art symbols into design. It discussed how we should regard this kind of transfer, and suggested what value these may add to design. In this chapter, the focus moved from design-centred to user-centred, from Chinese symbolic to Chinese behavioural aspect. Meanwhile, it is also an attempt to answer the question that arises from the Chinese folk art workshop - if we regarded what the Chinese culture design for, pragmatic and more user-centred, how do we manifest Chineseness - in my research progression.

This chapter highlights the Chinese users' experience and their cultural behavioural transfer into design. The approach aimed at discovering a path and sharing an experience with designers about how to find Chinese cultural behavioural elements, how the behavioural elements could be applied, and their potential value for design. Through this approach, a new insight on Chineseness in design was brought to light: the Chineseness that concerns the Chinese people, the local Chinese users of products.

This discussion developed through projects that introduced Chinese cultural elements, specifically behaviours in terms of mobile interaction design, a three-month research-based project supported by Alibaba Company in China (project proposal to the company refers to Appendix 6.1), and including a collaborative workshop with Masters students in Tsinghua University.

Another important starting point of this stage of the research was the recognition of the complexity of Chineseness in terms of its generated context today. The whole of Chinese society has experienced huge changes during the last thirty years. There is more than one generation who have changed their lifestyle with this rapid social flow. For instance, they had to accept those somehow hi-tech products or new stuff in an extremely short time, especially the old generation. Taking the Internet for example, a lot of the Chinese elderly cannot use it independently without help from the young. This is an issue more generally concerning the generation gap. But why it is so significant in China is also because of the huge Chinese social changing and traditional Chinese people's behaviours keeping. It is also a reflection of the Chinese social context.

What is more, due to the specific user experiences of the mobile, new Internet technologies trend for a more personally geared experience. Design thinking of mobile devices and services seem to need to be more aware of the users' behaviours. Conversely, mobile interaction design can be a good testing and reflecting board for the research of its users' behaviour: What are the distinctly Chinese elements in terms of behaviours? How to discover those tangled and intangible behavioural elements and appreciate their value within this big global interaction design trends?

Why choose the mobile?

Firstly, the uses of mobile phones in China or in the west were generally similar, e.g. phone, SMS, accessing Internet, etc. (This was the situation in summer 2010, when I began this project.) Although the mobile was recognized as a hi-tech product, there were no barriers to accessing mobile techniques or engineering, as the core technical features of mobile phones had already become open source (Android). Without the technical barriers, the cultural integration might be more influential and valuable. The user experiences were the standard by which to judge the mobile design.

What is more, the mobile Internet influence has been reflected in mobile phone hardware, software and service development. Its development can be traced thus: in the hardware field, iPhone and Blackberry, have combined the alphabetic keyboard with mobiles, and have made mobile searching much easier to use. In the field of software and service, 3G Web, Google's products for mobile and RFID payment system etc. are promoting the smart phone use at a rapid speed. Through a report of the Nielsen statistics (2010), in 2008, 14% of mobile users in the United States were using smart phones, while in 2009; this number had increased to 21%. It was predicted that in 2011, the number of smart phone users would be more than the traditional phone users, and would keep increasing (Nielsenwire, 2010). In China, the usage of smart phone and relevant mobile application was much less than in the States, UK or Europe in 2010. In contrast to the west, most Chinese consumers still bought the mobile just as a product, rather than a service.

However, through the Chinese IT market experiences in the first internet revolution, we can anticipate that in the near future, the smart phone device and relevant service facing Chinese users will be highly valued in both commercial and research fields. How such design can satisfy the Chinese local users' requirements, especially behavioural ones, is definitely becoming a challenge.

I conducted initial research on the history of mobile phone development (refers to Appendix 6.2). It revealed that before 1996, with immature technology, the technological factor was the most influential factor for mobile design, reflecting that the mobile tended to be smaller, lighter and multi-functional at that time. The image of future technology in pop art was also slightly influential, but quite limited. Since 1997, the mobile ap-

pearances became various. The focus of mobile design moved from solving technological problems to better and more diverse appearances. In 2007, with the launch of iPhone, the mobile interaction and user experience began to be highlighted. One further aspect was that, although the mobile is a typical global product, the team also listed some of the mobiles created in China. For instance, one of the best sale mobiles in 2002 had a diamond decoration on a red coloured surface (Figure 5.1.1). It emphasised a luxury feeling for its users, as at that time, a mobile was a luxury product for most Chinese.

5.2

A concept design project: Mobile interaction for the elderly Chinese

This project began with the question:

What are distinct Chinese behaviours? How should we put our standpoint on behavioural shift? Why does this matter to design?

This project developed through a typical commercial industrial design research steps: searching for target users and finding for the research points, future research of target users, design, and evaluating. For the three-week workshop and the brainstorming with the Alibaba designers, I had found a target group to explore this question, the elderly Chinese or more specifically, the generation aged between 60-75 years. Interviews and observation were subsequently carried out with this mobile user group. Designers at Alibaba and I then explored a series of design concepts to exchange our thoughts on the relevant questions. At a later stage, I held a workshop with the Tsinghua design Master students, to test the ideas generated in the previous work, as well as to investigate more possibilities of Chinese behavioural transfer into design.

5.2.1

Finding the point

This stage of the work was geared to searching out any potential directions and interests. Indeed, I shifted my standpoint on 'behaviour' at this stage. The initial workshop was with the 4th year BA industrial design students from Beijing University of Scientific and Technology. They were separated into three groups and worked from the following briefs, in order to search out some interesting points for the later research in the company, as well as, this is the students' summer school work at Alibaba:



Figure 5.1.1
TCL mobile phone 2002

- 1) Mobile Development: Search and collect the documents on mobile development since the appearance of the first mobile in 1983. Consider the factors that affected the mobile's development both directly and indirectly - social events, new technological influences, pop art and culture, and so on. Express this information visually.
- 2) Narrative of Chinese users' experiences of technology products: Photograph and video to record users' experiences, then represent or create stories. Find the interest points and ask questions.
- 3) Mobile Transfer: Without consideration of technological limitations, if the mobile existed at a specific era, what would it be like and what aims would it serve? Imagine, design, as well as giving some supporting reasons for your choices.

(The students' work images refer to Appendix 6.3)

Team 1

Through this team's work, I wanted to make explicit the different factors that impact the trend of mobile development, technology-centred or user-centred. Team 1 made diagrams to show the factors that affected mobile development. This team just got access to their data analysis research ability, did not give very helpful or intelligent ideas.

Team 2

Through the work of this team, I wanted to discover more interesting points in Chinese mobile users' experiences, as well as narrow down and specify my starting question. On the storyboard of Team 2, they highlighted two groups of people: the elderly and immigrant workers. They said they chose these two groups of users because they found more inadaptability when these two groups of people used technology products. For the elderly Chinese, one of the reasons is because the mobile function is tending towards multiple functions and the complex. To some extent, the inadaptability of older Chinese people forms a representative reflection of globalization in China. Although people are adaptive, and frequently use mental shortcuts or seek assistance from wherever appropriate, their adaptation and cognitive capabilities are limited by their own backgrounds and experiences. With age, the quantity of new information with which they are faced, and their mental resources tend to decline (Huppert, 2003). At the same time, they are more dependent on their previous habits to familiarize themselves with new stuff. The younger generation living in the new Chi-

nese social context must possess a kind of Chineseness as well. The difference is that they are less dependent on previous knowledge when learning the new. Thus, as Patmore and Matoney argued, in order to ensure that the users of an internet service are able to use it intuitively and effectively, the design of the service must take account or accommodate the user and their context of use (Patmore and Matoney, 2003).

Team 3

Through this team, I attempted to indicate the links between mobile functions and its users' potential requirements because of their social context. This team designed a smart photo for the bureaucracy in China's Han dynasty¹, and devised an animation to describe its use. Through a fictional story, this team depicted mobile interactions in a special social context, highlighted the users' behaviours in terms of its cultural and social influences. Some of behavioural or cultural images about Han dynasty seem significant in people's impressions, through the archeological evidence². In contrast, it is more ambiguous to indicate what are the different behaviours now compared with the past, or what is the different behaviour of using a mobile in a Chinese or universal way. For an understanding of designing Han behaviour, there would be nothing new added for changing people's impressions, as it is already a 'history'. For the understanding of designing today's behaviour, it deals with endless novelty.

Meanwhile, I organized brainstorming sessions with the Alibaba product designers to collect ideas. In the brainstorms, we talked about emotion expression, daily life trail, and mobile functions, and the like. (Brainstorm maps refers to Appendix 6.5)

Then I narrowed down the research target user group to be the older Chinese between 60-75 years. Based on the questions that arose from the brainstorming and workshop, the following speculations emerged:

- 1) The elderly were much less likely to use technology products or services compared with the youth. Why? Because they didn't need them or because those products were of little use to them?
- 2) What are the behaviours of the elderly?
- 3) What challenges existed due to the gap between the universal mobile design trend and the use behaviours of the Chinese?

1. Han dynasty is the second great Chinese imperial dynasty (206 BC–220 AD) after the Zhou dynasty. It succeeded the Qin dynasty (221–207 BCE) by its first emperor Liu Bang. So thoroughly did the Han dynasty establish what was thereafter considered Chinese culture that 'Han' became the Chinese word denoting someone who is Chinese. Refers to 'Han dynasty' on Encyclopedia Britannica online.

2. The most famous archaeological site of Han dynasty is Mawangdui, which was uncovered in 1963 near Changsha, Hunan province. It is the burial place of a high-ranking official, who lived in the 2nd century BC, and of his immediate family. He was one of many petty nobles who governed small semiautonomous domains under the Han dynasty. The uncovered in Mawangdui were important for the information that it provides about life habits, religious, beliefs, practices, as well as artistic styles of the Han period. Refers to 'Mawangdui' on Encyclopedia Britannica online.

- 4) How to transfer the behaviours of the elderly Chinese into design and add value to design?

These questions are also a searching and reflecting through project of what I have challenged at Section 1.1 that feed into the concepts about global and western design epistemological influence into Chinese people, as well as hi-tech and user-friendly for local users.

5.2.2

Further research

At this stage, I separated the elderly into two kinds after several open-ended interviews: the elderly living with their child, or nearby their child, and the empty nest elderly whose children were living in different cities or overseas. The design target group was focused on the latter one, who used many more technology products for their long distance communication with family members.

Our interviewee, Mr Zhang, 65 years old, lived with his wife. Their son's family lived in Germany. He told me that he communicated with his son once a week. Every time he connected with his son, he called his son's mobile, and then hung up waiting for his son to call back when he had time. I asked why not by email? He explained because he was not able to use Pinyin (A-Z spelled-out sounds of Chinese characters) to type. Another finding that I think is quite interesting was the son's family album that Mr Zhang showed to me. His son sent photos via the Internet to one of his young neighbours. The neighbour helped him to produce these photos. He kept the photos in a physical album. Definitely, he thought the Internet album or Renren to be unreliable and hard to use. (Renren is a social network service in China, like Facebook.)

Moreover, we also did some observation on the elderly's daily life at Hangzhou. The early morning exercise is a very communal form of entertainment and communication for the elderly Chinese. We visited the early morning parks and talked with them there to observe their interests. I found that the elderly are more likely to attempt new things than we expected. They wanted to communicate with the youth and show their activity through accessing the new stuff, in order to prove they are still young.



Figure 5.2.1
Interviewee and his family album
(Interview records refer to Appendix 5.4)

However, most of the time, a huge gap exists between the experiences of the elderly and the means of interaction in the new technology. It could be said that they were even two different cognitive systems. The acceptance by Chinese people of the western motivation products is comparatively similar as the elderly facing the young's stuff. Not every Chinese accessed a western cognitive system. They used some of the global hi-tech products not because those products really bring more benefits to their life, but they want to be keeping in time. In fact, to some extent, the 'Chinese elderly' tended to be more local, traditional and Chinese, the 'young's stuff' was more 'in' and global.

On the other hand, through studying an elderly person's mobile (Figure 5.2.2), which was very successful in the Chinese market, some interesting points arose: simplifying the functions of a mobile can increase accessibility for the elderly users, or at least reduce some misgivings about using them. Secondly, technology products are mostly introduced by the younger to the older.

This is not only about the difference between the Chinese generations, but also about their behavioural context: the latter makes the difference.

5.2.3

Design concepts generating from research

This design is explored as a series of phone accessories. It is concept design that expresses the thinking of designers about the older users' access to the functions of the smart phone, in order to bridge some of the communication gaps between the generations, rather than to create commercial or functional products. This design and its previous research work consisted as an experimental design process and a development laboratory (Hall, 2011), in which the design acts as an understanding exploration in terms of Chinese users and their traditional behaviours, but a not yet reliable to be commercially launched.

There are four sections in this series of boxes, representing the four functions of sending and receiving emails, Skype videophone and electric album.



Figure 5.2.2
the elderly mobile, designed by New-plan design studio, China, 2008



Figure 5.2.3
boxes of mobile accessories

- 1) Mailbox: When the phone is put onto the front of box, the phone's camera recognizes the barcode in the box automatically. On the screen, this prompts it to insert the letter. Then the camera takes the photo of the letter and sends it to the contact directly as a modified jpg file.
- 2) Envelop: Put the phone on this pop-up envelope and it jumps into the inbox directly.
- 3) TV: links with Skype videophone.
- 4) Album: Chinese youth use Renren to share information as in Facebook. When the phone is put on the 'album', it guides the user to the previous setting of friends' Renren albums.

This series of conceptual designs was also an output of previous research work. It attempted to link some of the most used smart phone functions with the familiar stuff of the elderly Chinese, in order to simplify the interaction of smart phones for its older users, increasing in that way both the acceptance of the technology and the motivation to use it. What is more, because most of the hi-tech products of older users are introduced by the youth, this design needed to be attractive for the youth in the first instance.

5.3

An evaluating and reflective workshop: Bridging the communication gap: co-design across older and younger Chinese generations

(Workshop information refers to Appendix 6.7)

5.3.1

Workshop flow

At the beginning of the workshop, I shared the first project experiences with the participating young designers. From my research perspective, the aim of this workshop was to investigate the inspiration and approach from the earlier work. It focused on the consideration of the Chinese users' behavioural difference between generations, in other words, it saw the traditional and modern both reflecting on mobile or Social Network Service (SNS) design. Combined with the previous research, through different practical phases and discussions, this workshop explored certain explicit methods for transferring the subtle Chineseness on the level of the behavioural into the design process.

The participants of the workshop were sixteen industrial design first year MA students from Academy of Art and Design at Tsinghua University

and four older users - retired Tsinghua professors. These retired professors can be said the best-educated group of Chinese people at that age. However, they keep a lot common habits as their generation; there still existed big difficulties in them to use smart phones or social network service (SNS). Moreover, another important reason of why they were chosen as the participants is for the easier and more efficient communication and collaboration in this workshop.

All the participants were separated into four groups. Each group consisted of four design students and one older person. Two of the groups' target designs were smart phones for the elderly; the other two were for SNS. The design outcomes were required to be pragmatic, connected with user interface, product, or system design.

The whole workshop lasted for three days, following the steps of group communication, co-designing, brainstorming, design development, and final presentation and discussion. The concepts generated from this workshop were produced quickly. Rather than passive respondents who complied with designers' questions in the workshop, the older users were perceived as participants as well and became designers themselves. Through this co-design approach, designers might gain the following benefits when transferring the Chinese behavioural elements into design:

- 1) Insights directly into the habits of the old through information gathered and expressed by the potential users themselves.
- 2) Facilitation of the collection of information.
- 3) Increased awareness and discrimination of the old and the young's behaviour and thoughts.
- 4) Clear visualization of issues through design that is difficult to express in words.

Step 1: Communication

The group members introduced themselves to each other and then freely chatted about their daily life. The design students were asked to listen rather than speak when talking with older members. And they had to keep the following questions in mind:

- 1) What is the behavioural difference between the old and young?
- 2) Why are there such differences?
- 3) Are these behavioural differences caused by differences in your manner of communication?



Figure 5.3.1
Communication and co-design
between the young and old in the
workshop, Sep 2010, School of Art
and Design, Tsinghua University,
China

Step 2: Co-design

At this stage, the design students showed their own smart phones or SNS first. The older users told the students how they used phones and the Internet on a daily basis as well, and what products and services they targeted. Then they worked together to imagine an ideal product and sketch or tested this design out.

Step 3: Brainstorming and Design Development

Based on the previous work, design students began brainstorming and discussions to find each team's design interests. I suggested that they could focus on the following points:

- 1) What was the difference when the two generations used such technology products? Are those differences related to your daily life habits?
- 2) What problems arose when those highly educated Chinese older users used smart phones and SNS?
- 3) What do they want to use them for? Are their requirements well satisfied?
- 4) In the designs today, is there any example that reflects the older users' needs and solves their usage problem?

Step 4: Experimental Concepts, Expressions and Presentations

This phase is the critical phase of the workshop, when the students presented their work to tutors from Tsinghua and the RCA, as well as some de-

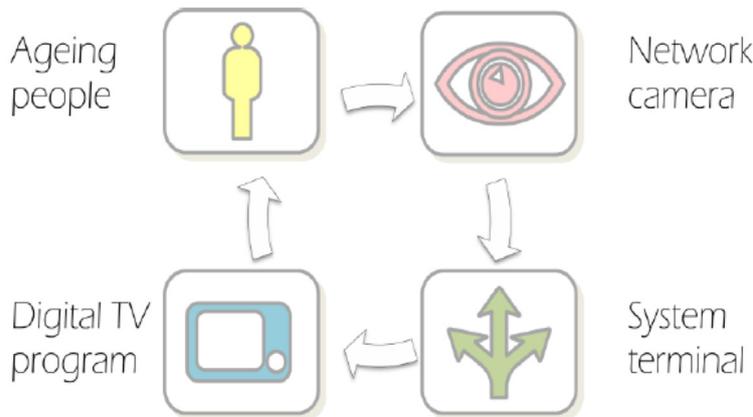


Figure 5.3.2
Workflow of a TV Healthy Sharing
Society

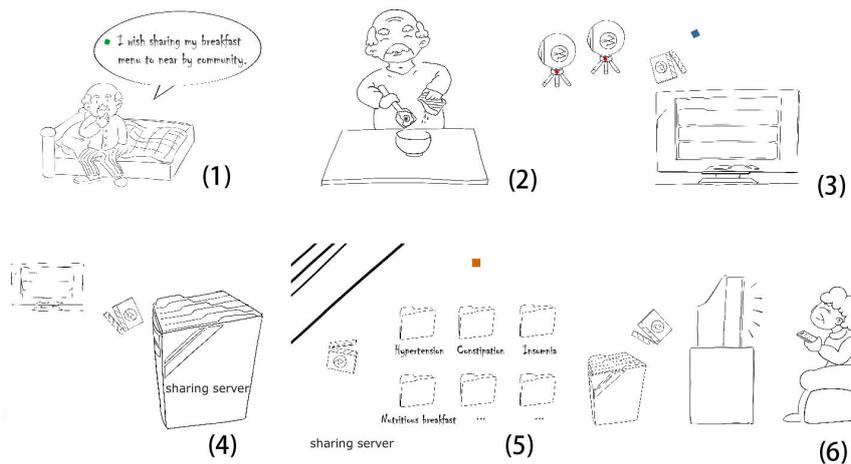


Figure 5.3.3
TV Healthy Sharing Society Design
Narrative (Picture cut from the
Animation)

signers from industry. The following discussions brought more ideas about how to look at the local and universal aspects of design.

5.3.2

Design concepts from the Workshop

The teams spent one day to develop and express their concepts. The following are some of these design cases:

Concept 1: A TV Healthy Sharing Society

This team developed a SNS based on a TV system. Through their communication with older people, they found that in contrast, the young rely on the Internet to gain information; the elderly's accustomed information channel is TV. They are much more familiar with the TV functions than the Internet. The older people's daily life behaviours are reflected in their views about the requirement of information and their ways of getting information. For instance, the elderly participant in this team put health care

first. He required a platform to organize all the information about keeping healthy. As he used to cut newspapers to collect such information, he thought new convenient ones perhaps could replace such traditional media. He also thoroughly trusted in his own experiences of a healthy lifestyle and wanted to share and communicate these with others. As a consequence, in this team, the old and young worked together to imagine an ideal TV based SNS workflow for older users (Figure 5.3.2). After then, the design students of this team developed this workflow and injected more details for creating a happy communication way and refuelling the life for the aging.

Concept 2: A “Shooting & Cooking” Smartphone Service for the Elderly

Through their research, this team contended that, although older people seemed reluctant to use digital products or relevant services, sometimes they did have the needs to use them. In addition, another activity that the elderly adhered to very strongly was sharing discoveries and stories from daily life: a great happiness for them. What is more, this team found that their older partners paid a lot of attention to food safety and nutrition. They believed that information about the treatment of food was the most important for them, as it could help them prevent diseases rather than medicine. Starting from these above points, this team designed a Smartphone service called “Shooting and Cooking” to fit the older users’ requirements in both form and content. Through this concept design, users were able to take photos of food and choose “What to eat today”. The system recognized this

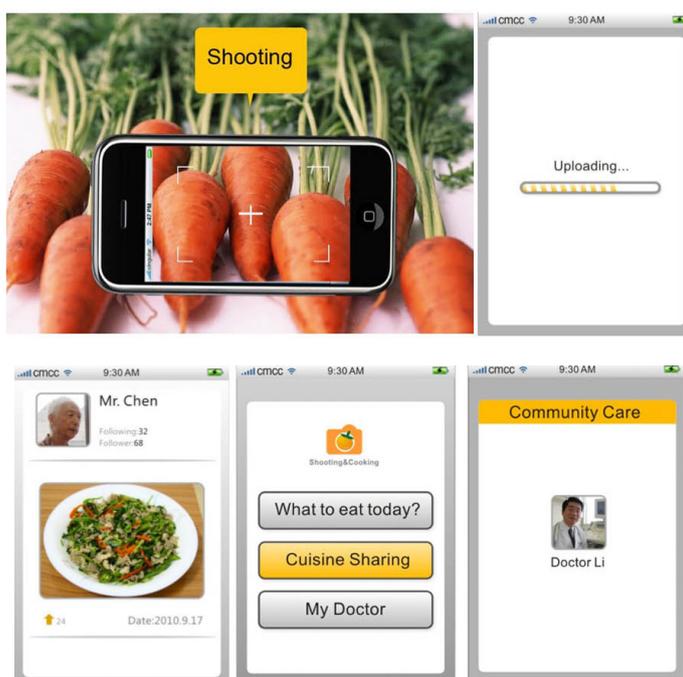


Figure 5.3.4 Functions in “Shooting & Cooking” Smartphone Service Concept Design

food and offered several healthy recipes. By these Smartphone Social Network Service (SNS) functions, users could build their friends' links from the phonebooks, and share the cuisine information with them. Moreover, as food was the older users' big interest, they were able to connect with some community care and gain professional suggestions on sitology quite easily through this service.

Concept 3: iHelp

Some of this team's members were from a business background; so they designed a commercial Internet service model for the Chinese over-70s in order to support them live independently. They found that, with the demands of Internet from the society as a whole increasing, older people were also interested in the content offered by the Internet. However, computer interaction was out of their familiar realm of knowledge and stopped them gaining access to the Internet. The elderly in this team preferred to use their old familiar stuff, for instance, a watch, combining with a function as media to Internet rather than a computer, because they wear their watch every day, but rarely used a computer. On the other hand, this team found that the older people's main consumption was on health food and medicine; they were happy to pay for the commodities that they believed positive for their wellbeing. This team designed a business platform that combined the Internet information and labour-service forms together. This device was a watch, for the designers found that most of the elderly retained the habit of wearing a watch, even though they had mobiles that could tell them the time. Through this device, the users were able to gain access to some functions such as Skype phone and first aid. A personal customer service was the bridge for technical difficulties when they wanted to gain information or services from the Internet³.



Figure 5.3.5
iHelp Device

3. This concept is done in Sep 2010. It foretells the Samsung and Apple watches 2013, which concept is taking watch as a wearable and more convenient accessory of phone.

From a pedagogical perspective, this workshop introduced a culturally orientated design concept into practice, bridging the gap between research methods and design practices. In the presentation, the students stated, “We were very happy to work with these intelligent elderly people. They were really helpful and created a lot of surprises during our work together”. And, “We feel such communications with the elderly is quite efficient and inspiring, a lot of brilliant design ideas come out from it. We think that this is because of the impact caused by the difference.” “Perhaps we can adapt the same method as well, when we want to collect some design ideas from a complex problematic design area”. What is more, from the commercial design research approach to one concerned with improving the lifestyles of the elderly Chinese through mobiles, this workshop achieved through a disruption of the old to young hierarchy in an interactive group work context. It was able to bridge the gap between the young and old.

This older and young design workshop appeared to focus on age related issues rather than any generational cultural transfer. The aged people have an issue with transitioning from traditional habits and thinking to the contemporary world. But how to regard and deal with this issue is also about the cultural behavioural consideration: the aged must get used to the products that evolve from the transitioning of globalisation, or a design should involve its older users’ traditional behaviours.

5.4

Summary

The work depicted in this chapter focused on the older Chinese and their behaviour, and how to make designs acceptable to them. It interacted with a few old people and produce sketches for services that are nice for them, then tested within the groups. In this project, the elderly group reflects the local/traditional behaviours in terms of their inadaptability of smart phones through the whole research process addressed. It indicated what a design about Chineseness in terms of behavioural aspect would be – how to explore the implicit ‘behavioural’ practically, rather than did a mature product and further tested it within the market. On the other hand, Chineseness, in this way, should be regarded as a part of the globalisation, in terms of fitting to some special local Chinese users’ behaviours.

Through this research experience, I perceived a new angle on how design and its Chinese users’ behavioural context could be integrated. The analysis used the same four factors – designer, design, users, and culture element – as the label to data coding. Through this way, it also set this ‘mobile interaction design for the old’ project into the same category as the previous ‘Chinese folk art’ one, as a theoretical sampling. In contrast to the design symbolism, the Chineseness in this project was concentrated on design usability. I explored the relationship between designer, design, users and cultural elements in terms of Chinese behavioural transfer into:

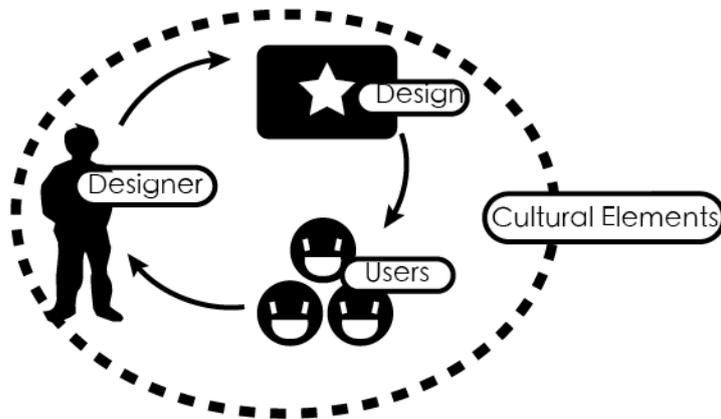


Figure 5.4.1
the relationship of designer, design,
users and cultural elements in terms
of behavioural transfer

designers search and learn about behaviour from users; they add considerations of the users' behaviours into their design, to enhance the accessibility of products (Figure 5.4.1). Sometimes, such designs can impact and change users' behaviour as well, shaping new behaviours. So the behavioural transfer may be cyclical and iterative.

Even though globalisation brought western culture and thinking into China, Chinese local ideology keeps its difference, may be more unobtrusive. It is a composition of historical and contemporary social culture, as well as local and global influences; this influences behaviour, and is reflected through behaviour as well. The idea of 'Chinese behavioural transfer into design' in my research does not mean to go against the stream of globalisation, but it searches out its own way in this stream. On this point, my work described in this chapter can be regarded as a sample of investigating and designing Chinese behaviours, as well as through design practice manifesting Chineseness, which developed through a participatory design approach. From a divorce between old and new products to a combining of the two through a collaborative venture, the old (Chinese local users) teach the young (designers) about the adaptations of techniques in a variant on the project above. This does not seem so much like a definition what of Chineseness is, but a 'how'.

When people speak of globalisation, there is one sense in which they actually mean the homogenous products of markets. For instance, Theodore Levitt sparked a continuing debate in 1983 when he pointed out as evidence for "globalisation the booming success of McDonald's everywhere from the Champs Elysees to the Ginza, of Coca-Cola in Bahrain and Pepsi in Moscow, and of televisions, and Levis jeans everywhere" (Levitt, 1986). From Levitt, these global products have attained a global status. This process of homogeneity also represents a form of American capitalism influences that dictates to the rest of world. However, the reverse creation of local values into the universal mass market is also a wave of globalisation. In the electronic information interaction design area, the pervasion of ho-

mogeneity has expanded from products to the means of communication. The mobile interfaces and the way of interaction of the Chinese market seem no difference from the western market, losing of some Chinese traditions with global status; meanwhile it is shaping a new form for Chinese-ness in terms of behaviours. A typical interesting example in this market is the electronic red envelope in the Chinese New Year, which produced by the Chinese biggest online paying platforms Alibaba and Tencent. It shapes the Chinese tradition – the lunar New Year gift money giving - into online and social network behaviour.

Chapter 6: Chinese cultural transfer in terms of its philosophical and political impact: Top-secret island workshop

6.1

Introduction

This chapter introduces a workshop called ‘Top Secret Island’ that took place in April 2011. Through this workshop, I established a communication platform to investigate the Chineseness that is implicated by the political and philosophical culture in China in terms of designers’ ideology, as well as a means of reflection on these special intangible Chinese characteristics in design. This workshop is adapted from the cultural probes method (Gaver et al., 1999) and critical design thinking (Dunne and Raby, 2001). Rather than specify what Chinese philosophy and politics are, or what their impact is, this workshop weaves the complexity into a fiction, and aims mainly to provoke and raise more awareness of Chineseness through exposing assumptions. Through introducing the probes – a package containing an assortment of tasks - to the participants of this workshop. They were supposed to carry out a number of tasks and then return the different items from the probes. This attempt is to giving insight and helping to overcome Chinese cultural, political influences and intimate ideological boundaries in an unobtrusive way.

“We propose a reversal of priorities in favour of more useful, lasting and democratic forms of communication – a mind shift away from product marketing and toward the exploration and production of a new kind of meaning. The scope of debate is shrinking; it must expand. Consumerism is running uncontested; it must be challenged by other perspectives expressed, in part, through the visual languages and resources of design”.

(Garland, 1964)

This project in Chapter 6 is in terms of how to establish a platform to investigate the tacit dimension of Chineseness, what such communication is for.

Design, philosophy, ideology and politics form overlapping domains of human thought and activity, but can be taken as separate realities. Each of them covers their own principles of realization, while they indeed influence and affect each other directly or indirectly. “Politics is so constructed, for example, whenever it is defined as a specific form of the exercise of power and its mode of legitimating” (Ranciere, 2010). The philosophical and political influences on culturally oriented design cannot be ignored. They impact on and are reflected in the people’s ideology and behaviour. They are tangled and intangible but significant: the products of the process of a society’s intellectual, spiritual and aesthetic development.

This workshop can be also regarded as a theoretical sampling in grounded theory leading method with the previous two, in terms of how to analyse its generating information. On this point, the cultural philosoph-

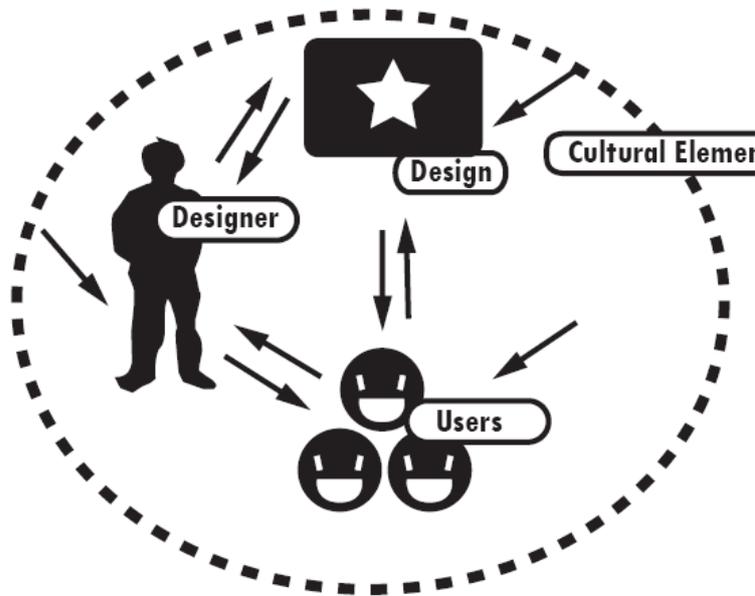


Figure 6.1.1 the relationship of designer, design, users and cultural elements for philosophical and political cultural transfer

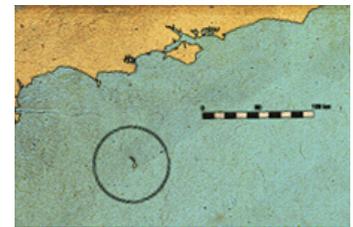


Figure 6.1.2 the fictional island's position

ical and political elements form a sphere of influence for the designer, the design and the users that are immersed in it. Its impact is complicated, implicit and everywhere. In contrast to the previous projects which have investigated the specific Chinese symbolic or behavioural elements, how to reveal such a sphere of influence seems much more complex. Not least because, at this level, the line between Chinese and non-Chinese tends to be more blurred, for everyone is immersed in local and global intricacies. (Figure 6.1.1)

This workshop was formed of two groups of participants.

Team 1: five RCA Chinese designers(Chinese nationality and educated in China before their undergraduate)

Team 2: five RCA UK designers

The two groups were separated and were not aware of the other group at the beginning of this workshop. Each team was told a fiction that there arose an island from the sea next to the mainland of their country. They should act as the decision makers for their top-secret island's development of design.

After they designed their own island, they were told of the existence of the other island and gained an information sheet of that island. At this stage, the groups then designed products or services in order to export to the other island.

6.2

Workshop content

Step 1 Design your island

The two teams are the decision makers of these two islands.

One, team 1 represents the Chinese government and team 2 represents the UK government.

Two, think about the benefit to your country. At the same time, you have the creative space to design an ideal island, as you want.

Three, give more information about this island and write it down on the workshop sheet. It should include the following 6 points:

Social structure: how is this group of people organized? What is the government structure? What are the international relations like?

Work: what makes up their economy?

Flag/icon/motto: How will they represent themselves? What phrase sums up this group?

Leisure

Communication: How do these people communicate with each other?

Family: What is the role of family? How do families relate to each other?

Step 2

At this stage, team members knew there was another UK/China island and received general information about it: Exchange the information sheets of the two islands.

After gaining information about both islands and learning about each other's island, each team designed products or services for the other island. Team members decided the targets and aims of design. Those could be in terms of cultural exports, communications, or commerce, and so on.

Contrastive table of workshop outcomes

	From the Chinese team	From the UK Team
Island description	<p>This is an experimental island for testing different social structures. There is no standard social mode. As an advertisement for communist values, this island can adopt different political models at different periods. So we can call it “red tourism” island.</p> <p>This is a “Sims island”. As a theme park, there are no local people. The support industry is tourism. Visitors decide what to do on this island and earn their living here by their labour and ability. Visitors cannot bring money to this island but they can decide how much to pay before coming here, how long to stay, what job to do, etc.</p> <p>The motto is “realize your dream and personal value, get rid of reality for a while.”</p> <p>In terms of communications, visitors cannot connect with the outside world through contemporary technologies. It is a lost island.</p> <p>Also there are no local people, nor standard family. People can try different life styles.</p>	<p>This island might be similar to Hong Kong. It can adopt some UK laws. A Customs will be set up later. People go here of their own free will. Will there be territorial competition with France?</p> <p>The work here depends on the land. It might be some kind of farming, military staging post, energy mining or harvesting seaweed. It also might also develop tourism, build fake ancient sites, make glass from sand, use wind farms or open trade routes. Some jobs need to be carried out to find out if this island will get washed away.</p> <p>The motto here is ulterior motives: adventure, and wanting to tell a tale to grandchildren. Leisure here can be swimming, scuba diving, and surfing, making sushi, and visiting pubs. Or it can be developed as a vacation spot.</p> <p>As this island is near France too, so languages here are English and French. Meanwhile the question of immigration is uncertain.</p> <p>Education serves to prepare people to move to the mainland.</p>
Describe and imagine the other island	<p>The UK island is a colony (similar as Hong Kong). It is not distinct from the British mainland and looks boring. The island people seem quite crisis aware.</p>	<p>Red tourism? That island lacks structure and vision. It is narrow minded and consumerist in nature.</p>
What to design and export to the other island?	<ol style="list-style-type: none"> 1. Open a theme pub on the UK Island. Broadcast TV shows about our island and combine it with gambling. (Such as “big brother”) 2. Communication might be through message bottles. Open a spot to collect, receive and send these 	<p>Fish</p> <p>Call centre</p> <p>Service facilities for the Chinese island</p> <p>Travel agent to arrange holidays</p>

Table 6.2.1
The two groups’ concepts and reviews

	<p>“bottles”.</p> <p>3. Bounty hunter: organization for finding the common problems of both islands and creating innovative ideas, e.g. how to avoid the islands being washed way.</p>	
<p>What are your thoughts on the difference between the two groups? And why?</p>	<p>From the perspective of the Chinese team: The Chinese mainland is big and rich in resources, so we do not consider self-sufficiency to be an issue. Nor do we think the production of this area means anything to the mainland. For geographical reasons, we don't worry about territorial competition. So if this island were designed to be an experimental one, it would be more meaningful. On this point, the view of the UK island is the opposite of ours.</p>	<p>From the perspective of the UK team: the UK island design considers the complexity of the inside and outside of the UK environment. In comparison, the design of the Chinese island lacks critical thinking.</p>



Figure 6.2.1
 “Top secret island” workshop, left: the Chinese team; right: the UK team

6.3

Summary

At the beginning, the aim of the workshop was to search out some interesting view points about the philosophical, ideological or political subconscious influences on design according to different cultural backgrounds. However, with the project going on and after communication with the participants, I recognized that social contexts, the influences of philosophical and political environments are more complicated the closer we look. The design of this workshop that focuses such influences of Chinese and non-Chinese philosophy/politics is not well suited for dealing with complexity. This is also because cultural probes method deals with

the intangible and tangle elements, which results might be diffused and receptive varying subjective interpretation as well. Rather than defining and explaining what Chinese philosophical and political influence might be, this workshop tends to be much more meaningful in terms of building a communicative cognitive platform to initiate debate and reflection about what distinguishes Chineseness on this cultural layer.

Thousands of people must have thousands of images of Chineseness. The philosophical and political reflections of designers' thinking, as well as their understanding about Chinese culture are on the level of tacit knowledge. Michael Polanyi described this tacit knowledge as the pre-logical phase of knowing; he argued that the "hunches and imaginings that are part of exploratory acts are motivated by what he describes as passions". As Michael Polanyi wrote in *The Tacit Dimension* we can know more than we can tell (Polanyi, 1966, pp.3-8). Moreover, firstly, what Chineseness is on a philosophical and political level is impossible to transmit or explore through a verbal communication or artefacts. Secondly, if the exploration of Chineseness is only a process of transmission from one side to another, it can be only received when the acceptance side places an exceptional degree of confidence in another, what is an acceptance of authority (Polanyi, 1958). Dunne and Raby argued in "Design Noir" (Dunne and Raby, 2001), design is ideological; its process is informed by values based on a way of seeing and understanding reality. Design in the critical category provides a critique of prevailing situations through designs that embody alternative complicated values. This point is stressed by the "Top secret island" workshop. As the participants said after the workshop, they suddenly noticed that there exists a huge difference between their ways of thinking, because of the different philosophical and political environments of their growing up. "It increases our awareness that design ideas will be politically and culturally relevant". "It responds to real needs and hence is more likely to have the desired social or market impact". Successful designers are keenly sensitive to particular aspects of what is going on around them and these observations inform and inspire their work, often in subtle ways. First hand exposure to people, places, and things seems to be key, but there is no formulaic method for observation of this very personal kind. This "Top secret Island" workshop changed from precise description to explaining what the political/philological impact is that makes the Chinese and UK designers' ways of thinking different, into the creation of a medium of communication and then into the manifestation of Chineseness in terms of the political philological through that medium. This research project is the media of my imagination, yet acts in "real time". It is not about a truth that needs any external evidence to support, nor categorical or quantitative evidence. This workshop created a communication platform for reveal some of such tacit influences of Chineseness into design. It is an example of manifesting Chineseness communicable in a critical design way.

Chapter 7:

A systematic structure in terms of Chinese cultural transfer

By now, this research tends towards manifesting Chineseness, and learning how to do this through trial experiments; as well as understanding Chineseness by a critical consideration. For example, in Chapter 4, it manifests Chineseness from a symbolic perspective through comparing the Chinese and non-Chinese designers' work and understanding on folk craft elements; and explores Chineseness into a behavioural and communicable concept through the practice that depicted in Chapters 5 and 6.

In this chapter, I summarise the ideas that generate from my research into a theoretical framework. Based on the experiences from the previous projects and contextual reviews, this systematic structure aims to create an enabling system and communication platform that can offers designers a variety of insights for investigating Chineseness and integrating Chinese cultural elements into design. What is more, this structure is constructed as combining of relevant research methods and thinking within to a designing Chineseness context.

7.1

A summary of the three projects

The experiential knowledge from the previous three projects can be categorised in terms of different cultural aspects: symbolic, behavioural and philosophical, political. In each project, I could manifest my understanding of Chineseness through design, for adding special values for design from the perspectives of regarding the different kinds of relationship between the four factors: designer, design, users and cultural elements. As a research with a design outcome, investigations showed that the different concentrations of cultural transfer elements in design affected how these factors were weighted.

7.1.1

Project 1: Chinese folk art transfer into design

Cultural symbolic transfer can be a good way to define products in the homogeneous global market. Its importance is not to pursue how much the design reflects the cultural elements, but to find valuable cultural elements that make the design different or reflect back the users' images about Chineseness. On this point, designers transfer cultural elements into product design to distinguish it, adding commercial allure (Figure 7.1.1).

7.1.2

Project 2: The elderly Chinese and smart phones

If we look from the perspective of users' experiences, and see products in terms of technological mediation, design evolves through users' experiences and users' interaction with design. In this way, Chinese cultural transfer into design should be considered on the level of users' behaviour. This second project focused on reflecting and extending the thinking around

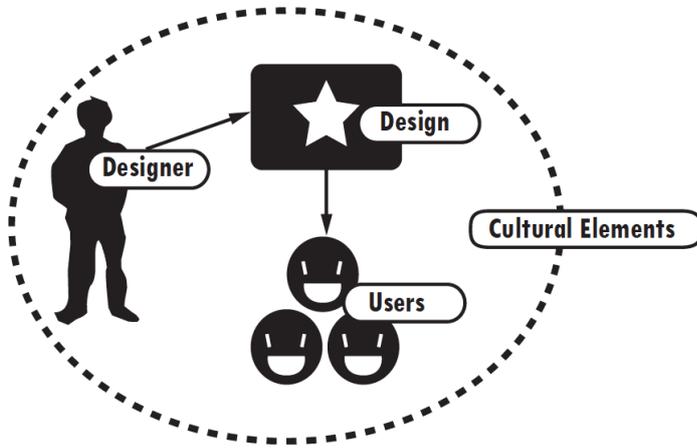


Figure 7.1.1
the relationship of designer, design, users and cultural elements in terms of symbolic transfer

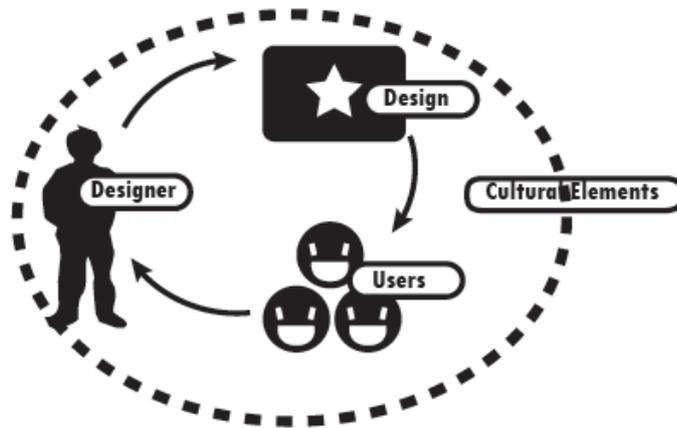


Figure 7.1.2 (left)
the relationship of designer, design, users and cultural elements in terms of behavioural transfer

Chinese behavioural transfer into design and how the design can be better adapted by Chinese users. To integrate the user's behaviour with design, the designers should research through user experience, search and abstract the relevant cultural elements surrounding users and then accommodate those into a design, with the ultimate goal of users' better acceptance of products (Figure 7.1.2).

7.1.3

Project 3: Top-secret Island

In this project, I highlighted the intangible Chinese philosophical and political elements and their influence in design activities. The designers, designs and users were all immersed in a big philosophical/political mix of different factors that subtly influenced the designer's way of creativity,

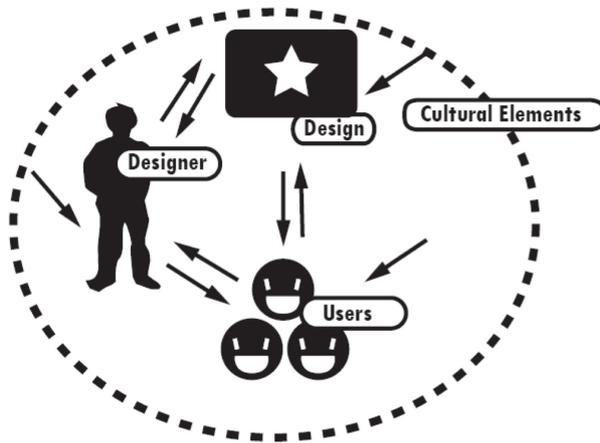


Figure 7.1.3 (right)
the relationship of designer, design,
users and cultural elements in terms
of political/philosophical transfer

or the people's understanding and acceptance of design. However, this complexity also contributes to the wealth of the philosophical and political cultural transfer as design communication and a community platform to exploring Chineseness (Figure 7.1.3).

7.2

A model of Chineseness manifesting

These three explorations in terms of cultural transfer is the reflection of my thinking and experience from the previous projects. Simultaneously, in order to structure them, I attempted to search the models of the classification/definition of culture in the sociological research sphere. Raymond Williams' social cultural theory is a very inspiring one. His Marxist critique of culture studies (cultural materialism) viewed culture as a 'productive process', as well as defined three terms of culture: "the works and practices of intellectual and especially artistic activity, the particular way of life of a people, period or group, and the process of a society's intellectual, spiritual and aesthetic development" (Williams, 1958). In Chapter 1 and 3, I have talked about the cultural theories of Kroeber & Kluckhohn (1952) and Hall (1983). Their ideas put forwards my understanding about the complexity of culture. Yet, Williams' culture definition addresses culture into a pragmatic concept.

Later researcher Spencer-Oatey's extended the concept of culture as a three-layer cultural model (2000). She combined both basic assumptions and values in one 'segment' of culture. In her model, 'beliefs, attitudes and conventions' influence another layer, consisting of "systems and institutions", which in turn are encircled by a split outer layer of culture. In the split outer layer of culture, "artefacts & products" is located on the one side and "rituals & behaviour" on the other side. The model also contains another 'mental' level of culture: 'attitudes, beliefs and behavioural conven-

tions', which makes a useful distinction between values on the one hand, and their expression in a more precise, but at a non-implemented level on the other (Spencer-Oatey, 2000). This can be regarded as the extension of Williams' theory. Dahl reviewed Spencer-Oatey's model that it 'describes culture as a shared set of basic assumptions and values, making the level of culture more practical'. As well as, it is the combination of a number of 'additional factors that apart from values and resultant behaviour and artefacts, including a description of the functions that culture performs' (Dahl, 2004).

In addition, in design research area, Lin and Leong defined three cultural levels for their culture-oriented design model:

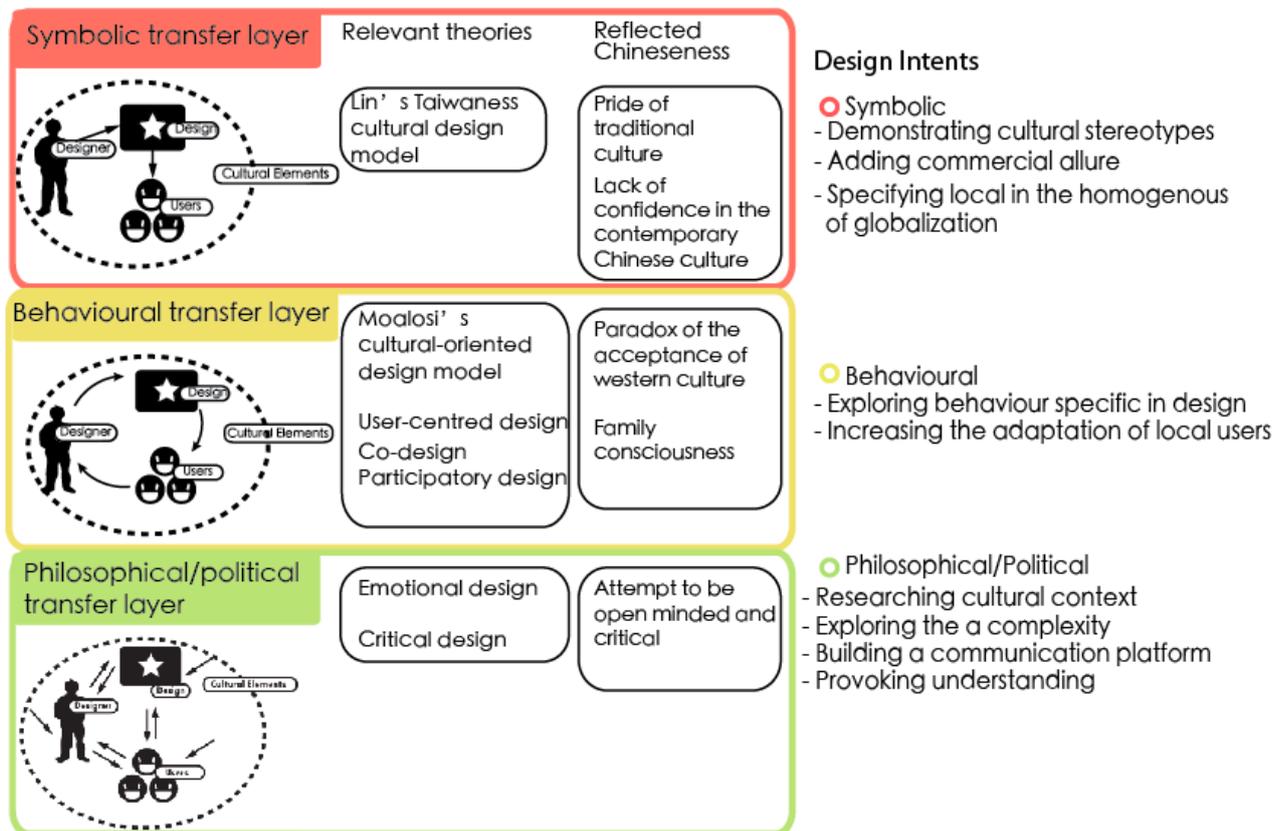
- 1) Physical or material culture
- 2) Social or behavioural culture, including human relationships and social organization
- 3) Spiritual or ideal culture—including art and religion (Lin, 2007).

Hence, inspired by Williams, Spencer-Oatey and Lin's work, I located 'how to manifest Chineseness into design' as the following three-layer structure: symbolic layer, behavioural layer, and philosophical/political layer. This structure is a view to characterise Chineseness in terms of design practice. This also offers a platform to combine the fuzzy set of culturally oriented design concepts with a number of additional relevant research/design methods and knowledge.

This framework (Figure 7.2.1) is a hybrid and culmination of research through design. Through analysing, combining, simplifying and structuring the ideas that arise from the previous chapters, this interpretive framework clarifies the different statuses of designing Chineseness into three layers: symbolic, behavioural and philosophical/political. It performs as a platform bringing a category of different discursive considerations of design, theories and methods to the research, in order to raise more possibilities within my practices. It also identifies a theoretical thread that divides culture into different layers, representing open-ended and ongoing inquiries, posing relevant questions about culturally orientated design.

This analytic framework and interpretation of research from practice can be always more dynamic. My practical work brings out questions about the Chinese cultural and behavioural complexity, as well as broadens the research file, for it is less of a hierarchical method. It explores the manifestation of Chineseness into a structural manner (a system) that enables more apposite design methods.

However, there are definitely more things about Chineseness that cannot be reflected through it. Back to the cultural theories, we cannot ignore the subconscious aspect of culture/Chineseness, and the subtlety, ambigu-



ousness and tangle it leads to. I am left wondering:

What values, attitudes, or ways of looking at the world are Chinese people subconsciously building into Chineseeness?

For designers, their design consciously or unconsciously, shapes the micro-texture of people's experiences. Through this way, manifest, create and shift the Chineseeness. How can designers find and address blind spots in approaches in order to design projects under today's complicated Chinese social context that may lead to a change/improvement?

Meanwhile, there were more research questions and interests beyond a category, which grounded theorising can generate. The comparison and analysis of collaborative groups assess to discover how group interaction mediates between the way a group set up (for instance, Chinese or non-Chinese in Chapter 4, Chinese old and young in Chapter 5) and the results of its work – including its performance effectiveness (how to transfer Chinese symbolic features into design in Chapter 4, how to design Chinese behaviours effectively in Chapter 5). What is more, for instance, in the Chinese folk art transference design workshop in Chapter 4, I noticed that

Figure 7.2.1
a three-layer structure for culture-transfer design

the Chinese designers who tend to design with Chinese cultural elements should be more critical on regarding the Chinese cultural complexity and specificity, rather than staying at a visual level. Combining with the conditions and limitations in real practice, the project “Mobile interaction design for Chinese elderly” in Chapter 5 also concerns a user-centred design concept, as well as addresses the co-design of Chinese old and young in design practice. On this point, the three projects in Chapters 4-6 represent reflections (Schön, 1983) through three particular aspects in Chinese culture. This illustrates what particular considerations concern when designing/manifesting different aspects of Chineseness.

One of the important intents of my research is to help designers to deal with Chinese cultural elements in design practices. Designers’ work is trans-disciplinary. If as Bruce Archer commented “A designer is someone who formulates a prescription for some artefact or system in the light of all relevant considerations” (Archer, 1974), the hypothetical ‘relevant consideration’ in my research is the complexity and intangibility of Chinese cultural elements in design that a designer deals with or may face. Design stems from a variety of purposes. It can involve solving problems, creating something new, or transforming less desirable situations to preferred situations. But no matter to do in purpose of any of these, designers must know how things work and why (Friedman, 2003). Through grounded theorising in the Chapter 4 and 5, Chineseness tends to be regarded more as a ‘problem’. However, equally, it can be a cultural prop, depending on the designer’s standpoint: regarding the local culture as a difficulty and difference that need to be solved for universal design, or an inspiration that enrich the global design market.

Overall, the three projects in Part 2 have not been an objective or scientific search, nor ones that could be well planned in advance. Instead, they are research through design, ones that have evolved with the stages of the project. The contemplation is in searching the meaning of Chineseness, in terms of design manifestation and its value. It is based on design reflections and critiques, to explore more meanings for an investigation of Chineseness into design thinking.

In the following Chapter 8, it depicts two other of my research projects, in which design itself was introduced as the core to identify the blind spots and open new spaces for Chineseness. On-going reflection of design by both its users and designers is a crucial element of cultural relevant design practice.

Part 3: Reflections

098

Chapter 8:
Reflective projects: Smart
Dating and Sex education
workshop

Chapter 9:
Conclusion

Chapter 8:

Reflective projects: Smart Dating and Sex education workshop

The Chinese carry a mix of pride in their national culture, with a deep respect for authority and family, along with an adoption of what is assumed to be more open western behaviour, of course, this is just one bit of Chineseness, which revealing through my practices and observation in the projects. Such findings and discussions are also a contribution of my PhD. It offers a way through my research in terms of design approach to probe Chinese sociological issues.

In the two previous parts, I discussed the concept of Chineseness and my way of investigating it. Through contextual reviews and practical projects, I have proposed a Chinese design model in terms of a three-layered platform. This is a systematic approach which can be helpful to designers when thinking about cultural complexity in a structural way, as well as when designing diverse models. However, a systematic kind of knowledge is specialised, firmly bounded, scientific, and standardized. In contrast, a professional knowledge and its practice not only consists of the components of an underlying discipline or applied science or engineering, but also the skills and attitudinal components that concern the actual performance, using basic and applied knowledge (Schein, 1972) (Schön, 1983).

Designers cannot act as though they have had no relevant prior experience in practice. They seek to discover the features of problematic situations from their accumulated tacit knowledge, which comes from their own experience. In the two following projects, rather than dig more into the three-layered structure, I argue that reflective and critical design, as well as my own practical experiences, should together be brought to bear in order to open new spaces. Through these projects, I approached each practice problem as a unique case. There seems to be little point in searching for a forced resemblance between the projects and the three-layer methods. At least, the projects did not follow any of the directions in the structure completely. Rather, these projects give rise to some of the reflections that pinpoint the peculiarities of Chineseness, which cannot be represented through methods alone.

Moreover, in terms of my personal knowledge development in my PhD, in neither of the following projects is the problem stated at the outset. Rather, I discovered my design directions based on Chinese social issues. As a practitioner, the choice of issue is made through my own perspective and interest. On the other hand, I am looking out for clues that correspond to my three-layer structure and reflections on Chineseness in design. At the beginning of these two projects, I attempted to transfer the three-layer structure of knowledge into practice based on the actual social contexts, in order to investigate how the Chineseness can make value and what that value is in design.

However, the situation in each project is complex and unlikely to be

embraced by a single approach. The point is not to judge in which situation my methods can fit best but to find what the situation reveals itself through a systematic and comprehensive thinking approach, and from the following perspectives:

- 1) How to construct and understand each situation with its specific Chinese issues?
- 2) How to frame the task?
- 3) What problems are worth solving?
- 4) What role should the designer play?
- 5) How can design be a response to the complexity?

What is more, Chineseness is generated from the people and their surroundings. Most of the time, it is a production that evolves unconsciously. On this point, the two reflective designs that follow can serve as a useful response to this complexity and intangibility, as articulated through the design researcher's looking at, exploring and re-shaping the micro-texture of people's experiences.

These two projects I focus on now are connected to issues of dating and sex education, and are concentrated on a group of young Chinese people. I include myself in this group as well as I am personally quite interested in these directions, and find they have great potential value in design that has still to be discovered.

8.1

"Smart dating"

(Refers to Appendix 8)

8.1.1

Project direction

This project was a collaboration with Nokia Research Centre (NRC) Shenzhen. I put forward the original proposal based on their local area network (LAN) system technology. The principle question was how to develop the young Chinese people's interests, while considering their needs and characteristics, through the application of this technology. Rather than being led in terms of design research, Chinese IT companies are technology led, no matter whether Nokia or any other company. So, for example, NRC were interested in investigating a useable LAN system for young Chinese users, one that promoted their communication and social activity, or that stimulated a new virtual social activity. Although I held a particular perspective from my own research, I accepted this project that was proposed

from within a technological context.

What is more, the proposal was broad at its beginning. It involved the considerations of the young in terms of different Chinese cultural and social status today: e.g., the Chinese marriage and family ideology, growing up experiences of the Chinese born in the 80s and 90s, and the manner of communication between generations. The proposed questions included:

- 1) What can we transfer to the users' experience through this project?
- 2) What is the function and meaning of the mobile and real interactions in this interactive process?
- 3) How to make things fun and attractive to the target users?
- 4) What can we change to the society and way of communication through this project?

On the other hand, the dating project is also about Chineseness of the role and importance of family, the seriousness, and the difficulty of getting together all of these considerations. So this project also means clearly that I have gone right away from designing products to relationships. Another point that needs to be mentioned here is the limitation of doing this project from working with a company. NRC was a research organization as well as a technology leading company that works with positive facets of Chinese life. Working with them means I should address and communicate my project in a general design research process, and also adjust my research in the reality for all our societies rather than only consider exploring Chineseness from my personal PhD research perspective. So I admit here that Chineseness in product promotion is still going hand in hand with the experience to some degree. And this is not only because I am doing it with Chinese culture, but also because this is a design process. When I did this project, I had to work within those limits in realities. I think so do other designers in their practices.

8.1.2

Project background

After several meetings with the NRC designers, the project focused on the young Chinese people's dating behaviour. In order to create a mixed virtual reality environment, we formed a dating party, which was assisted by a mobile app. Through this app, the dating party participants could say hello, send gifts to other participants at the party, as well as invite them to games etc. It tended to be designed as a comfortable and friendly dating

interaction, especially for those who were shy. Then the project moved into the User experiences (UX) design stage. The target group is the Chinese youth who are single and have registered on the dating match website. Born in the late 1970s, 1980s and early 1990s, this generation is the link between the old and the new. As I mentioned in the previous chapter, they reaped the benefits of China's opening-up period while, taking their parents' hope in their hands. Both the designers at NRC as well as myself can be considered part of this generation. On this point, we were designing for ourselves.

If narrowed down, at this stage, the target users are from the well-educated group of this generation. They have grown up in a pressured and heavy school education system. They have passed exams to qualify for the highly prized opportunity of entering the universities. Dating and developing relationships were normally forbidden before their high-school graduation. However, when they begin to work, marriage suddenly becomes the first thing on their wish list, mostly because of the pressure from the family. For this reason, some of the time, dating seems very functional for them, as a direct preparation for marriage. The marriage is not for the individual, but links to the whole family as well.

At People's Park, Shanghai, there is a famous dating corner. In this corner, the parents hold their single children's documents, talking with each other, arranging dating for their children. Of course, this is not the prevalent dating form in China but it reflects the family's strong influence, as well as the different possibility of interaction in terms of dating in China. What is more, this generation is a mix of communism, capitalism, and Confucianism. They keep the traditions, the sense of a responsibility to their parents, and meanwhile, sort out their lives through their peers. They search on the web for a dating partner and also follow the family's blind-dating arrangements. They judge if a boyfriend or girlfriend is a good one for marriage from a very pragmatic perspective such as his/her salary or if he/her owns a flat. However, this does not mean they do not have a romantic expectation of love and marriage.

The design process was a response to the complexity depicted above. At the same time, it was a journey for its designers to look at their own requirements and expectations of dating. Through the design, the designers at NRC and I were searching for a different way of reflecting our own behaviour dreams and expectations of dating. For my part, I wanted to search out Chineseness, or my new understanding of Chineseness, through the design process.

8.1.3

Project design

The Smart dating party was designed to invite 100 females and 100 males to take part, and designed to take place at a western style club restaurant. We collaborated with the website jiayuan.com, which is the biggest

Chinese real name registered dating website. The participants were their VIP members.

Before the party, registration and downloading the mobile app took place. In the party, the Wifi LAN, on the main surface of the app, listed the participants in terms of their distance from the user from those nearest to those furthest away. The users were able to add a priority mark on the preferred persons' photos. The app kept those tagged photos ahead of the list automatically. Users could also choose to list just the male or female names. Tapping on the name or photo brought up the information page of that person.

The following are the app functions connected to the services in the party:

- Flash: send a screen flash, cause attention
- Message: start a talk
- Gift: this function links with the party service. There are four kinds of gifts that can be chosen: champagne, cocktails, chocolates and roses.
- Game: send invitation to play games. The games take place in front of the public.

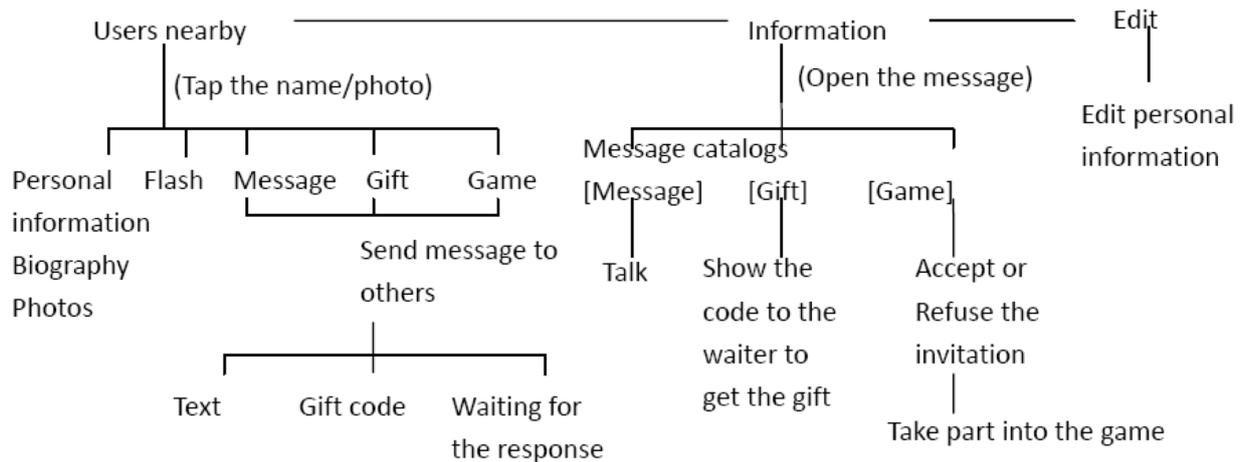


Figure 8.1
Party environment



Figure 8.2
Selection of the interfaces

UI Flow:



From a functional and technical perspective, this app is very simple. It took its designers two weeks to develop the whole UI flow, service system and interface design. We also shot a video to show the design ideas of this dating party. However, due to the global arrangement difficulties of Nokia 2011, the company reduced the research funding and closed the NRC Shenzhen in early 2012. So this project was stopped from continuing in the marketplace. It is a severe disappointment for me not to be able to pursue the users' reflections. However, this concept of knowing new people was improved very acceptable and successful in Chinese market through other apps. In the end of 2011, months after the "smart dating" project cut off in NRC, an app named "momo" got great popularity in China. It is a quite similar concept as the locate based service of "smart dating", but technically based on 3G and wifi, suiting to a big scope of space (more information refers to its website: www.inmomo.com)¹. Its register number increased from 1 million at its earlier putting-on stage in Jan 2012 to 7 million in the end of 2012. In other words, the marketing result of "smart dating" depended on others, who could ruin the outcome. However, in the way that I can control, it is still worth analysing this project from my research perspective.

8.1.4

The reflections of the three-layer structure in smart dating

I introduced my three-layer structure of Chineseness to the designers in Chapter 7, organised workshops following the trails of different layers of Chinese culture in order to inspire their design. It is clear that this design

1. Meanwhile, momo is keeping to be ethical challenged for its big range and unlimited way to know people, especially this caused risks for its teenager users.

process is a radically incomplete description of where an approach can potentially lead. When designers choose to address new possibilities in design as part of a cultural layer, they do not fit into already known categories. Their discussion is not to do with mapping of structure or the relations of designer, design, users and cultural elements, as I described of my method, but a design process that combines their own interests as well as previous knowledge. For instance, in terms of the Chinese symbolic aspect, I worked with the designers to imagine and describe how they could start a romantic relationship with someone new, focusing on the ideal environment and conversation, then tell a story. Very naturally, after everyone's sweet or funny story, the discussion led to experiences. For instance:

Why are we so shy to say hello to someone new? Or, even if we encourage ourselves to do that, will it cause others to gain the wrong impression? How can we solve this problem through design and our daily behaviours? In short, this kind of questioning belongs to the behavioural layer.

The dating website jiayuan.com is hugely successful in terms of its off-line parties. It must have a register of real names. Its users should offer ID and even more personal information to join in the party. Most of the single young people have a responsibility to dating and take it seriously. We think it is a reflection of Chinese family consciousness about 'Xiao' (filial piety) in Confucianism to some extent. It is connected with both the cultural behaviour and the philosophical background.

Then in the design stage, the questions such as those listed above are dealt with as the research problem itself, reflected in the design concepts:

A way to know somebody new, to attract his/her attention in a gentle and sweet way.

Gather his/her information (This is important. If you are happy with him/her in the party, you can show them to your mother or friends after that. At least, you have achieved something.) You also hope to have further contact with him/her later.

Sending small gifts is a good way to build a friendly impression. Also receiving a gift in such party really makes us happy. Taking part in small games together reminds us of school times, as a sweet way to initiate the first touch.

These are the reasons why, when I showed the smart dating video to the non-Chinese people, they told me it presented as really Chinese, not because of the Chinese faces, but because of the behaviours in it.

Looking at the whole design process of smart dating, designers began

with the problem of how to design a friendly young users' app service for dating. They attempted to research the questions and potential possibilities for the target users by comparing the existing dating apps. Like a typical design process, they firstly opened up the design questions and then narrowed them down towards a commercially realizable direction. At this stage, introducing the systematic three-layers of Chinese cultural thinking can open a new perspective on the cultural elements of this pragmatic project; it can develop more hypotheses, as well as address new explanations for design questions.

This three-layer structure can be represented as a communicative and reflective platform with the resource of Chinese culture as an incisive consideration in the design. Designers' experiments yielded ambiguous results. In different instances, the reflective conversation waved its way through stages: the designer's background, the experiments, the design process, the target users, etc. In this project, partly following my structure, the designers explored some points about Chineseness in the youth and its reflection in design.

8.2

Sex education workshop

By now, it still feels like my own game: I was exploring my understanding of Chineseness on this platform at the same time as inspiring the designers' working process. In this final project "sex education workshop", I pursued the aspiration to be more open to the masses of Chineseness, involving more people in contributing.

How to make talking about sex as acceptable as talking about food for the prudish Chinese? The aim of this workshop is to seek for inspiration, narratives and directions for designing the future of sex education for the masses in China. I am looking to shed light on the underground and taboo nature of Chineseness in sex education and to work as a designer towards more socially acceptable possibility of conversations and communications amongst the mainstream population.

In this workshop, I worked with Lisa Ma, design researcher and graduates of Design Interactions, RCA 2011. We wanted to see if we could make a series of progressive designs to initiate some alternatives to the current form of sex education in China. We thought we could gather together my knowledge of Chinese pulp history and theory on cultural transfer with Lisa's curiosity for the strange desires and services of the fringe. We undertook the workshop with the help of Chinese Academy of Fine Art (CAFA) & Tsinghua students.

There is a famous Chinese saying from Confucianism "食色性也" which means eating and sex are the most basic and original elements of human nature. Even in ancient times, young couples were taught sex education separately before marriage. Yet today, we Chinese talk about food a lot and

enjoy all aspects of life, but when it comes to sex, people become rather stiff upper lipped, for they equal sex as a porn or shame.

After the dating project, I was documenting some interesting challenges that were thrown at me in carrying out a sex-related workshop in China. We were attempting to publicize while remaining under the radar of anything that would flag us up as explicit: talking about sex seems a challenging topic for me to explore in terms of the Chinese way of thinking, curiosity, tradition, and so on. The project was an attempt to build a communication platform to explore the participants' understanding of Chineseness. Such a platform offers a lot of possibilities for manifesting Chineseness and thinking about its value.

Before the workshop, we made posters to attract participants (figure 8.2.1). The target group was the well-educated young Chinese. The participants were twenty-years old, design and art university students. They were separated into a female group and a male group. We chose a love hotel² to run this workshop.

In the first stage, the two groups were in two separate rooms, talking about the same topics. And then they all came together in one room to continue the conversation. The workshops were split into the following 3 phases with discussions carried out around each one.

- 1) Playing with Metaphors: a light-hearted workshop surrounding clichés of relationship 'roles' and sexual preferences.
- 2) Sensual Experiences: discussions in the loopholes of consensus in an unconventional environment under pheromones, intimate lighting and explicit sounds in a love hotel.
- 3) Futures: How could sexual details of Chinese cultural histories remain of help to propose a more informed future?

For each phase, we played a short video of my talk or told a joke about each topic, as a starting point and warm-up. And then the conversation continued. We had also prepared some research videos about sex to show in the middle of each phase in order to inspire the conversation.

The quotes from the workshop are just as surprising for the other participants as for myself (refers to Appendix 8.2). I am delighted by how they were encouraged to communicate and discover themselves, and how rational in selecting and critiquing their fantasies they were.

In contrast to the previous the "Top-secret island" workshop (Chapter 6), the sex education workshop is a reflection and critique of my established framework, and a thinking process to refine and extend the three-layered

2. Love hotel is a themed hotel, with different style rooms, for instance, romantic red or hello-kitty pink room, etc. It is supplying a market for couples or one-night stands.

cultural design theory. It is also a designed, reflective and collective platform of Chineseness, in order to gather further knowledge about Chineseness and possibly to adapt the concept of Chineseness along the way.

The quotes from the workshop are just as surprising for the other participants as for myself (refers to Appendix 9.2). I am delighted by how they were encouraged to communicate and discover themselves, and how rational in selecting and critiquing their fantasies they were. Their conversations reflected their understanding of western sexual culture and the Chinese traditional and recent ones (refers to the 'sex education' video and conversation records in the Appendix 9). From my research perspective, 'sex' itself is just a sensitive and interesting topic and communication platform, through which I designed this workshop to explore Chineseness in the youth reflectively, designerly and critically. This workshop indicates a paradox in the acceptance of western culture in the Chinese young generation today that I will depict in the following Section 8.3.2.

8.3

Reflections of Chineseness in the projects

More than a model, these two projects also create and are created through conversations. The experiences and social rituals that surround the projects generate some totems of Chineseness.

8.3.1

Family consciousness

The most particular point of Chineseness in the smart dating project is family consciousness. Actually, I began to notice that family consciousness had become an important issue for design in China during the earlier project of mobile interaction design for the elderly Chinese (refers to Chapter 5). In contrast to the elderly in the west, the elderly Chinese are less independent, whether using technology products, or in daily life. Their technology products are more or less introduced by the young. Also, their children have great patience in solving problems for them, no matter whether they are technical ones or the daily behavioural ones. In the Smart dating project (refers to Section 8.1), my project participant designers listed that the family's feedback about their 'dating mate' as important, and emphasised how their marriages were also influenced by their family's opinion. They designed the function of the dating app to save the dating partners' information in order to share with family and get an agreement. Also through the previous research, they found that the parents' agreement could almost decide a relationship going to be serious or not. And the parents do take charge a lot to their children's relationship and marriage. Simultaneously, the young generation holds the idea that they should take responsibility for their parents, and even makes some life decisions through considering and benefiting them. This

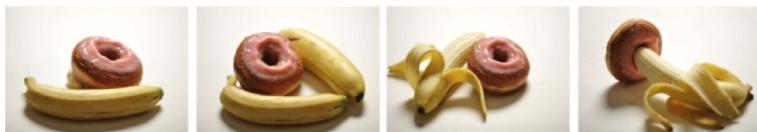
设计工作坊 做爱做的事

人员招募中：
设计师，艺术家，
各路敢言潮人

未来的成人性教育—畅谈与设计

时间：2012.3.28-2012.3.29

注：整个工作坊过程只谈性，与色情无关，不涉及道德评判。但仍需提前提醒各位道德标兵慎入



环节一：暗示
香蕉和甜甜圈
这一环节中，我们将会通过引入一些具有性暗示的道具，第一步展开轻松“性”讨论
“曾经有一次……” “我更喜欢年轻的男人……” “在事前……”



环节二：感官享受
昏暗的灯光和费洛蒙
借助乐高玩具和变化的环境，以及假叫床的video，这一环节将会对“性体验”进行更进一步和开放的讨论。
“我朋友喜欢……”

环节三：**历史和未来**
我们是如何看待历史中的性偏好的，未来又会如何看待现在

报名邮箱：lisa.ma@yizhou.li@



Figure 8.2.1 (left)
Workshop advertising poster

Figure 8.2.2 (right)
Sex education workshop

is partly because it is a common human moral, but also because it derives from the concept of 'Xiao' (filial piety) in Confucianism, which emphasises the attitude of obedience, devotion, and care toward one's parents and elder family members and is the basis of individual moral conduct and social harmony. Although China has changed greatly in recent years, including those changes of family structure in cities tending towards the nuclear more than the traditional³, the strong link between the extended family members always remains. This responsibility is not only to do with taking care of the close family members' lives, but also 'living for them' to some extent. 'Making my parents happy' is an important reason for Chinese people to make a decision.

The traditional Chinese family has a hierarchical order. It is rigorously structured with family name and relationship by blood. The rule is: since you were fostered by this family, you naturally keep worshiping to your ancestor, and will serve this family for life. Being honourable and dutiful to parents is one of the core concepts of Confucianism filial piety. This responsibility also endows parents with authority and they have the final say in the affairs of the family, for instance, what job to do and who to take as a wife. Today, with the change of the whole Chinese social structure, the concept of family has become ambiguous; however, the tradition cannot be blotted out. It still impacts on Chinese thinking and behaviours.

Family is the most important focus and consciousness for Chinese people. The link of Chinese family members appears strong and extensive. Family consciousness is also one of the most important factors affecting Chineseness from tradition to today. In terms of design, the family concept of Chinese people can reflect its uniqueness. For instance, it influences Chinese people's behaviours deeply from different angles and, therefore, it indicates designers working on products for the Chinese market should be knowledgeable about Chinese family consciousness and the ideas that it raises. This is abstracted from my practice, also can be developed into a new specific direction of manifesting Chineseness into design.

8.3.2

Paradox inherent in the acceptance of western culture in the Chinese young generation

The sex education workshop (refers to Section 8.2) can be also regarded as a reflection of the paradox inherent in the acceptance of western culture, which is a typical totem of Chineseness in the young generation today.

After the national opening of China in the 1980s, as a part of the phenomenon of globalisation, western culture swarmed into China. The Chi-

3. The traditional Chinese family is much bigger than today. It was normally that if one of the oldest direct blood relative is alive, the family was not separated. That means the grandparents, uncles, and cousins all lived together.

nese politic framers search for the innovative ways through the western experiences. They know the western approach must be changed and fit to the Chinese local situation. Nevertheless, the western ways are valuable to be learnt to promote the Chinese technology and economy. However, from the perspective of researcher and designer, the real challenge is about this 'fit'. The Chinese people learn the western technics more easily rather than its ways of doing or thinking. The paradox is the Chinese behaviour and judgement was different facing the western thinking and value. In the sex education workshop, the participators said that they were much more free and open than their parents' generation, no matter on the attitude of their own personal sex or acceptance of others' option. They believed this was due to the western cultural influence after the 1980s.

The Chinese people have some cultural images about western as a whole, for instance, more free, innovative and open-minded. These images are treated as positive ones in the youth, subconsciously and without too much critique. The youth attempt to learn these 'good points', however, through a Chinese learning/copying way rather than a critical thinking way. This is why there seems a paradox.

Take another example, artistic creativity, for instance: western art rewards individuality and self-expression, and is constantly seeking dramatic change, but Chinese art develops through copying masterpieces (Justice, 2011). This generates two different ways of creative thinking and standards of judgment. However, the whole Chinese learning tradition and system decides that copying is a bona fide way of learning. This is not searching for an excuse for the parroting that exists in Chinese design. As I explain in Chapter 1, this copying is a process of their creativity as well, which does actually contribute to change in design, for instance, the "Shanzhai" (parrot) mobile (refers to Section 1.3).

Such paradox also causes that Chinese designers search ways to be creative by adopting western standards. The Chinese environment today is a mix of collectivism, communism, Confucianism, capitalism and globalisation. The customers of design in China still like to ask "has this design been done before?" in order to find proof that somebody has done it so that it will be reliable in the market, rather than that it is in itself innovative. Considering this complexity, the paradox places the Chinese designers in a situation where they attempt to be open-minded and critical in a cognitive western way. This is partly because of their sense that the west is well developed, which is one of the main ideologies in China today. An understandings or misappropriations of the outside world in the Chinese designers could be also thought of as a current manifestation of Chineseness. Yet most of the time, it is their imagining of a western way, and ironically, it can leave them open to be criticised by western design innovators.

Chapter 9: Conclusion

9.1

A definition of Chineseness

Chineseness can be used in the discussion of Chinese culture or to refer to the condition of being Chinese cultural contextual relevant, and has never been a clear definition for the term. In this research, it can be understood as the interface between Chinese culture and product-services that designers can recognise and act on to develop product and design thinking that are better suited the contemporary Chinese market. It means 'Chinese cultural design factors' for the purposed of this research, and is contestable depending on the agent interpreting it for the inevitable difference of design purpose. Moreover, Chineseness in this research refers to the contemporary culture and society of Mainland China; rather than a broad meaning of being ethnic Chinese related.

9.2

The research contributions to its two group readers

I conclude my research into an approach to communicate Chinese cultural context and its complexity in terms of design, structurally, reflectively and critically. In terms of method, this research was led by action research through grounded theory and critical and reflective design. It drove a process of setting statements for designing Chineseness, then formulating researchable questions for data generation; referring to later projects; and then relating to the previous analyses. The data collection and analysis was driven by grounded theorising, and led to different method-critical design, based on practice and further evaluation. The whole process itself is design reflective. The three layers cultural transfer design model generated in this action research process in Chapters 4-7. This model can be regarded as a conceptual model and design approach to simplify the complexity of cultural elements in design practice. It can be generally used at certain stages: clarify the cultural relevant element in design (symbolic, behavioural or philosophical), concept generation, contextual research, project development and evaluation. Although the knowledge and understanding about Chinese is judged and evaluated though individual background and perspective, through this model, it shaped practically through dealing with the following questions:

- Who will be the user or audience of this design?
- What are the purposes of Chinese elements manifesting for?
- What kind of Chinese elements need to be reflected through this purpose?

As I indicated in Introduction, this research is for two groups of readers. For the Chinese designers who want to re-brand Chinese design into global market, this research methodological process and its three layers

model offers methods, examples and evaluation considerations to manifest Chineseness. To some extent, this is addressed in a Chinese acceptable way: rational classified and can be learnt and then practiced step by step. It also holds some very Chinese perspective, such as a national pride and the understanding shift during its exploration. On the other hand, for the non-Chinese readers, this model addresses reflective projects to explain some of the Chinese design and cultural contextual examples, as well as the richness and mobility of Chinese culture today analytically and critically.

Moreover, this research is one measure of manifesting Chineseness: as I have indicated, it is in part an exploration of my experiences and change of understanding while investigating Chineseness within design; one measure of my intuitive and affective response from the heart of what I think I have been doing all along, and an explanation of why I am doing what I am doing. I am a Chinese design researcher who is doing Chinese research; my understanding and thinking, the trail of this change, and why it is change are also reflections of Chineseness. Chineseness in my research emerges from these two perspectives: the Chineseness that is reflected through theories and projects, and the Chineseness that arises from this doctoral learning experiences that also link back to the contextual reviews and projects.

9.3

How to manifest Chineseness

My work claims that for the Chinese new generation designers, manifesting Chineseness into design appears to be important, not only because it emphasises the local cultural particularity from the similarity in the globalisation today, but also it can deal with Chinese culture in terms of design critically, in contrast to the concept 'Chinoiserie'.

On one hand, design efficiently, we can characterise Chineseness that feeds into our design purposes; transfer the Chineseness that we understand into design, and manifest it in design.

Symbolic: Chineseness can be regarded as symbolic. For the non-Chinese, this translates as their imaginations and stereotypes about China. For the Chinese, it relates more to local cultural pride for expressing themselves' specialities. On its symbolic layer, Chineseness for design is valuable for its allure in the diverse global market. This, then, is the more superficial or surface layer.

Behavioural: Chineseness comprises the Chinese people's behaviours that are impacted by the older traditions as well as the contemporary social context. The consideration of this aspect of Chineseness in design is central to a design user-centred angle, for making products more Chinese user-friendly.

Political/Philosophical: Chineseness refers to the ideology of Chinese people, their ideas and ways of thinking that generates from today's Chinese social environmental impact as a whole. It is the inner factor that makes us feel the difference and specificity of Chinese culture. It is subtle and different in each individual. However, it can be seen as a communicable factor in design. Design can present a relationship or a way of thinking, rather than just promoting products.

On the other hand, for the Chinese designers, manifesting Chineseness is not doing something artificial, but dealing with a way of understanding, expressing and communicating in design. "Designers need a type of knowledge that enables them to act (better) rather than just evaluate the likely outcome of their proposed actions" (Verbeke and Glanville, 2005). Since the work of Donald Schön (1983), the value and significance of reflective design has gained a growing acceptance as a distinct and valuable approach to the generation of knowledge and to solving problems. Design is dealt with as knowledge for change rather than knowledge of description (Glanville, 2007).

As it introduced in the earlier chapter, the design education in China started in 1980s. Today, in the industrial design area, most designers are the under forties young generation. Pride in traditional culture and lack of confidence in the contemporary are very significant Chinese designers' traits. Actually for me, when I started my PhD, part of the motivation was due to pride in the Chinese traditions. A lot of the Chinese heritage is broadcast as brilliant pieces, for instance, the Ming dynasty furniture (see Section 1.2), in contrast to the mass-produced products today. Also because the Chinese "mianzi" (face-saving thinking) make the Chinese bent on comparison: China has developed and flourished ancient culture in history, which had highly impacted the surrounding countries, and even the west; today, it is less so in terms of its cultural influence. In following a typical way of Chinese utilitarian thinking, Chinese people feel there is less point in having confidence in today's culture. The response is that 'we should hurry on and catch up with the West, and then we can re-find our confidence' – regardless of whether the direction of the west is ultimately the best one. The later two projects in Chapter 8 consider this situation in the Chinese readers. These two projects approach Chineseness more into communication. It threw some light on the puzzles, problems and possibilities that did not fit any established theory or category, yet they further reflected a sense of culture and Chineseness. This is quite open that gives rise to new experiments and phenomena in the search around and versus the fixed image or concept of Chineseness. It is also an experiment and exploration of such a research idea, and attempts to assess how far along a sociological path of Chineseness design ought to go.

9.4

A critique of the research limitations

Research is iterative. This work also suffers from several circles. This is unavoidable, partly because of the research by project itself, partly because of my personal background and motivation.

Through sketching out the consequences, through an attempt to understand, I draw the pattern of my work. Both my research direction and thinking have evolved with the choices and processes made during the design projects. Generally speaking, I would see this as learning by doing. I choose and design a project not because I know exhaustively what direction it will bring me to, but I make an intelligent guess from the questions in practices, and the surroundings and background resources. Although I reflected the clues of such guesses through the interpretation in chapters, I still cannot avoid that there are tacit and inimitable for others. I acknowledge pragmatic limitations due to my connections, budget, or the accessibility of co-operators. The limitations also generated the components of research. This further brings me tortuous thinking about my core ideas of Chineseness – a communication. How to make others understand the reflected Chinese culture in design with its whole context?

I am a Chinese person who grew up in the fastest time of Chinese development. I was pursuing an engineering education until I began my PhD at the RCA. Although I am learning to be critical through my PhD study, I admit that I am pragmatic in nature. I held an idea of developing a brilliant design approach in order to incorporate Chinese elements into designing at the beginning of this PhD. Thus far, this work recounts my personal learning experiences and thinking. Significantly, the research question has turned from “what is Chineseness?” into “how is Chineseness manifested, and “how can it manifest specifically and add value to design?”

My understanding is the shift of my research stands. The starting point of my research is that I am a Chinese designer. I was not satisfied with Chinese design when I came to the doctoral study. I had observed the gap between the Chinese and western design ways. I found a lack of harmony when I saw the ‘Chinese lucky cloud’ added to the surface of a laptop. Thus, I made the decision to change this kind of circumstance through my work. It was almost all derived from the Chinese pride perspective. From this starting point of “how to make the Chinese local designs attractive for the western world”, and “how to bridge the gap between Chinese design and western design” my interest developed. However, soon after beginning I found I could not really answer such pragmatic questions. That was because Chineseness deals with understanding rather than problem solving. China does not exist within one particular context. Every Chinese person lives within his/her particular context. On the other hand, in general, we all live within a pragmatic and capitalistic environment, where becoming wealthier is the goal of the country and most of its people. Developing the

economy, eliminating self-criticism, and chasing money are the big drivers in China today. These drives can also be said to form the Chinese design story created by Chinese designers, subconsciously but inevitably¹. Thus, with my research carrying on, I shifted my status more towards the middle. In other words, I now contribute research approaches that can promote the communication of Chinese culture in the design sphere, from both Chinese and non-Chinese perspectives.

My work is action research. It is not that I consciously adopted this approach; rather, I noticed that I am adopting it at a later stage of my work. The reason why my work has followed this approach was initially implicit and retrospectively articulated. Perhaps because of the influence of my logical way of thinking from my engineering background, action research has seemed to be a practical tool for me to discover and organise my practicing and thinking. Also because from a logical and scientific perspective, action research offered me an iterative and reflective cyclical form as a tool with which to structure my work. But more significantly if I reflect back on my research purpose of investigating Chineseness: my work presents partly the story about my investigation of Chineseness in design (how), partly the subject of this story (why), the telling of the tale being an account of the design route.

My role in this research is more on observing and teaching than design. I was designing my research rather than designing products through research. My part in the projects and my experience is the subject of this research. It is not an objective process that I can solid involve with reports, meanwhile it leads the research.

9.5

The new knowledge

Depicted through the thesis, this research mixed my practical process, critique of the relevant knowledge, and understanding shift. Rather than the pervious cultural design models or the Chinese cultural design theories, such as Moalosi's and Lin's model, or Liu's and Xing's theory (refers to Chapter 2), my work enables its Chinese designer readers in contemporary local Chinese cultural context to manifest Chineseness rationally and critically. Its generated design model can also help to explore new project through differ the design purposes practically.

What is more, this thesis reflectively inspire the 'change' of Chinese design context, in Chinese designers and non-Chinese designers who work with Chinese culture or in Chinese environment. For instance, what is the new meaning of Chinese symbol, behaviour and philosophy for design today; and what is the new consciousness about some typical Chinese traditions. These people are those who are making these changes. Through my

1. An example is that why there exist so much copying in China today? It is a relative easier way to chase commercial allure. The social phenomenon causes the commercial value to be the most important one for the Chinese design today.

research vision of China, in the future, such changes that reflect in design will be more diverse and individual, as well as practical and critical, which will be influenced by both the Chinese local environment and global tendency.

In conclusion, this research is not entirely about an established truth, not a definition of Chinese cultural design identity, nor a solution although it has investigated aspects of such an enquiry. Rather, I anticipate that it is a shared sample about research through design, and that it can be regarded as a catalyst for designing Chinese cultural elements. It can be treated as a critical theory about Chinese contemporary culture and design, an enabling method of manifesting Chinese specific, or a reflective design research example, as being useful or for sparking or inspiring the future work. It is also about how to be a Chinese designer today. All of this is communicated through the depictions of my experiences, emergent thinking, and the shifts of understanding, as well as a delineation of limits of practice that imposed by the pragmatic realities. All of this can be regarded as the new knowledge that my doctoral work addresses.

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YAO, W. & HALL, A. 2011. The Transferral of cultural factors from traditional Chinese folk art into contemporary product designs. *Design Principles and Practices: An International Journal*, 5, 313-326

List of figures and tables

Page	Fig	Description	Page	Fig	Description
015	Fig 1.1.1	Better Place project design, 2009-2010	041	Fig 3.1.1	Gero and Kan-nengiesser's model of situated designing as the interaction of three worlds, 2004
018	Fig 1.1.2	A typical electric rice cooker			
020	Fig 1.2.1	Cartier enamel watch with dragon pattern	045	Fig 3.1.2	Hevner's model of design science research cycles, 2007
021	Fig 1.2.2	Beijing 2008 Olympics torch and laptop designs from Lenovo	046	Fig 3.1.3	Kemmis and MaTaggart's spiral action research model, 2000
022	Fig 1.2.3	A Ming rose-wood chair and its mortise and tenon structure	046	Fig 3.1.4	O'Leary's circles of action re-search model, 2004
025	Fig 1.3.1	Big character poster in Cultural Revolution	054	Fig 3.3.1	Research methodological construction
025	Fig 1.3.2	Soviet poster in 1920s			
025	Fig 1.3.3	Poster: Chairman Mao forevermore great	060	Fig 4.2.1	a - e. Chinese folk art transfer workshop teams work with craftsmen
026	Fig 1.3.4	Red Guard soldiers in military uniforms	061	Fig 4.2.2	Photos taken of market products by workshop participants
029	Fig 1.3.5	Feiyue sports shoes, Left: brand registered in China in 1950s, 28yuan/pair; Right: brand registered in Europe in 2006, 50 euro/pair	063	Fig 4.3.1	Design concept from workshop "paper-cut" mirror
			063	Fig 4.3.2	Living room products design from workshop
029	Fig 1.3.6	'Shanzhai' mobile, a parroting iPhone style, 2009	064	Fig 4.3.3	Bedroom products design from workshop
032	Fig 2.1.1	Lin's cultural product design model, 2007	068	Fig 4.4.1	Four key factors in research: designer, design, users and culture elements
034	Fig 2.1.2	Moalosi's culture-oriented design model, 2007	068	Fig 4.4.2	The relationship of the four key factors in terms of symbolic transfer

Page	Fig	Description	Page	Fig	Description
071	Fig 5.1.1	TCL mobile phone 2002	092	Fig 7.1.1	The relationship of four factors in terms of symbolic transfer
074	Fig 5.2.1	Interview of empty nest elderly Mr. Zhang	092	Fig 7.1.2	The relationship of four factors in terms of behavioural transfer
075	Fig 5.2.2	The elderly mobile, designed by Newplan design studio, 2008	093	Fig 7.1.3	The relationship of four factors in terms of philosophical transfer
075	Fig 5.2.3	Mobile accessories design			
078	Fig 5.3.1	Design for the elderly, Tsinghua design workshop, 2010	095	Fig 7.2.1	A three-layer structure for culture-transfer design
079	Fig 5.3.2	Design workflow of a TV healthy sharing society	103	Fig 8.1.1	"Smart dating" party environment
079	Fig 5.3.3	TV healthy sharing society design narrative	103	Fig 8.1.2	Selection of "smart dating" interface design
080	Fig 5.3.4	Functions in "Shooting & Cooking" Smartphone Service Concept Design	109	Fig 8.2.1	Sex education workshop poster for calling participants
081	Fig 5.3.5	"iHelp" device design	109	Fig 8.2.2	Sex education workshop, 2012
083	Fig 5.4.1	The relationship of designer, design, users and cultural elements in terms of behavioural transfer	062	Table 4.3.1	Design output of the five teams (Chinese folk art workshop)
			089	Table 6.2.1	Two groups' concepts and reviews
086	Fig 6.1.1	The relationship of designer, design, users and cultural elements for philosophical and political cultural transfer			
086	Fig 6.1.2	A map of the fictional island's position			
089	Fig 6.2.1	"Top secret island" workshop, left: the Chinese team; right: the UK team			

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