

CHAPTER I

PRELIMINARY

1.1 Design Background

The application of technology and scientific thinking will be increasingly necessary for innovation in design science in the future (Simon, 1996). Design benefits from sustainable development as a link between the natural and human sciences. According to Norman, the experimental and research methodologies of the social and behavioural sciences cannot be used to address the complex issues we face today (Norman, 2019). A methodological framework called 'design thinking' provides strategies for innovation. Design thinking provides guidance on design and creative methods for cultural approaches, with the aim of continuously improving the quality of people's lives. Scientific design methodologies based on Design Thinking can not only provide designers with access to more useful, diverse and scientific practical approaches, but can also guide the evolution of traditional crafts. Craft is crucial for value innovation as one of the main components of design development. From the designers' point of view, craft is a sublimation of handicrafts into mind-crafts and serves as a basis in design.

Craft and design go hand in hand. Design is the embodiment and future of craft, while craft is the foundation and connotation of design. Ever since people started making things with their hands, a certain way of thinking and designing has been present in craft production. As the craft evolves, so does the product of the craft, finding new applications and contributing to the long-term growth of the craft.

The basis of design now consists of the principles and processes used to create the items. It makes sense that this research defines process design and action research in the light of this context. Design approaches can be incorporated into traditional handicrafts to explore new potentials and models for sustainable growth, as well as to add additional cultural implications in response to market needs. However, there are differences in problem-solving skills, techniques and experience among artisans. A challenge to be addressed is how to fully utilise scientific design techniques and methodologies while learning about the sustainability of traditional handicrafts (Norman, 2019).

Humans have entered an era of spiritual needs, where they seek meaning and experience through material needs as a result of social growth and technological advancement (Pine, 1999). Future designers want to be motivated in different ways to produce more goods, experiences and services that improve human existence and have a significant and positive impact on society (Norman, 2019). The design firm IDEO believes that future designers must be able to draw inspiration from a variety of fields, create novel value for customers, and incorporate environmental considerations into their innovative work in order to achieve sustainable natural, human, and ecological development (Holt, 2016). Traditional handicrafts are cultural expressions characterised by beauty, usefulness, location and sophistication. They also encompass a variety of qualities such as technology, art and collecting. The Sustainable Development Goals (SDGs) are the cornerstone of the United Nations (UN) 2030 Agenda (Crabbe, 2012). The SDGs aim to provide all people with a sustainable, peaceful, prosperous, and just existence on earth today

and in the future. The need of preparing for cultural, educational, and inventive futures has been stressed by the UN time and time again. Through innovation in cultural diversity, industries with high added value and higher economic productivity must be produced. To further stimulate local culture and product innovation, productive activities and innovation must be encouraged. In addition, funding for technological advancement, research, and invention is necessary for increased commodity value and industrial diversification. To enhance the supply of Internet service, communication coverage must be increased (Huang, 2018).

Sites that are part of the world's cultural and natural heritage should be better protected. By 2030, sustainable management and resource efficiency should be achieved through the adoption of a sustainable consumption and production model, which will also strengthen the importance of regional culture and goods in green economy sectors such as sustainable tourism. The benefits of promoting economic status and maintaining the cyclical development mode will be achieved by maintaining the sustainable operation of traditional artisans, developing culturally creative products with local cultural identity, and continuously improving the creative process and craftsmanship through innovation and design, drawing on modern modes of design thinking.

Traditional ceramics have a rich history and beautiful culture in China. Ceramics were once used by the nobility as a symbolic ritual and ceremonial object, as well as a utilitarian tool for their own production and way of life. It has both practical and spiritual significance (Huang, 2018). Scientific methodologies and trial and error procedures are not accessible in the production of traditional

handicrafts, and artisans lack the necessary knowledge and training (Liu and Hao, 2017).

Traditional handicrafts are produced through a craft and apprenticeship system, which is usually only a replica of traditional handicrafts and an aesthetic representation of traditional aspects. Although handicraft innovation may be used to educate relevant skills in terms of handicraft value, the concept of handicraft value and the direction of growth of traditional handicrafts are unclear, and certain handicrafts with high intrinsic value are declining in popularity (Zhan and Walker, 2018).

The significance of external handicrafts in terms of handicraft innovation is essentially that of sheer enjoyment and appreciation, lacking the conceptual components of the fusion of creative activity and social life in practice. Second, with the impact of consumerism and globalisation, handicrafts have become more commercialised, while "efficient production" based purely on "interests" has shortened product life cycles and promoted a culture of disposable consumption (Zheng, 2004).

Third, the survival of traditional culture has been jeopardised by the lack of intergenerational contact and conversation (Härkönen, 2018). The flow of information and skills for craft production has been disrupted because the cultural heritage of a particular region has been cut off from the nation and its territory (Yang et al., 2018). For example, in traditional Chinese crafts such as knitting, paper cutting and pottery, it takes a lot of experience and time to make high-quality, culturally acceptable products with precise attention to detail.

The time it takes to accumulate knowledge and experience varies from one year to ten years. On 19 November 2018, the study team spoke for four hours with ceramicist Wang Xinghu, who had spent four years learning the craft at the Ceramics Institute, followed by ten years setting up his own ceramic workshop. According to him, China's rural and semi-rural areas are where many traditional handicrafts were created and inherited. However, as rural areas became increasingly urbanised, more and more young people chose to leave the monotonous, repetitive and lazy life of an artisan, creating a situation where the only people with impeccable traditional craft skills were the elderly. The failure of the craft to capture the interest and attention of young people further complicates the picture. Research shows that more than 50% of respondents had little or no knowledge of traditional craft production.

As a result, the traditional craft sector needs care and protection. High cultural value, product value and creativity in modern design can be found in traditional ceramics. While practical creations can evoke a ceremonial feeling and allow designers to experience the beauty of work, creation and practice in production, ceramic craft creations can help designers develop their integrated knowledge and action skills and stimulate interactive experiences of the body and nature of ceramics (Throsby, 2003).

It emphasises the creations of individuals inspired by nature and encourages the study of many civilisations (Warnier, 2003). It can also support the local economy, community, culture and ecology, while promoting material conditions for environmentally friendly consumption. Traditional ceramic handicraft patterns

not only inspire new designers and assist in product development, but also play an important role in helping individuals to understand, preserve, and transmit traditional handicraft culture (Moraes and Quadros, 2019).

The myth of yin and yang in Eastern philosophy and the value paradigm of traditional Chinese craftsmanship are fundamental to sustainable development (Holmgren, 2014). Design technology is where the sustainability highlighted in this study first appeared. Traditional Chinese crafts need scientific design tools and models in order to develop and thrive in the future. It is possible to explore a collection of strategies that are helpful for the sustainable development of traditional crafts by introducing contemporary design thinking methods. Exploring sustainability in traditional crafts as part of design thinking not only provides traditional culture with a source of inspiration for contemporary designs, but also helps to weigh the pros and cons of sustainable design in such products.

Full expression of Chinese knowledge is a central theme of Chinese design development, as it is the only way for China to stand out in the fierce global competition (Wang, 2010). The contrast between traditional craftsmanship and scientific design methods has been the focus of previous design. The design process may be as objective as a scientific experiment, which will produce visible results, or it may be the same as apprenticeship and craft instruction, which will result in the future replication of traditional items (Dai and Hwang, 2019).



Figure 1.1. Ancient Ceramics

The author believes that ancient ceramic styles are highly valued by historians, archaeologists and art collectors for their cultural, historical and artistic significance. Ancient ceramics provide a valuable insight into the lifestyles, beliefs and artistic abilities of past civilisations, and their intricate designs and techniques offer a glimpse into the creative skills and cultural heritage of the past. Many ancient ceramics are considered works of art and are admired for their beauty and craftsmanship. They are also valued for their rarity, as many have been lost or destroyed over time. However, as with all art forms, personal tastes and preferences play a role in the appreciation of ancient ceramics, and what some may find beautiful and significant may be considered outdated or unappealing by others. Overall, ancient ceramics are considered important cultural artefacts and are valued for their historical, cultural and artistic significance.

In the author's opinion, the pros of Indonesian Ancient Ceramics are:

1. Rich cultural and historical significance, offering a glimpse of past civilisations.
2. Unique and intricate designs, showcasing the creative skills and cultural heritage of the past.
3. Appreciated as works of art, admired for their beauty and craftsmanship.
4. Rarity, as many ceramics have been lost or destroyed over time.
5. Valued by historians, archaeologists and art collectors.

Meanwhile, in the opinion of the author, the cons of Ancient Ceramics Style are:

1. Fragile nature, requiring special care and handling.
2. Limited availability, as many ceramics have been lost or destroyed over time.
3. Age and wear can affect their appearance and value.
4. Designs and techniques may be outdated and may not meet modern aesthetic preferences.
5. High cost due to rarity and cultural significance.

In the first half of the 18th century, Hakka Chinese immigrants from the provinces of Kwantung and Fukien immigrated to Indonesia, leading to the development of ceramics in that country. They came as tin and gold miners. Long tunnels were dug by the newcomers as they used dragon kilns to produce high-fired ceramics for their tableware needs. They were later credited with pioneering the construction of an Indonesian high-fire kiln at Singkawang (San Keuw Jong). Before high-fire ceramics were introduced to other regions of Indonesia in the early 20th century with the help of Dutch colonists, it was thought that such kilns could only be found in Singkawang. Under the direction of two painters, Edie Kartasubarna and Angkama Setjadipradja, the Bandung Institute of Technology (ITB) Art School started its ceramics laboratory in 1963. These two artists then studied ceramics for about a year at Alfred University in the United States (Gautama, 2019).

Hildawati Soemantri (1945-2003), an art student who graduated from ITB in 1971, continued her ceramics studies in the United States in 1973. She returned to Indonesia in 1976 and held her first solo exhibition at IKJ (Jakarta Art Institute-

Jakarta Art Institute), which included installation pieces that, after receiving an MFA from Pratt Institute, made her known as a pioneer of contemporary ceramics in Indonesia (Gautama, 2019).

Modern handicrafts and ceramics. Indonesian ceramic art has a rich tradition of western influences. This is because it was in Western culture that the first ceramic artists learned their craft. The state of ceramic art in Indonesia is influenced by Western influences, which divide the hierarchy of art into high art (painting, sculpture, installation, video, multimedia) and low art (crafts, ornamental products, functional art) (Gautama, 2019).

It is not surprising that ceramics colleges fall under the craft sector. The artists are (generally) categorised as independent ceramic artists who set up their own studios and create both functional and non-functional objects. Some even work in the design and production of commercial ceramic companies. Students who study fine arts and have a passion for ceramics are ultimately categorised as modern ceramic artists, whose work demonstrates conceptual thinking (Gautama, 2019).



Figure 1.2. Indonesian ceramics

According to the author, Indonesian ceramics are known for their vibrant colours, intricate designs and cultural heritage. The use of traditional techniques and locally sourced materials gives Indonesian ceramics a unique character and makes them an important part of the country's cultural heritage. Many Indonesian ceramic styles are inspired by nature and depict scenes from everyday life, adding to their charm and appeal. However, as with all art forms, personal tastes and preferences play a role in the appreciation of Indonesian ceramics, and what some may find vibrant and charming, others may find too busy or overwhelming. Overall, Indonesian ceramic styles are considered to be a beautiful and authentic representation of the country's cultural heritage and are appreciated by many people for their unique designs, rich colours and cultural significance.

In the author's opinion, the pros of Indonesian Ceramic Style are:

1. A rich cultural heritage and history.
2. Unique and intricate designs, often inspired by nature and everyday life.
3. Vibrant colours and patterns.
4. Made using traditional techniques and locally sourced materials, adding to their authenticity and character.
5. Growing in popularity and recognition worldwide.

Meanwhile, in the opinion of the author, the cons of Indonesian Ceramic Style are:

1. Fragile nature, requiring special care and handling.
2. Limited availability as it is mainly produced in Indonesia.

3. High cost due to the time and skill required to create it.
4. Vibrant colours and intricate patterns may not suit all interior styles or personal preferences.
5. Imitation and mass-produced ceramics may be less valuable and lack the authenticity of traditional Indonesian ceramics.

In contrast, the discovery and study of ceramic culture in Korea in the 20th century was full of human drama, as is appropriate for the creation of true culture. After all, every small and significant new idea and development is made by people, either alone or in groups. One of the water droplet ejections, in the shape of a duck, is as stunning and wonderful as the celadon cut in Figure 1. It moves. The incident was recounted in the best-selling novel *Korean Celadon* by the author G.St. GM Gompertz, and the cover of the book shows water drops (Gompertz, 1964).

Returning home from a long day's work, a farmer notices a duck's head that has been buried in a field for several millennia, but now pokes its head out as if on a world tour. After being stopped by the police, questioned and finally released with little money in his hand, the farmer is ecstatic at his good fortune and bids his prize for more than he could have ever imagined, but he still wants more to prove his incredible experience (Choo, 2012).

Ceramic middens are no longer common, most having been obliterated to make way for houses, grain and vegetable fields, dams and roads. However, one would still consider oneself lucky to come across such a mound after spending hours studying the literature and asking countless questions of historians and village elders. They are often found at the foot of mountains, overlooking verdant

landscapes and adjacent streams. Small clumps of earth, used as dividers in stacks of pottery for firing, were found among the various sized shards, clumps of earth and stones that had been burnt (Choo, 2012).



Figure 1.3. Korean ceramics (Yi et al., 2022)

According to the author, Korean ceramics are highly regarded for their intricate details, rich cultural history and unique aesthetics. They are valued for their blend of traditional and modern elements and for the high level of craftsmanship involved in their production. They are sought after by collectors and art enthusiasts, but their high cost and fragile nature can make them less accessible to some people. Ultimately, the value and appreciation of Korean ceramics is subjective and depends on individual tastes and preferences.

In the author's opinion, the pros of Korean Ceramic Style are:

1. Rich history and cultural significance.
2. Unique and distinctive aesthetic, blending traditional and modern elements.
3. High quality and attention to detail in craftsmanship.
4. Versatile and can be used for both functional and decorative purposes.
5. Valued by collectors and art enthusiasts.

Meanwhile, according to the author's opinion, the cons of Korean Ceramic Style are:

1. High cost due to the time and skill involved in the creation process.
2. Limited availability as it is mainly produced in Korea.
3. Fragile nature requiring special care and handling.
4. May not suit all interior styles or personal preferences.

As a result, there has been virtually no progress in traditional craft design. In terms of research methodology, this study used a literature review to investigate and identify the characteristics, content and theoretical underpinnings of design as the 'third wisdom' of the natural and social sciences, and design thinking as a

scientific method and key research tool. The value of sustainable traditional crafts was then investigated using action research, expert interviews and factor analysis. The product design workshop then used the experimental technique to design and prototype, and this prototype was measured using the design thinking development model to produce an evaluation report.

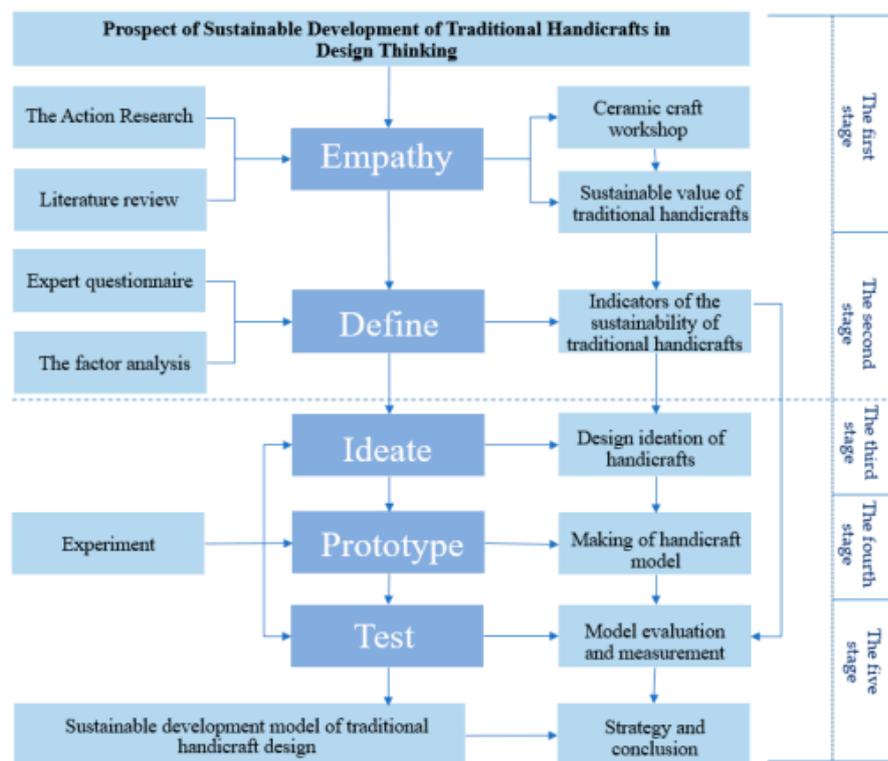


Figure 1.4. Thought Development Models

The primary experimental techniques used in this study are natural ones, and the objects created are ultimately used in real life. We investigate the creation of traditional handicrafts that are sustainable against the backdrop of everyday life, after deliberately regulating and creating certain circumstances. By combining the advantages of experimental techniques and observation methods, such experimental

methods are more similar to the actual output of craftsmen and consumers in daily life.

Backflow incense burners are a type of incense burner that use special incense cones designed to create a unique smoke flow pattern. Unlike traditional incense burners, which release smoke directly upwards, backflow incense burners have a special channel or cavity that allows the smoke to flow downwards, creating a mesmerizing and relaxing waterfall-like effect. So the plan for this research is to study ancient ceramics that combine two different styles, from Indonesia and Korea.

Incense holder was chosen to be the product of this research because while thinking about how to express the flow of life, researchers felt the correlation in backflow incense as the smoke flows from the top to bottom. Researchers felt it was suitable to express the flow of life. The use of incense supports meditation prayer and quiet time. Puts researchers in the right state of mind for prayer and meditation and to ponder the deepest aspects of life. The type of lavender incense chosen was Lavender incense because it is a popular choice for use during meditation and yoga practices due to its calming and soothing properties.

Lavender incense can cause calming and relaxation. The scent of lavender incense can help reduce stress, anxiety, and promote relaxation. This can be especially useful during meditation and yoga practices when people want to calm their minds and relax their bodies. Lavender incense can also increase focus and concentration. Lavender incense can help improve mental clarity and focus. Its scent can help calm racing thoughts and increase concentration, making it useful for yoga and meditation practices that require focus and attention. -lavender incense

has anti-inflammatory and antiseptic properties that can help soothe the skin, promote healing, and reduce pain and inflammation. Its aroma can also help promote feelings of renewal and rejuvenation. Lavender incense is believed to have a balancing effect on the chakras, or energy centers of the body. Its scent can help balance the crown and third eye chakras, which are associated with spiritual awareness and intuition.

1.2 Purpose

Based on the background of the problems above, this design aims as follows:

1. Designing the concept strategy and visual rebranding of the Ancient Ceramics as back flow incense holder inspired by Korean and Indonesian.
2. By employing the design thinking process, the authors aimed to create a unique backflow incense holder that embodies the rich cultural influences of both Korean and Indonesian traditions, resulting in a distinctive product with a strong identity.

1.3 Limitation of Design Problems

By considering the limitations of time, skills and supporting infrastructure, the authors limit the problems.

1. Designing the concept strategy of the Ancient Ceramics as back flow incense holder inspired by Korean and Indonesian.
2. Only using Korean ancient ceramics on Goryeo dynasty (918–1392) period and Indonesian ancient ceramics after the Dutch colonial era, started around 1795 that combination.

1.4 Design Method

The design method in this study is as follows:

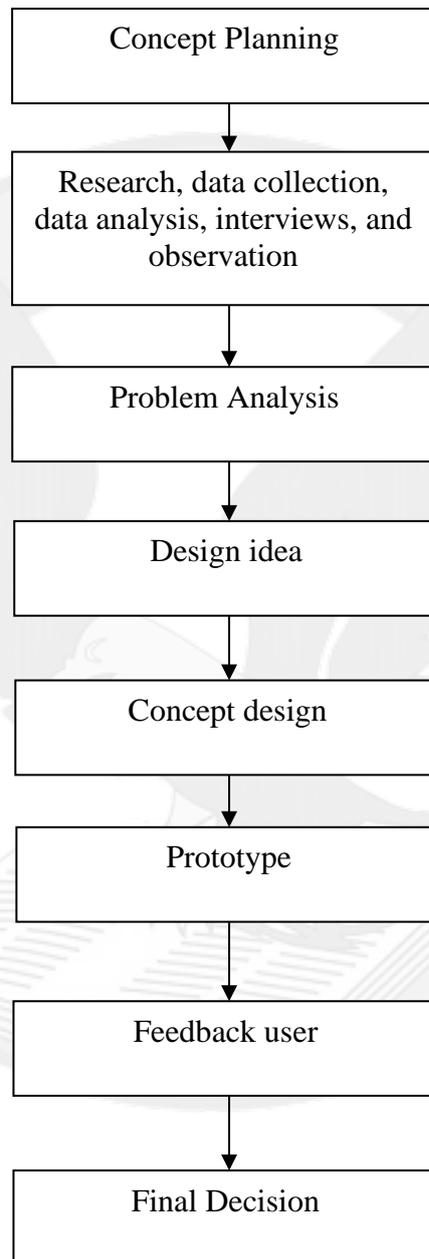


Figure 1.5. Design Method

1.5 Systematics of Writing

The writing systematics in this Final Project are as follows;

Chapter I Introduction.

This chapter covers the general design highlights of this work, including Background, objectives, problem definition and design methods.

CHAPTER II: Data analysis.

This chapter describes the information I gathered and needed for this design. This chapter first discusses the secondary data and primary data obtained and includes literature reviews, observations, interviews and surveys. After processing the available information, an analysis of the existing problems and alternative solutions to these problems is carried out. The chapter ends with a discussion of the development of the quality function.

CHAPTER III: Design Concepts.

This chapter covers general design concepts to solve problems in this area.

Bibliography

This section contains research sources.