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**FRAMEWORK DEVELOPMENT OF YI TRADITIONAL CRAFT CULTURAL
FACTORS ON CULTURE-CENTERED DESIGN IN LIANGSHAN, CHINA**

By

BU JIMO

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of
Philosophy**

January 2024

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in
fulfilment of the requirement for the degree of Doctor of Philosophy

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The traditional craft culture of the Yi ethnic group has exhibited a tendency towards decline and transformation in various aspects due to the impacts of industrial modernization. Although people are interested in buying Yi cultural artefacts, they have limited practical use and lack diversity. The design developments of new products need to be maintained by preserving the Yi traditional crafts. In the context of a new cultural environment, the Yi traditional crafts have a more important impact on the acceptance of related development of products, designs and services. Although the Yi traditional craft has been widely discussed in recent years, the available documentation does not provide extensive knowledge about the integration of Yi crafts on designs. In fact, there is still a lack of research in the relationship between Yi traditional crafts and the designs of cultural products. Consequently, local designers are in dilemma without proper references when integrating the Yi cultural factors into their designs. Therefore, local designers make mistakes in explaining the cultural attributes on designs, as their designs touch superficially on the

surface of culture. This study shows that local designers lack an in-depth understanding of the Yi craft field. A rigorous study of the tangible and intangible culture of Yi traditional crafts can help designers obtain a new paradigm in the designs of products for Yi crafts. Thus, the purpose of this study is to determine the prominent Yi Traditional Craft Cultural Factors (YTCCF) and their attributes to develop a framework that influences Chinese cultural products. A mixed-method was employed in this study. In the first phase, three groups were used in the Nominal Group Techniques (NGTs) to discuss the Yi Traditional Craft Cultural Factors (YTCCF), and explain the reasons for their factors. Then, the findings of Nominal Group Technique (NGT) were used to conduct a comprehensive participant survey to comprehend the prominent factors and attributes of Yi Traditional Craft Cultural Factors (YTCCF). Then statistical analysis was conducted to establish the usability evaluation. The results of the survey reconfirmed the five factors that influenced the designs the Yi craft products and also determined their 15 prominent attributes. Finally, these factors and attributes were validated by the Yi designers. The contributions of this study can help to increase the understanding of the culture Yi traditional crafts and provide an approach to explore the transition to modern designs. A framework of Yi Traditional Craft Culture Factors (YTCCF) was also developed to generate Yi culture-centered designs. Designers and stakeholders can use the results as a flexible guide to create localized innovative designs.

Keywords: Cultural Factors, Framework Development, Yi Culture-centered Design, Yi Traditional Craft

SDG: GOAL9: Industry, Innovation and Infrastructure, GOAL11: Sustainable Cities and Communities

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**RANGKA KERJA PEMBANGUNAN FAKTOR BUDAYA KRAF
TRADISIONAL YI TERHADAP REKA BENTUK BERPUSATKAN BUDAYA
DI LIANGSHAN, CHINA**

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Budaya kraf tradisional etnik Yi telah mempamerkan kecenderungan ke arah kemerosotan dan transformasi dalam pelbagai aspek akibat kesan pembuatan industri moden. Walaupun orang ramai berminat untuk membeli artifak budaya Yi, artifak ini mempunyai kepraktisan yang terhad dan kekurangan kepelbagaian. Pembangunan reka bentuk produk baharu perlu diwujudkan dengan mengekalkan budaya kraf tradisional Yi. Dalam konteks persekitaran budaya baharu, budaya kraf tradisional Yi mempunyai kesan yang lebih penting terhadap penerimaan pembangunan produk, reka bentuk dan perkhidmatan yang berkaitan. Walaupun budaya kraf tradisional Yi telah dibincangkan secara meluas dalam beberapa tahun kebelakangan ini, banyak dokumentasi tidak memberikan pengetahuan yang luas tentang integrasi budaya kraf Yi ke dalam reka bentuk. Malah, kajian mengenai hubungan budaya kraf tradisional Yi dengan reka bentuk produk budaya masih kurang. Akibatnya, pereka tempatan berada dalam dilema tanpa rujukan yang betul

apabila mengintegrasikan faktor budaya Yi ke dalam reka bentuk mereka, ini menjadikan mereka tersilap dalam menerangkan atribut budaya dalam reka bentuk, dan menjadikan reka bentuk berlarutan di permukaan budaya. Kajian ini menunjukkan bahawa pereka tempatan kurang pemahaman yang mendalam tentang bidang kraf Yi. Kajian yang teliti tentang budaya ketara dan tidak ketara budaya kraf tradisional Yi boleh membantu pereka memperoleh paradigma baharu untuk reka bentuk produk budaya Yi. Oleh itu, tujuan kajian ini adalah untuk menentukan Faktor Budaya Kraf Tradisional Yi (YTCCF) yang menonjol dan atributnya untuk membangunkan rangka kerja yang mempengaruhi produk budaya Cina. Kaedah campuran telah digunakan dalam kajian ini. Pada fasa pertama, melalui tiga kumpulan Nominal Group Techniques (NGT) digunakan untuk membincangkan Faktor Budaya Kraf Tradisional Yi (YTCCF), dan menerangkan sebab faktor tersebut. Kemudian, dapatan Nominal Group Technique (NGT) digunakan untuk menjalankan tinjauan peserta yang komprehensif untuk memahami faktor-faktor dan sifat-sifat menonjol Yi Traditional Craft Cultural Factors (YTCCF) melalui analisis statistik dan penilaian kebolegunaan. Hasil tinjauan sekali lagi mengesahkan lima faktor yang mempengaruhi reka bentuk produk budaya Yi dan menentukan 15 sifat menonjolnya. Akhirnya, faktor dan atribut ini telah disahkan oleh pereka Yi. Sumbangan kajian ini membantu meningkatkan kefahaman tentang budaya kraf tradisional Yi dan telah menyediakan pendekatan untuk meneroka peralihan daripada budaya kraf tradisional Yi kepada reka bentuk moden. Rangka kerja Faktor Budaya Kraf Tradisional Yi (YTCCF) juga dibangunkan untuk menjana reka bentuk berpusatkan budaya

Yi. Pereka bentuk dan pihak berkepentingan boleh menggunakan hasilnya sebagai panduan yang fleksibel untuk mencipta reka bentuk inovatif setempat.

Kata kunci: Faktor Budaya, Kraf Tradisional Yi, Pembangunan Rangka Kerja, Reka Bentuk Berpusatkan Budaya Yi

SDG: MATLAMAT 9: Industri, Inovasi dan Infrastruktur, MATLAMAT 11: Bandar dan Komuniti Mampan



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LIST OF ABBREVIATIONS

CCD	Culture-Centered Design
NGT	Nominal Group Technique
YTCCF	Yi Traditional Craft Cultural Factors
YCCD	Yi Culture-centered Design



CHAPTER 1

INTRODUCTION

1.1 Introduction

The Yi communities have produced many unique crafts throughout their history, and their crafts are highlighted as their way of life and have an important position in the overall craft culture of the Chinese ethnic minorities. However, modern industrialization has impacted Yi traditional craft culture and has shown a declining trend and less transformation in all aspects. In the context of the new cultural environment, the Yi traditional craft culture has more importance on the development, designs and services of related product. Although Yi traditional craft culture has been widely discussed in recent years, research literature does not provide extensive knowledge in the integration of Yi craft culture on designs. The above situation has raised concerns of how to make a smooth transition of the Yi traditional crafts to modern designs.

However, there is still a scarcity of studies on the relationship between traditional craft culture and designs of cultural products among the Yi ethnic group. Designers have less reference when creating new products, as there is a lack of any comprehensive design framework of Yi culture designs. The products designed lack the unique features and innovation of Yi culture, because of the lack of competitive advantages in the open market. This shows that there is an important need to investigate the Yi craft cultural factors on

the designs of cultural products. The investigation can help designers to include cultural factors on the designs of culture-centered products. Thus, the new designs of products can enhance the identity and sustainability of Yi culture.

Understanding the Yi culture can help avoid negative connotations in the design. Therefore, it is necessary to develop a Yi culture design framework to enhance understanding, protection, acceptance, of the use of design products by addressing cultural challenges. Developing a framework can improve the relationship between designers and the development of new design products, that can be added to the design process. Therefore, it is crucial to explore the impact of culture on designs to address the problem of a lack of design information involving man-made artefacts.

1.2 Background of Research

Since China is a multiethnic country, the local traditional craft culture is composed of various ethnic craft cultures. Therefore, this study is conducted within the context of a rich and splendid Chinese craft culture. From the mid-1990s to the present day, the traditional craft industry in China has entered a new stage of development (Zhang, 2014). It has shifted from the Production Renaissance to the Cultural Renaissance (Wang, 2019), especially turning to focus on local and traditional cultures, which are very significant transformations (Fang, 2020). Some researchers believe that in order to achieve innovations and developments in the designs of the current cultural

products, it is necessary not only to combine the needs of modern society and people, but also extract reasonable attributes from traditional craft cultures (Hu, 1999).

The Yi Ethnic Group has a long history and is the sixth most populous ethnic group in China. Most ethnic Yi people live in southwest of China (Wang & Shi, 2013), speak many languages, and have rich art traditions. The Yi communities have produced many unique arts and crafts over the years, such as Yi lacquerware painting, Yi traditional costumes and accessories, Liangshan Yi silverwork etc. Therefore, Yi traditional craft culture has an important position in the overall craft culture of Chinese ethnic minorities (Zhang, 2015). The Yi craft products have not only become the daily necessities of the Yi people, but are also the carriers of history, culture, art and their spirit (Chen, 2018). In other words, the design elements in Yi cultural artifacts can reflect the Yi cultural identity. In addition, the research shows that traditional Yi culture is the inspiration for the designs of Yi cultural products (Luo, 2018; Tian et al., 2018; Wang & Shi, 2013). The combinations of culture and design helps to enhance the value of the products and at the same time meets their functional requirements. It also helps to strengthen the sense of identity of the consumers (Wang et al., 2014). The integration of contemporary designs and traditional crafts are becoming increasingly important (Li, 2015). Incorporating cultural characteristics into the design processes of products have become a new trend in designs.

Many scholars have proved that culture shapes designs (Röse & Züblke, 2001; Shen et al., 2006; Sparke, 2019). In response to globalization, an increasing incorporates local characteristics (Moalosi et al., 2010). According the extensive research by Zhang (2015) on Yi cultural artifacts, they reveal the decorative colors and patterns of Yi lacquer tableware that have been developed into important cultural symbols for Liangshan Yi. The importance of these symbols to the Liangshan Yi people is apparent in many aspects. The prominent examples of these are the colors and patterns that have been expanded and integrated into architectural designs, urban planning, and furniture designs (Liu, 2016; Ye, 2016). In this way, it can be seen that Yi cultural factors have exerted an impact on the designs of culture centered products.

There is evidence that Yi culture has become an important part of the innovations of the local culture-centered products and services (Chen, 2018). If the Yi cultural factors are examined closely, it became obvious that the cultural characteristics are embedded to the designs. Moreover, they are beneficial to the emotional interactions between the designed products and the users. Many studies from diverse perspectives believe that the Yi culture has a key influence on the acceptance and uses of related products and services (Qin, 2017; Zhu et al., 2017). However, with the rapid development of society and technology, designers will not only need to provide new products that are different from the traditional ones, but they also need to create designs suitable for local situations (Zhao & Gao, 2018). Particularly, in response to globalization, modern designers have started to emphasize the values of

traditional culture in order to improve recognition among users and give designed products a “cultural identity” (Yi, 2020). As a result, on one hand, design integration can promote the culture-centered designs; on the other hand, these can strengthen the protection of local cultures (Saidin et al., 2017). The above explanation provides the background of the research and further attempts will be made to reveal the research gaps, which will lead to the research questions, research objectives and significance of this study. Therefore, this study will focus on several important traditional Yi crafts, investigate the factors that are frequently used in their designs, and analyze their roles in the designs of Yi cultural products. Ultimately, the research attempts not only to understand the factors that influence the Yi craft culture on the designs, but also to find out the problems encountered in the development of the current Yi craft culture. This helps to construct the appropriate research objectives.

1.3 Definition of Terms

The important terms that appear in this study are explained as follows:

1.3.1 Yi Culture-centered Design (YCCD)

Yi culture-centered design is a design method based on the native knowledge and ways of lives of the Yi people, which ensures a local culture-led design process. The purpose is to produce different design results and solutions, as well as competitive products with a clear cultural identity.

1.3.2 Definition of Yi Traditional Craft Cultural Factors

Yi traditional craft cultural factors carry a variety of cultural information and reflect the commonness of Yi traditional culture. It represents the Yi people's material needs of the Yi people and spiritual beliefs. It is a medium for sustainable cultural development.

Tangible and Intangible factors of Yi traditional craft culture, such as colors and patterns, and intangible factors, such as cultural significance and handcraft skills, can be integrated into any design as independent and clear components to express the intrinsic value of the design or product. The tangible forms have a high degree of visual recognition in products, which can stimulate the perception and imagination of the target group. The intangible values of these factors are embedded in the cultural meanings of the designs. The Yi traditional craft cultural factors make the process of transmission of cultural information and communication more accessible and more orderly.

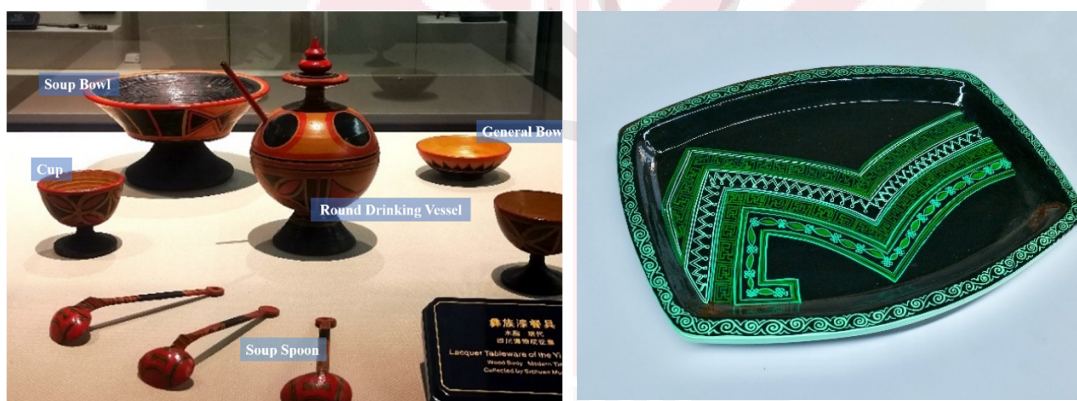
1.4 Problem Statement of the Research

Yi craft practices have an important value to Yi culture. Some crafts have been recognized as provincial and national level intangible cultural heritage (Liu & Liu, 2019). However, due to the impact of modern industrialization and urbanization, the craft culture has declined and changed in various ways. With the decrease in demand from people for cultural artifacts, the Yi crafts are in the danger of disappearing, and the cultural meanings of these crafts may

change (Zhang & Yang, 2004). As a result, many traditional elements with profound cultural meanings have started to disappear (Zhang, 2014), and makes it difficult for designers to understand the cultural implications when integrating the Yi cultural elements into their designs. In some cases, this results in a simplistic patchwork of Yi cultural elements (Xu, 2020). As shown in Figure 1.1, Yi traditional tableware has various shapes and unique forms, and the colors are painted with natural colors. The patterns on them come from the understanding of the living environment of the people. Unfortunately, as the production of these beautiful tableware have decreased, the cultural factors they contain are disappearing or changing. However, current design expressions are mostly based on speed and convenience. For example, traditional natural and environmentally friendly materials are replaced by chemical coatings; the shapes are directly derived from industrial manufacturing; and the patterns are simply the accumulation of elements. There is a huge change from traditional natural lacquer products to chemical lacquer products. It is observed that the new chemical lacquer products have reduced cultural values although they have achieved rapid production.

Traditional crafts are forms of production that can embody products, designs and practices with cultural significances. Therefore, researchers (like Sparke, 2019; Yair et al., 2001) generally believe that traditional craft knowledge and culture serve as important inspiration for modern designs. Culture-oriented products have established stronger connections with users (Marília, 1999). Although Yi craft culture has been widely discussed in recent years, the findings provide little insight into how cultural factors influence designers in the

design processes (Chen, 2018; Chen, 2018; Zhu et al., 2017). The commentaries of some scholars (Zhang & Yang, 2004) on the subject of Yi cultural designs are still limited and unable to provide explicit knowledge of the cultural artifacts. These studies have ignored the more valuable and intangible elements of the culture, such as ways of thinking, symbolic meanings, and methods of use. In fact, there is a lack of research on the relationship between Yi traditional craft culture and products that are related to Yi cultural designs (Luo, 2018). Therefore, designers lack references when choosing the most suitable cultural elements for designs. This dilemma has led designers to use Yi cultural symbols improperly, and has caused the unacceptable development of cultural products (Chen, 2014).



A. Yi original cultural products: Traditional natural lacquer artifacts B. The current design's expressions: Innovative chemical paint products

Figure 1.1: Compare Traditional Natural Lacquer Artifacts with Innovative Chemical Paint Products (Photo A is From the Museum and Photo B is From the Exhibition)

The understanding of the integration of culture and designs will help to increase the values of products and they will help to gain the confidence and recognition among consumers (Wang & Hu, 2014). With the development of

the Reform and Opening of China state-level policy, there is greater attention to the development, utilization and protection of Yi culture (Luo, 2018). With greater reliance on tourism and the creative industry, the Liangshan traditional craft culture is rising rapidly and is being promoted at the national and local levels (Zhang, 2015). Still, there is a lack of contemporary designs with true Yi cultural characteristics in the market. As such some important elements of Yi culture are gradually disappearing, the local cultural identities are threatened. Some of the reasons are : the comparison with industrial products, Yi crafts lack practicality and diversity (Chen, 2018); products with the Yi culture-centered designs are of low value, but their prices are often high (Qin, 2017); most cultural design products lack innovation and seek short-term market benefits through imitation (Zeng & Zhang, 2018). Researchers believe that these problems exist because designers lack an understanding of Yi culture, so the designs have not established a connection with culture semantically (Wang & Wang, 2019).

Cultural inheritance and innovative designs have become an inevitable requirement for the existence and development of products in the contemporary cultural environment controlled by consumers society (Li, 2014). Fang Lili (2020) also argues that the integration of the local craft culture on designs is an efficient way to make practical, artistic and aesthetic products. However there is no complete theoretical framework to connect designs and culture (Zhu, 2018). Most of the literature provides extensive descriptions that are impractical for the application to the designs of products (Hsu et al., 2011). Therefore, designers do not have a culturally centered design method of

reference. It is necessary to establish such a framework in order to avoid methods with superficial cultural designs. In addition, the framework should also instruct designers on how to integrate appropriate cultural factors into products.

Generally, there are major gaps in prior studies and literature. First, the literature revealed less research on Yi's cultural designs. The past studies lacked the definition of Yi cultural factors and attributes. In addition, there is an insufficient number of theories about the Yi culture-centered design. Second, from the perspective of local design practices, there is a lack of a cultural design framework that integrates Yi cultural factors. This means designers lack an understanding of craft attributes and values because they lack Yi culture-centered references. They also lack a rigorous method to integrate Yi craft culture into the designs of products. As a result, designed products lack the characteristics and innovations of Yi culture and do not have a competitive advantage in the market. The above situation also reflects that when Yi cultural artefacts are not in use, cultural practices are reduced, and the cultural identity of the Yi people can slowly disappear. Therefore, it is necessary to develop a Yi culture design framework to enhance understanding, protection, acceptance, and use of design products by addressing cultural challenges. The development can not only provide a reliable reference framework for design when creating new products, but also improve the sustainability of the Yi culture.

1.5 Research Questions

According to the research gaps mentioned above, the main research question is focused on how to develop a framework of factors on Yi traditional craft culture by determining the factors and the attributes that affect Chinese cultural products. Therefore, this research will focus on the following questions:

- i. What are the prominent Yi Traditional Craft Cultural Factors (YTCCF)?
- ii. What are the attributes of the prominent Yi Traditional Craft Cultural Factors (YTCCF) on the products of Chinese culture?
- iii. How to develop and validate a framework of Yi Traditional Craft Cultural Factors to generate Yi Culture-centered Designs (YCDD)?

1.6 Research Objectives

In order to answer the research questions, the main objectives of this study are to obtain an understanding of the prominent Yi Traditional Craft Cultural factors and their attributes that affect these Chinese cultural products. The corresponding research objectives proposed are as follows:

- i. To identify the prominent Yi Traditional Craft Cultural Factors (YTCCF).
- ii. To determine the attributes of the prominent Yi Traditional Craft Cultural Factors (YTCCF) on the products of Chinese culture.
- iii. To develop and validate a framework of Yi Traditional Craft Cultural Factors to generate Yi Culture-centered Designs (YCDD).

1.7 Limitations of the Research

There are two limitations to the study. Firstly, although the Yi ethnic group in China is widely distributed, namely in Yunnan, Guizhou, Guangxi, Sichuan and other places, the scope of this study is the Liangshan Yi Autonomous Prefecture (abbr. as “Liangshan”) in Sichuan, where the Yi people are most concentrated in China (Thomas H., 2007). However, due to the factors of time, finance and geography, the study site could not cover all the areas where Yi people live in China. There are many studies that have proved the Liangshan Yi Autonomous Prefecture is suitable as a research site for Yi culture, so the study was conducted here. This is because Liangshan is the center with a comprehensive and typical Yi culture, and it is also the area with the best-preserved Yi traditional culture. In addition, the largest population of Yi people in China live here (Banfill, 2020).

Besides, the three groups of participants in this study are all from China namely Yi cultural experts, local residents of Liangshan, and Yi cultural designers. Therefore, the following situations may occur during data collection: i. Since this study is written in English, the initial development of the questionnaire was in English. ii. The official language in Liangshan is Chinese, and the interviews or surveys were conducted in Chinese; however, it is inevitable that the participants will use the Yi language that will be added to the descriptions. Therefore, to minimize the impact of language problems, the staff from Faculty of Yi Language and Culture, Xichang University were invited, to participate in the interviews to help with the interpretations and transcriptions of Yi language.

In addition, bilingual experts in English and Chinese were invited to verify the translations of the questionnaire. Finally, the questionnaire was reviewed by Research Center of Yi Culture in Sichuan.

1.8 Research Contributions

The contributions of this study are:

- i. To provide new knowledge in cultural designs, and to increase the understanding of Yi craft culture.
- ii. To propose a new integrated framework of Yi craft cultural factors for designers to improve and deepen their design practices.
- iii. To provide problems solving methods for Yi cultural designs, and increase flexibility in the designs of products.
- iv. To develop an approach that is relevant to local culture and design, taking into account the potential for further exploration when designers face certain cultural problems in their practices. This means that the research results can be used as a flexible guide for designers from other cultures in the process of localizing innovative designs.

1.9 Structure of Thesis

Chapter 1: Introduction

This chapter introduces the background of the study, problem statement, research questions, research objectives, significance of this study, limitations, and the structure of this study.

Chapter 2: Literature Review

The second chapter consists of a systematic literature review to demonstrate the relationship between Yi traditional cultural factors and the designs of cultural products. It also summarizes the integration of the Yi traditional craft cultural factors in product designs. Finally, it contains the theoretical knowledge relevant to this study and a theoretical framework developed for Yi traditional craft culture and its use in the design of products.

Chapter 3: Research Methodology

The third chapter outlines the data collection process and methods used in this study (see Figure 2). A mixed method of Exploratory Sequential Design is adopted in the study. Qualitative data were obtained through three nominal group discussions. Quantitative data collection was completed through two questionnaire surveys. Data analysis mainly used inductive content analysis and statistical descriptive analysis. External validity was evaluated by designers. In addition, this chapter also explains the data sources, sample selection, and data collection instrumentation.

Chapter 4: Research Findings

Chapter Four describes the findings of the study. The NGT research findings are described first, followed by the findings of the survey. Both are used to develop the framework.

Chapter 5: Discussion of Research Findings

This chapter discusses the outcomes of the study, particularly the prominent Yi traditional craft culture factors and their attributes that influence the designs of cultural products. The researcher also describes the cultural artefacts that contain these factors, as well as the cultural characteristics of these factors, to highlight the superiority of local designs based on Yi culture. The discussion also examines the role of designs in cultural inheritance and innovations.

Chapter 6: Conclusion

This chapter discuss the conclusion and summary of the research. The researcher will put forward a number of suggestions for further research.

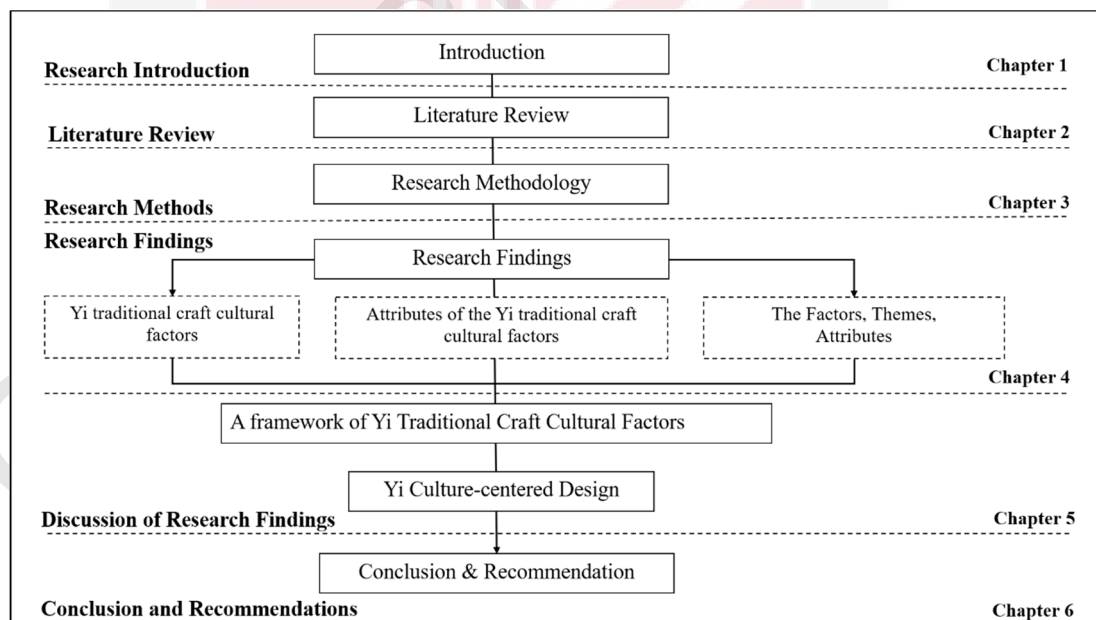


Figure 1.2: Structure of the Thesis

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