CHINESE PAPER CUTTING:
Opportunities for Revitalisation in Contemporary Design

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A thesis submitted to the Victoria University of Wellington in fulfilment of the requirements
for the degree of Master of Design Innovation
Victoria University of Wellington (2021)

ACKNOWLEDGEMENTS

There are several people I would like to acknowledge as integral contributors to the completion of this project. Firstly, I would like to thank my parents and my husband for supporting my studies. So that I had time to complete my academic dream. And thank my lovely daughter, who has brought great joy and inspiration to my life. Also, I would especially like to thank my supervisor, Tonya Sweet, for your encouragement, guidance, and support. Thank you for your interest in my topic and for helping me to promote it to an academic project. You gave me a lot of inspiration and enthusiasm throughout this process. I came to know about many new things.

Secondly, I would like to thank Gillian McCarthy gave me instruction for the thesis, as well as Isabella Mae who proofread my writing. And thanks to all of the student learning staff who helped me with academic writing guidance. It is your help that made the words alive.

Lastly, I would like to thank all of the workshop staff who gave me guidance to learn the laser cutter. It is your help that made my prototypes come true.

ABSTRACT

As a result of globalised development and the rise of capitalism, the craft of traditional Chinese paper cutting is facing marginalisation. The loss of this craft has resulted in a loss of opportunities to share the valuable role of this art form: to bring good wishes to people. The revitalisation of paper cutting as a component of contemporary design offers a strategy to sustain the value and meaning of this craft.

My research explores a potential strategy that supports the transformation of Chinese paper cutting in the contemporary context through its application in design practice. This research investigates the traditional patterns applied to Chinese paper cutting and their implication and symbolic meaning within Chinese folk culture. Through the development of a criteria-led design case study, this research aims to translate these concepts into the formation of new design outcomes applicable to product packaging.

As an element of packaging design, this approach intends to take advantage of the democratisation of and universal access to this medium ensuring wide dissemination to the public.

The purpose of this research is to translate traditional paper cutting into a contemporary design approach that enables the values of this special Chinese craft to prosper.

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CHAPTER 1

INTRODUCTION

INTRODUCTION

As a student from Shanghai, China, I am inspired by the beauty and culture of Chinese paper cutting. The first time I experienced the beauty of paper cutting was in handicraft class at primary school. At that time, I was attracted by the bright red paper that revealed intricate cut patterns. I was able to use scissors to cut out the shapes I wanted and then place this on the window as a decoration, creating a joyous and festive atmosphere. In contemporary China, the majority of people rarely use paper cutting, and fewer people understand the meaning expressed in this art form. Sadly, traditional paper cutting has been marginalised. In considering how traditional paper cutting might survive in the contemporary context, I wanted to use my skills as a designer to bring paper cutting to the public eye.

The tradition of paper cutting originated in China and features intricate hand-cut imagery commonly used to convey cultural symbolism and infer wishes of good luck (Huang, 2008). Within this practice, it is common for the manipulation of cultural forms to be used to fulfil beliefs and, in this respect, paper cutting is often practised as a means of seeking hope and comfort (Chen & Tao, 2008). My research strategy is to transform and integrate traditional Chinese paper cutting within the packaging of contemporary products to enable this craft to enter the lives of people from diverse cultures and, in this way, bring people good wishes through the meaning imbued in paper cutting.

1.1 Research Background

Paper cutting is produced in many countries, however, due to different geographical environments, customs, and aesthetic inclinations, paper-cut art has diverse characteristics. As papermaking technology was first invented in China, it is believed that the craft of paper cutting also originated in China (Chen, 2007). Through global trade, this art was brought to all parts of the world. Paper cutting has a broad mass base in China, blending in the social life of people of all ethnic groups and functioning as an important part of various customs and festivities. With the evolution of Chinese culture however, the knowledge and appreciation of traditional paper cutting has diminished year by year. Through this research, I hope to explore design strategies that support the transformation and dissemination of traditional Chinese paper cutting in the context of contemporary culture.

1.2 Research Question

How might traditional Chinese paper cutting be transformed and applied to contemporary design practice as a means to propagate the value of this craft?

1.3 Research Aims

•Aim 1: Explore the history and value of traditional Chinese paper cutting.

•Aim 2: Explore approaches for the integration of traditional Chinese paper cutting techniques in contemporary design practice.

1.4 Research Value

The value of this research resides in its translation of traditional craft to contemporary design practice as a means to sustain cultural heritage. This translation centres on synthesis: It aims to combine the historical characteristics of traditional Chinese paper cutting with modern aesthetic consideration and production methods applicable to contemporary design.

1.5 Thesis Structure

This thesis is structured in eight parts, including an introduction and seven main sections:

Chapter one: Introduction

This chapter is the introduction of this project. It provides the reader with some context on my motivation, the scope of my design research, and how I identify it as a thesis proposition.

Chapter two: Literature review and design precedents

Chapter two includes the literature review and design precedents. This literature review focuses on the history and the value of traditional paper-cut patterns and craft and is supported by an exploration of contemporary paper cutting techniques. Design precedents include examples of traditional Chinese paper cutting and contemporary paper cutting.

Chapter three: Chinese traditional patterns and symbols

Chapter three collates common Chinese traditional patterns and explains their symbolic meaning.

Chapter four: Methodology

In chapter four, the chosen methodology is explained to describe a structural method applied throughout this research. The study is mostly qualitative-based research which is data collected through interviews with several Chinese paper cutting artists.

Chapter five: Data collection

Chapter five summarises the data collected from the interview process. The summary of the interviews and transcripts are explained in this chapter.

Chapter six: Design criteria

This chapter describes the design criteria of paper cutting and the opportunities to apply paper cutting to packaging.

Chapter seven: Design outputs and process

Chapter seven illustrates the design process, including the development of final design iterations and prototypes. The final design outputs include three original designs that entail paper-cut pieces applied to contemporary packaging design. Lastly, the prototype process entailing digital production with the use of the laser cutter is documented in this chapter.

Chapter eight: Conclusion

This chapter will conclude the findings, offer reflections on the research process, and suggest opportunities for future exploration of this project.

CHAPTER 2

LITERATURE REVIEW AND DESIGN PRECEDENTS

LITERATURE REVIEW AND DESIGN PRECEDENTS

2.1 Literature Review

As China evolves into a culture shaped by modern industrialisation, many kinds of folk art from the past are beginning to decline. As a student who studies design, this phenomenon inspired me to use my skills as a design thinker to address the preservation of Chinese arts culture within a contemporary context.

Through my research, I aim to investigate opportunities to transition Chinese traditional paper-cut art into contemporary design practice. This investigation will work to synthesise both ancient and modern techniques and, through the application of a critical and creative design process, propose new prospects for the craft of paper cutting. In order to support the aims of this research, a thorough examination of relevant literature is required. This literature review focuses on the history and value of traditional paper-cut patterns and craft, and this is supported by an exploration of contemporary paper cutting methods and techniques.

2.1.1 Chinese paper cutting history and development

Chinese paper cutting is one of the most ancient folk arts of China. It is believed that the predecessor of paper cutting can be traced back to the custom of women in the Han and Tang Dynasties to cut gold and pasted these cut-outs on their temples. According to historical resources, the earliest origin of paper cutting in China can be traced back to before the sixth century. Paper cutting art formed its distinctive style during the Northern and Southern Dynasties (420-581 CE) when flower paper cutting was popular. Chinese paper cutting fully developed in the Tang and Song Dynasties (581–907 CE); and became popular during the Ming and Qing Dynasties (1368–1911 CE) (Chen, 2007). With this continuous development, paper cutting art was practised in various styles and functioned in a variety of ways in Chinese culture. For instance, according to Wang (2007), during the Tang Dynasty paper cutting art was influenced by the worship of Buddhism and was used as a creative medium to support prayer.

Traditional Chinese paper cutting utilises colour in diverse ways with the application of both monochromatic paper cutting and colour paper cutting. Monochromatic paper cutting whereby the colour is the inherent colour of the paper – commonly red, green, brown, black, gold – is the most basic and widely used (Zhang, 2005). Colour paper cutting utilises the application of colour with paint, ink, or dyes. This approach includes many forms and techniques to compose multi-coloured surfaces: colour applied through painting the surface in brush strokes or a pattern of dots, colour separations, colour filling, wood

printing, spray painting, hook painting, and colour weaving (Zhang, 2005). Different colours can be used to achieve different effects (Yang, 2009).

Paper cutting art entails an image revealed through the virtue of material being subtracted. According to Yang (2009), paper cutting art can be produced through a variety of approaches, which show its depth and breadth. Folding paper cutting, silhouette, and tearing paper are the manifestations of monochrome paper cutting. Folding paper cutting is one of the most common folk production methods, which is paper cutting made by folding and cutting in different ways. The folding method is simple and easy to do, the shapes are generalised and have a certain deformation, especially suitable for the expression of symmetrical structures of the body and symmetrical schema. And it can change a variety of suitable shapes, two continuous, quadripartite continuous, or multi-continuous, which is one of the main reasons it can be spread for a long time, folding paper cutting plays an important role in the popularity of Chinese paper cutting and craft pattern modelling.

Chinese paper cutting artists have perfected this art form through the development of meticulous craft skills and dedicated artistic practice. Although paper cutting requires honing these skills, the tools for paper cutting are easily accessible and relatively simple to use at a basic level, this has allowed paper cutting art to flourish in China. Bai and Yu (2009) propose five basic tools for paper cutting art: scissors and knives are the main tools accompanied by rubbing stones, paper, and cutting board. However, professionals will have more than 20 cutting tools. Since the birth of paper-cut art, there has been no interruption of this practice over the course of history in China. It is one of the most prolific and identifiable forms of art present in Chinese folk history and its long-term practice has resulted in an enriching contribution to Chinese culture (Zhang, 2005).

2.1.2 Traditional Chinese paper cutting styles

The development of Chinese paper cutting was affected by the geographic areas where it evolved. Paper cutting styles vary between different areas and each style manifests a region's characteristics (Qiao, 2010). Bai and Yu (2008) highlight this diversity through the Chinese saying, "delicate south, gritty north". While the paper cutting from Northern areas appears wild, in contrast, the art created from the southern countryside expresses a tamed elegance (Wu, 2008). Due to the differences in geography, customs, ethnic groups, history, and culture, the style of paper cutting can be identified as being produced in a certain region. With this geographic diversity, it is easy to divide paper cutting art into two typologies: Northern style and Southern style. Wu (2008) indicates that paper cutting styles are not only based on location but are also distinguished by the implication and purpose.

2.1.3 Traditional symbolism in Chinese culture

Traditional Chinese paper cutting is also differentiated by the types of symbols expressed within the patterns revealed through the cut paper. The adoration of life serves as the

principal sentiment in Chinese paper cutting (Jing, 2010) and it typically expresses good wishes towards a prosperous life. Paper cutting is an indispensable art activity in accordance with Chinese folk customs. Its existence is dependent on the specific folk cultural background and living environment (Zhang & Zhang, 2009). In classifying the various types of symbols, Wang's (2009) classification contains three categories: natural biology (flowers, plants, animals), landscape, and Chinese characters.

Folk paper cutting commonly combines a variety of images together with the pursuit of auspicious metaphor being one of the ultimate goals of this image combination (Wen, 2006). The main reason why folk paper cutting has endured for such a long time is due to the performative function of instilling good fortune and auspicious omens. People pray for adequate food, clothing, a flourishing population, good health, and long life and this kind of simple desire is conveyed through the paper cutting (Wen, 2006). For instance, paper cutting that depicts fruit with many seeds means to wish people to have many offspring. Metaphors also express specific meanings. For example, a dog is a symbol of loyalty in traditional Chinese paper cutting. Some artists define their subjects in terms of folk tales. Deer and cranes in spring are traditional themes of folk paper cutting. Deer and cranes in spring are symbols of spring and life. In Chinese, the word deer has the same pronunciation as wealth so the meaning is transferable. Cranes are also considered large and long-lived birds. Therefore, deer and cranes together have the meaning of happiness, wealth, and longevity.

In ancient times, symbols of chickens, tigers, snakes, and deer were commonly applied to the craft and regarded to have the power to protect people (Wang, 2007). This application of meaning in paper cutting supported and contributed to people's religious beliefs including worship practice, and it is understood that this type of symbolism has historically played a significant role in Chinese religious ceremony. Thus, Chinese symbolism is applied to paper-cut art to support praying for luck, expelling bad spirits, and making blessings for love and healthy offspring (Yao, 2010).

Designs are often affiliated with folklore, festivals, celebrations, ceremonies, and social events. Lee (2004) notes that paper cuttings were commonly used in ceremonies such as birthdays, rites of passage, weddings, and funerals. In ancient weddings, paper cutting art was given to the bride and groom as gifts (Yao, 2010). The role of paper cutting in weddings has persisted and continues to be one of the foremost modes of decoration in celebrating unions.

The colours and shapes are two crucial elements to constitute a symbol. While the meanings of some colours vary from region to region, the symbolism of basic colours remains the same (Zhang, 2008). In monochrome paper cutting, colours like red, white, and yellow are mainly used in celebrations, funerals, and ceremonies. Red symbolises the origin of life, the power of the sun, and luck. The red colour is a focus of this research. Yellow appears mainly in religious ceremonies and signals loyalty and majesty. The history of such colour implementation can be traced back to the Han Dynasty (Zhang, 2008).

While it is beyond the scope of this thesis to discuss in detail the many individual symbols used in traditional Chinese paper cutting, a series of dominant symbols will be further discussed in the following chapter.

2.1.4 Paper cutting in contemporary Chinese culture

The rich tradition of the Chinese art of paper cutting has persisted for thousands of years and, although it has diminished, it continues to have a place in Chinese culture. In the contemporary context, the art of paper cutting has evolved with the primary shift the result of new technological production techniques, notably laser-cutting paper.

Laser paper cutting has enabled the production of delicate patterns with much higher efficiency than the traditional hand-cut craft. Complex graphics can be produced with little waste at a scale and speed that supports mass-production quantities. In the contemporary context of China, this digitised paper cutting is replacing traditional paper cutting.

The simplicity of paper cutting art and other characteristics continue to have a strong appeal to contemporary artists (Huang, 2008). “As a contemporary medium, the interaction between simple plane and three-dimensional formation, image and abstraction, materiality and void, and light and shadow provides artists with endless inspiration” (Zhan, 2019, p6). Artists can find their own paper cutting language according to their own artistic strategies (Chen & Tao, 2008). The evolution of contemporary paper cutting is a commodity created by the artists themselves in which paper cutting is reoriented for the market. The theme of contemporary paper cutting creation is partially or completely divorced from the content of traditional paper cutting. Instead, it provides an artistic expression of modern aesthetics, but without strong cultural connotations.

With the onset of modernisation and urbanisation, the foundation of Chinese folk customs has dissipated. With the emergence of mass-produced and technology-driven paper cutting and its gradual occupation of the market, traditional paper cutting has become marginalised.

2.1.5 Conclusion

Through this literature review, we find that traditional Chinese paper cutting symbolises the meaning of good life and inherits the long history of Chinese culture. This literature review has shown how modern techniques of paper cutting have been synthesised with traditional Chinese techniques and the present situation of traditional paper cutting in the contemporary era. This provides me with inspiration to transition Chinese paper cutting into contemporary design practice. In contemporary design, how can we take full advantage of the patterns and symbols of traditional Chinese paper cutting to inherit China's history and cultural background. On this basis, we can explore the contemporary paper cutting design application, which lets more people know and accept Chinese paper cutting.

2.2 Design Precedents

2.2.1 Traditional Chinese paper cutting styles

Traditional paper cutting was produced by common people who used the simplest materials and tools to hone their craft. Drawing from their personal lives and aesthetic ideas, these early artisans used the symbols of traditional folk art, such as hyperbole and personification in expressing the labourer's outlook and values, namely the basic pursuits of peace, wealth, and luck.

Early paper cutting artisans used paper cutting to directly serve their own lives, and for their own satisfaction. People applied their hopes and imagination to make their optimistic explanations of the unknown world, express their rich emotions, and show their pursuit of happiness and dignity reflecting the ideals, beliefs, emotions, living conditions, philosophical ideas, and humanistic mentality of Chinese forefathers.

The following chapters will discuss the features of the Northern and Southern styles.

North paper cutting represent: Heilongjiang

Heilongjiang paper cutting features are distinctive, mostly showing strong contrast and thick style. This form of paper cutting art has adopted unique techniques in its production such as lamp smoking and scissor cutting. The patterns are mostly flowers, birds, animals, and figures. This style of paper cutting is mostly used for hanging decorations and window cuttings, showing the bold and unrestrained style typical of the North. Due to different geography and cultural backgrounds, diverse styles are cultivated accordingly. The exquisite skills and unique style representative of the Heilongjiang Province produce strong, natural, and generous patterns with a clear artistic language.

Figure 2.1
Example of Heilongjiang Founder Paper cutting

South paper cutting represent: Yang Zhou

In contrast to the Northern style, Yangzhou paper cutting lines are delicate and smooth, the composition is exquisite and elegant, and the image is exaggerated yet simple. The techniques applied are changing, forming a unique sense of paper cutting flavour and artistic charm. Yangzhou paper cutting is one of the primary representatives of folk paper cutting art in southern China.

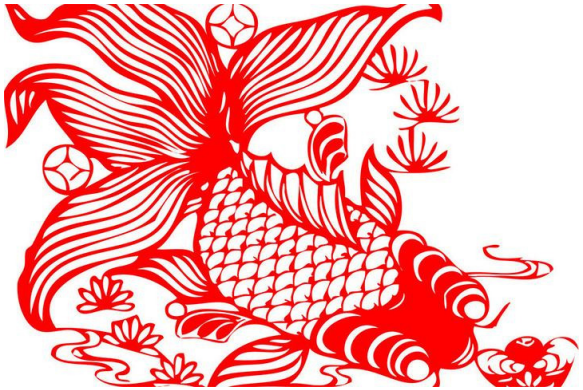


Figure 2.2
Example of Yangzhou Paper cutting

2.2.2 Symbolism in traditional Chinese paper cutting

Botany

A lotus is used to present a noble character that keeps flourishing in dirty environments and is the symbol of Buddhism to signify purity and luck.

Figure 2.3
Example of botany paper cutting

Animals

To celebrating weddings and love, mandarin ducks are often shown. This describes a couple deeply in love with each other.

Figure 2.4
The Mandarin Ducks in the River

Chinese Characters

Chinese auspicious words are commonly combined with lucky symbols to strengthen the blessing wishes (Wen, 2006). Fu (fortune), Lu (wealth), Shou (longevity), and Xi (happiness) are four popular Chinese characters used in paper cutting art.

Figure 2.5
Illustration of Chinese auspicious words

2.2.3 Function of traditional Chinese paper cutting

Depending on the intended function of the paper cut art, artists may choose a different form. For example, according to Zhou (2011), the forms are categorised into: window flower, door hangings, ceiling flower, gift flower, and toy flowers.

'Window flower' (as shown in Fig. 2.6 and 2.7), a papercut pasted on window paper or window glass, dates back to ancient China. The content of window decorations is rich and the subject matter is wide. Window decorations convey auspicious concepts and good wishes, and the backlighting offers vivid impact. Festival decorations are prosperous and rich, and red is used conspicuously because of its festival connotations in Chinese culture (Chen, 2007).

Figure 2.6
Paper cutting window in a New Zealand kindergarten celebrating the Chinese New Year

Figure 2.7
Example of Paper cutting Window

Similarly, ‘Door hangings’, a rectangular style (approximately 15x20 cm), are applied to doors and also used during the Chinese New Year. As shown in Fig. 2.8. Hanging a door is a very old custom.

The designs of ‘Gift flowers’ applied to gifts (e.g., teapots and furniture) (as shown in Fig. 2.9) are used in celebrations such as wedding, promotion, and birthday parties. In order to strengthen the blessing wishes, auspicious symbols (dragons, birds, botany) are teamed up with Chinese words.

Figure 2.8
Example of paper cutting door hangings

Figure 2.9
Example of gift flower

Similarly, ‘Ceiling flower’ refers to paper cuttings applied on walls and roofs and is used in celebrations.

Besides using the art as decoration for ceremonies, Chen (2007) proposed that ‘Toy paper cutting’ is used for lanterns, paper dolls, and curtains.

The application of paper cutting as decoration offers good luck and good wishes for life.

Figure 2.10
Mr Huang and the community members together to put up the ceiling flower

2.2.4 Contemporary/non-Chinese paper cutting art

Modern styles of paper cutting are exploring new and different expressions of the art as can be seen from a variety of artists. Paper cutting achieved the realm of high art in the late artwork of French artist Henri Matisse (1869–1954) when he produced a series of cut paper collages. A "plane game" dealing with the negative and positive shapes, bold colours, and simple symbols plays a key role in Matisse's process of artistic form (Zhan, 2019). Matisse is well known for his ability in "drawing with scissors" with a very direct and expressive visual effect. Matisse's artistic practice liberated the expressive potential of paper cutting as a medium for art, and his influence is evident in artwork being produced today.

Figure 2.11
The Fall of Icarus

Paper cutting techniques are used to tell stories by contemporary American artist, Kara Walker (1969). In Darkytown Rebellion (2001) (Fig. 2.12), the silhouetted paper figures are combined with projected coloured light on the ceiling, walls, and floor. The effect creates an additional experiential dimension to the work. Shadows of visitor's bodies - also silhouettes - appear on the same surfaces, intermingling with Walker's cast.

Figure 2.12
Darkytown Rebellion

Bovey Lee (1969) uses traditional symbols in paper-cut art to express current issues. Bovey is a striking contemporary Chinese paper cutting artist, and her works reflect the life of modern people. "Outgrow-Rice Grains" (2014) (Fig. 2.13) shows the tenacious vitality of these grains amongst the growth of urbanisation. Within the concepts of growth, the symbol of a good harvest also reflects the Chinese people's yearning for a better year.

Figure 2.13
Outgrow-Rice Grains

The work “Frau in Waffen” was created by Annette Schröter (1956). Her paper-cut artwork uses traditional paper cutting techniques. In this work (Fig. 2.14), Schröter creates a contrasting visual narrative by combining delicate cut plant ornamentation with imagery depicting a Muslim woman holding a gun. The contrast between the beautiful decorative patterns and the cruel theme reflected in this paper cutting results in a highly impactful work of tension.

Figure 2.14
Frau in Waffen

2.2.5 The application of multi-dimensional space in the art of paper cutting

Contemporary paper-cut art has broken through the static two-dimensional nature inherent in traditional paper cutting and has embraced three-dimensional space (Qiang, 2009). The three-dimensional application of paper-cut art applies spatial design and construction with the help of different techniques. Three-dimensional paper cutting is an extended category of paper-cut art, offering many spatial levels, near and far perception which engages people to perceive space in unique ways. By using light and shadow to form a three-dimensional space, the paper-cut art has the opportunity to be seen from a number of perspectives (Qiang, 2009).

2.2.6 Conclusion

Through this precedent, we find that the art of paper cutting can be roughly divided into two schools: Western paper cutting is mainly contemporary paper cutting, which is innovative; the Eastern school is more related to traditional folk customs and has more national characteristics.

The traditional Chinese paper cutting symbolises good life and inherits the long history of Chinese culture. Contemporary paper cutting artists combine the expression of paper cutting with modern art and design concepts, and through this evolution the application of paper cutting has entered many fields. However, in contemporary Western countries, paper cutting mixes abstract artistic concepts but lacks the profound significance of traditional Chinese paper cutting. This precedent review considers the functions of traditional paper cutting and provides us with design inspiration for how paper cutting may function in contemporary society.

CHAPTER 3

TRADITIONAL CHINESE PATTERNS AND SYMBOLS

TRADITIONAL CHINESE PATTERNS AND SYMBOLS

This chapter collates common traditional Chinese patterns and explains their symbolic meanings. Paper-cut art has taken various forms over history to express the desire and praise for good life. The extensive use of symbols is one of the main characteristics of Chinese folk culture. As for symbolism, scholars have defined it from different angles. Hegel defined symbolism from an artistic point of view, as a kind of idea or object, no matter what its content is, the expression is a perceptual existence or image (Zhu, 1979). From a cultural point of view, Liu defined symbols as the images of external perceptual things, implying a kind of abstract universal meaning (Liu, 2002).

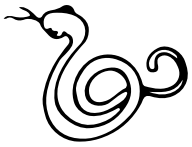
ANIMALS

Animal: pig (Chinese zodiac)

Symbolism: Chinese Pronunciation is similar to “happiness”

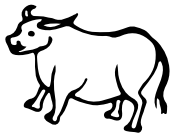
Animal: rabbit (Chinese zodiac)

Symbolism: fertility

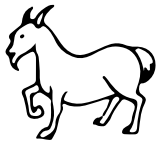


Animal: snack (Chinese zodiac)

Symbolism: fertility



Animal: ox (Chinese zodiac)
Symbolism: in the traditional Chinese culture, the ox is a symbol of diligence and kindness



Animal: lamb (Chinese zodiac)

Symbolism: obedience for parents

Animal: peacock

Symbolism: peacock is a symbol of auspicious happiness. In Greek mythology, the peacock is a symbol of the goddess Hera

Animal: monkey (Chinese zodiac)

Symbolism: smart, clever, good luck

Animal: tiger (Chinese zodiac)

Symbolism: valor and power

Animal: dragon (Chinese zodiac)

Symbolism: valor and power

Animal: horse (Chinese zodiac)
Symbolism: success

Animal: mousse (Chinese zodiac)

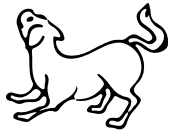
Symbolism: fertility

Animal: butterfly

Symbolism: butterfly is regarded as a mascot, it is a symbol of good luck

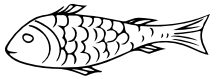
Animal: Chicken (Chinese zodiac)

Symbolism: Chinese Pronunciation is similar to Chinese word “ji”, meaning good luck



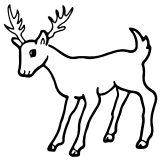
Animal: dog (Chinese zodiac)

Symbolism: loyalty, well-being



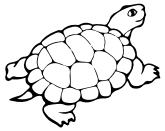
Animal: fish

Symbolism: fertility, wealthy



Animal: deer

Symbolism: Chinese homophonic sound is similar to the Chinese word for “fu”, representing happiness and luck



Animal: turtle

Symbolism: long life

Animal: magpies

Symbolism: good luck and good fortune.

PATTERNS

Pattern: China anient money
Symbolism: wealthy.
The ancients believed that copper coins became a symbol of wealth in the China

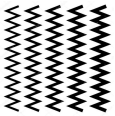
Pattern: dimond
Symbolism: love

Pattern: cross
Symbolism: sun and life

Pattern: water drop
Symbolism: good luck

Pattern: cresent
Function: mainly appears in eyes,mouth, eyebrows and features of clothing
Symbolism: good luck, family reunion

Pattern: cloud pattern
Symbolism: good luck.
In Chinese culture, clouds are often referred to as “lucky clouds”



Pattern: the saw tooth
Function: mainly appears in animals’ fur, bird feathers, beards and moustaches.
Symbolism: good luck

Pattern: the fish scales pattern
Function: mainly appears in animals’ fur, bird feathers, beards and moustaches.
Symbolism: good luck

Pattern: brick
Symbolism: wealthy

Pattern: heart
Symbolism: Chinese Pronunciation “ruyi” means to good luck

BOTANY

Botany: bamboo
Symbolism: resilience, longevity, wealth

Botany: lotus
Symbolism: nobility, good luck

Botany: orchis
Symbolism: noblility, steadfast, patriotic, elegant. In addition, it is a symbol of brotherhood and friendship

Botany: plum blossom
Symbolism: nobility, strong, self-confidence

Botany: Chinese rose
Symbolism: happiness, contains the four seasons like spring

Botany: lily
Symbolism: good luck

Botany: pomegranate
Symbolism: live long and prosper, have many children

Botany: pine tree
Symbolism: long life, long wealth

Botany: chrysanthemum
Symbolism: Chastity and honesty

Botany: peony
Symbolism: peony flower is called rich flower in CHINA, which is the king of flowers, expressing people's beautiful yearning for life and the desire for wealth

Botany: peach
Symbolism: long life

Botany: grape
Symbolism: the grapes are clusters of many grains, which means "many children and many blessings". The other means a big harvest

CHINESE WORDS

福

FU

Symbolism: fortune

禄

LU

Symbolism: wealthy

寿

SHOU

Symbolism: longevity

喜

XI

Symbolism: happinese

Figure 3.1
Traditonal Chinese Animals Symbols

Figure 3.2
Traditonal Chinese Patterns Symbols

Figure 3.3
Traditonal Chinese Botany Symbols

Figure 3.4
Traditonal Chinese Words Symbols

CHAPTER 4

METHODOLOGY

METHODOLOGY

This section highlights the different methods used to investigate the research undertaken in this thesis. The methods applied to this research are qualitative-based and follow the research through design method (Martin & Hanington, 2012, p. 146). Research through design centres on the creation of new knowledge through design experiments and iterative prototyping (Krogh et al., 2015). Within this approach, qualitative data is most commonly collected through interviews and questionnaires (Dörnyei, 2007). In this research, interviews have been undertaken for the collection of data.

4.1 Research Question

How might traditional Chinese paper cutting be transformed and applied to contemporary design practice as a means to propagate the value of this craft?

4.2 Research Methods

4.2.1 Literature and precedent review

A literature review was conducted that covers the historical development of paper cutting art in order to understand how it was traditionally created and its significance in traditional and contemporary culture (Martin & Hanington, 2012, p. 112). With this, I also conducted a precedent review to gather information about the expression and form of traditional and contemporary paper cutting, analysing its aesthetics and practicality. This research enabled investigation into the evolution and diffusion of the craft of paper cutting and the exploration of strategies for the regeneration of this practice.

4.2.2 Interviews

This research uses interviews for collecting qualitative data. According to Kvale (2003), interviews draw out narratives to enable better comprehension and amplification of participant's voices.

Semi-structured interviews (Adams, 2015) were conducted with three traditional Chinese paper cutting artisans and two contemporary paper cutting artisans to find out their experience and basic knowledge of the craft. The interviews were conducted with Chinese paper cutting artisans via web-based telephone. Throughout the interview, participants were invited to offer their thoughts and opinions on paper cutting and the meaning and significance this craft carries in their lives.

The interviews included open-ended questions and were aimed to lead the participants to openly discuss thoughts on their experiences.

4.2.3 Content analysis

As a means of systematically examining the information gathered from the semi-structured interviews, I conducted a content analysis (Cole, 1988). Content analysis is a research method for making valid inferences from verbal or visual communication methods to their context, with the purpose of providing new insights or a representation of facts (Krippendorff, 1980). Through a content analysis, I was able to better understand the artisans' experience and basic knowledge of paper cutting.

4.2.4 Design Criteria

Based on the literature review and interview analysis I developed design criteria to guide the design experiments (Ramirez-Rodriguez, 2017). The design criteria effectively enabled the pinpointing of the main explicit knowledge that was to be produced in the study (Ramirez-Rodriguez, 2017). The criteria address style, technique, subject matter, and application applied to my personal paper cutting experiments.

4.2.5 Design Experiments and Prototyping

The design experiments were produced iteratively based on the criteria outlined and this resulted in a series of prototypes being developed (Martin & Hanington, 2012, p. 138). The final paper cutting prototypes were produced through an iterative design process (Karjaluoto, 2013,

p. 150). During this process, the design criteria functioned as a guide to my aesthetic, technical, and compositional decisions. Following many sketch iterations, the designs moved from my sketchbook to the computer where I was able to clarify the drawings using digital software. Finally, an ideal prototype was obtained through empirical investigation utilising a laser cutter.

4.3 Aims and Objectives

The design investigation considered the following aims and objectives according to the associated mapped methods:

Table 4.3.1
Aims and objectives mapped to design research methods

Aims	**Objectives**	**Methods**
Aim 1: Explore the history and value of traditional Chinese paper cutting.	Objective 1a: Gather information by doing background research through a literature review of paper cutting history, technique, and relevant cultural theories.	Literature and precedent review (Martin & Hanington, 2012, p. 112)
	Objective 1b: Conduct online interviews with paper cutting artisans about traditional paper cutting and its meaning and significance in their lives.	Conduct semi-structured interviews (Adams, 2015)

Aim 2: Explore approaches for the integration of traditional Chinese paper cutting techniques in contemporary design practice.	Objective 2a: Gather information about the expression and form of traditional and contemporary paper cutting through a precedent review to analyse its aesthetics and function.	Literature and precedent review (Martin & Hanington, 2012, p. 112)
	Objective 2b: Based on the literature review and interviews, create design criteria to guide design experiments.	Produce criteria (Ramirez-Rodriguez, 2017)
	Objective 2c: Produce design experiments and prototypes based on the criteria outlined (Design process).	Prototyping (Martin & Hanington, 2012, p. 138)
		Iterative process (Karjaluoto, 2013, p. 150)

CHAPTER 5

DATA COLLECTION

DATA COLLECTION

This chapter summarises the data collected from the interview process. The summary of the interviews and transcripts is also explained.

5.1 Interview

The interviews were conducted with five Chinese paper cutting artisans via web-based telephone. During the interview, participants were given a list of questions that asked about their experience and basic knowledge of paper cutting. Throughout the interview, participants were also expected to give thoughts and opinions on paper cutting and its meaning and significance in their lives.

5.1.1 Interview questions

1. How long have you been a paper cutting artist? What inspired you to engage in this craft?

2. Can you describe what aspects of the craft of paper cutting you enjoy most?

3. How would you describe the value of traditional paper cutting?

4. What would you describe as the primary changes to paper cutting from traditional to contemporary practice? (For example, in regards to technology, style, pattern, etc.?) What do you think of these changes?

5. What are the primary differences between traditional paper cutting and contemporary paper cutting?

6. What do you feel are the biggest opportunities for paper cutting to be applied to contemporary design practice? What are the biggest challenges?

5.1.2 Interview transcript

	Occupation and length of time practising	What inspired you to engage in this craft?	What aspects of paper cutting do you enjoy most?	How would you describe the value of traditional paper cutting?
A	Traditional paper cutting artisan (more than 20 years)	*"I was born in a rural area, where we have the custom of paper cutting. I was influenced by tradition and family"*	*"Whether it is traditional or contemporary paper cutting, it has the spirit and language to express, which is the meaning of paper cutting"*	*"Traditional paper cutting preserves the culture of the ancestors, as well as the worship of the ancient patterns"*
B	Traditional paper cutting artisan (18 years)	*"Paper cutting is an important non-material culture in China. I am attracted by the charm of paper cutting language"*	*"The craft of paper cutting is permanent and historic. Its unique popularity, practicality, and aesthetics have become a symbolic meaning in line with the psychological needs of the people"*	*"Paper cutting is a custom in ancient China's rural areas. It means good luck and represents the rural culture of China, so it should not be forgotten"*
C	Traditional paper cutting artisan (more than 20 years)	*"I was born in a paper cutting village. I have been influenced by my parents since I was a child. We would always do paper cutting during festivals, which is my profession and an indispensable habit in my life"*	*"The traditional tools of paper cutting are very simple. Scissors, grindstones, etc., are easy to use and no contemporary technology can surpass this craft and handwork"*	*"The elements of traditional paper cutting come from nature, like water patterns. The traditional pattern is an investigation of the origin of something in ancient times. Paper cutting is a cultural treasure of the Chinese nation"*
D	Contemporary paper cutting artisan (12 years)	*"I began to cut paper because of my grandparents, we believe that it is a mission to protect and inherit paper cutting"*	*"Paper cutting can make paper come alive in many ways, such as making paper appear 3D. That's the charm of paper cutting"*	*"It originates from life and accumulates profound ancient artistic tradition, social consciousness, national culture, and people's aesthetic concepts. It has extremely high academic value and artistic value in the study of folk art in China"*
E	Contemporary paper cutting artisan (more than 10 years)	*"What I have studied in university is cultural heritage. How to inherit paper cutting in the contemporary cultural environment has always been my research direction"*	*"Paper cutting can be presented in contemporary times in innovative ways. In contemporary times, paper cutting has been found in buildings, clothes, and public infrastructure construction. This is the way of innovation"*	*"In ancient times, paper cutting was a cultural activity for the masses to entertain themselves, and it was mainly created by women. Therefore, paper cutting is free, which is from the emotions, has a very high artistic and research value"*

5.1.2 Interview transcript

	What would you describe as the primary changes to paper cutting from traditional to contemporary practice? What do you think of these changes?	What are the primary differences between traditional paper cutting and contemporary paper cutting?	What do you feel are the biggest opportunities for paper cutting to be applied to contemporary design practice?	What are the biggest challenges?
A	*"Very big change. Technically, the paper cutting of contemporary digital production are more accurate. For the design, modelling is more perfect and creative, in accordance with the modern aesthetic. But the original significance of paper cutting is still not changed, which is enduring"*	*"Contemporary paper cutting is more beautified and increasingly digital. The traditional paper cutting is made by hand. Although the time efficiency is not as good as that of contemporary paper cutting, however, tradition is the root of paper cutting. The hand-cut is used to express the emotion and symbolise luck"*	*"The opportunity is that the rapid digital production of contemporary paper cutting is conducive to the spread of paper cutting and accelerates the understanding of contemporary people to paper cutting. It plays a positive role in the popularisation and inheritance of paper cutting"*	*"The challenge is that in the digital age, dissemination and production are too fast, so that there are too many kinds of paper cutting in the market. They increasingly abandon the meaning and connotation of traditional paper cutting. This will make paper cutting more niche, so that people forget the fundamental significance of traditional paper cutting"*
B	*"The biggest change is the production of digital technology, because of the commercial demand of paper cutting. This is using modern science and technology, designed by computers, made by machines"*	*"The biggest difference lies in the change of the cultural context of paper cutting. Many traditional folk customs in contemporary society have disappeared, such as paper cutting for the New Year, paper cutting for wedding ceremony, and paper cutting for sacrifice. In this way, paper cutting gradually breaks away from the original 'cultural society' of paper cutting and will die out without the cultural context"*	*"This machine engraving is economical, accepted by the masses. Dissemination of paper-cut culture and art will play a positive role"*	*"The challenge is the change of cultural context. Despite the mass production of paper cutting, the uses of paper cutting have become diversified and innovative, but they do not belong to its traditional 'cultural society'. People accept the new paper cutting without knowing the original roots of paper cutting"*
C	*"Technologically, there is now a paper cutting laser engraving machine. It has a great effect on mass production, high efficiency, saves time and cost. However, because of modern technology, many traditional artists in rural areas have been gradually replaced and lost their jobs, so we do not support modern technology. From the pattern, have been added modern elements, more in line with the contemporary aesthetic. At the same time, however, some retain the traditional meaning and some have no traditional paper cutting shadow"*	*"Contemporary paper cutting is more profitable and commercial. The traditional culture of paper cutting as been gradually forgotten"*	*"The opportunity is that paper cutting can still attract people through contemporary technology and paper cutting can be inherited and preserved"*	*"The challenge is that digital technology is gradually replacing manual production, leaving many artisans out of their jobs. The origin of paper cutting is to rely on the hands to express their feelings and pray for good fortune, but modern technology has abandoned the original intention of paper cutting"*

D	*“Technology is the biggest change. Technology gradually replaces labour, saves cost and time, and increases efficiency. The shape is more in line with modern aesthetics, and the functions are more diversified”*	*“The biggest difference is that contemporary paper cutting needs to meet the market demand, while traditional paper cuttingis a kind of folk custom. Social background is the biggest difference”*	*“The opportunity is that paper cutting is a treasure left to us by the ancients. Both the meaning and patterns are worth referencing and using. In contemporary society, we rely on computer designs and machine printing to simplify complex paper cutting, which is a positive side”*	*“The challenge is that the artistic quality of contemporary paper cutting is relatively weak because commercial interests are over-produced and manufactured, and the patterns designed by businesses for sale have partially separated from the meaning of traditional paper cutting”*
E	*“The technology, the craft, and the shape have all changed. I am very supportive of such innovation, because only innovation of paper cutting can meet the market development and the public’s aesthetic taste, so that we can preserve our paper cutting culture”*	*“The biggest difference is that it no longer meets people's needs”*	*“The opportunity is that the modern application of paper cutting has started. We can find that paper cutting can be used in decoration, architecture, and the public environment. It has gone to the market, which is a good start”*	*“Paper cutting has been an artistic expression of life since ancient times. Only when paper cutting is closely connected with contemporary life, paper cutting will not disappear after continuous use. How can paper cutting be truly integrated into the life of contemporary people on the basis of retaining traditional culture, so that paper cutting will not be forgotten. I think this is the challenge of today”*

5.2 Interview Analysis

What inspired you to engage in this craft?

Through the interviews I learned that three out of five artisans were born in rural areas where paper cutting is a common custom. They were all deeply influenced by their family traditions in the craft of paper cutting and they were attracted by the charm of paper cutting. They all expressed a hope to protect and sustain Chinese paper cutting through their own research and efforts.

What aspects of the craft of paper cutting do you enjoy most?

The three traditional artisans believed that the artistry, craftsmanship, and meaning of paper cutting are eternal, enjoyable, and worth exploring. One of the traditional artisans said that the most exciting thing is the content and spirit expressed through paper cutting, which they referred to as a "paper cutting language" whereby every paper cutting has a story and meaning behind it. Designing and exploring the narrative of each paper cutting is a process he enjoys. The second traditional paper cutting artisan said that they enjoyed the traditional paper cutting process using scissors, grindstone, and knives. He felt that no contemporary technology is capable of surpassing this craft and handwork.

The contemporary artisans interviewed noted that the contemporary application and innovation of paper cutting is their primary attraction. One of the contemporary artisans pointed out that the application of contemporary paper cutting is gradually being enriched over time with paper cutting now being used to inspire architecture, decoration, and public environments. The challenge of how to introduce paper cutting into people's lives through innovation is what he most enjoys exploring.

How would you describe the value of traditional paper cutting?

The value of traditional paper cutting has been mentioned in the literature, but the value of paper cutting means different things to different people. Especially in the context of contemporary and traditional culture, artisans' views on the value of traditional paper cutting can be diverse. When answering this question, both traditional and contemporary artisans maintain consistent high praise and reverence for the value of traditional paper cutting. In their minds, paper cutting is representative of Chinese rural culture. Later, paper cutting developed into a symbol of auspiciousness during festivals. One traditional paper cutting artisan stated that "the traditional pattern is an investigation of the origin of something in ancient times". The artisans interviewed all expressed that the value of the traditional paper cutting lies in its implied meaning and spiritual expression, and it is worth our research and exploration whether it is artistic value or academic value.

What would you describe as the primary changes to paper cutting from traditional to contemporary practice? What do you think of these changes?

As for the changes to traditional paper cutting, the artisans have different opinions. From their answers, the biggest change was technology, with computers drawing patterns and machines cutting them. It cannot be denied that contemporary digital production solves the problem of mass production, saving cost and time, and the pattern is very fine and standardised, which meets the contemporary aesthetic requirements. One of the traditional artisans said that digital production is gradually replacing manual production, which will put most traditional artisans out of work. He also said that the paper cutting produced by machines has no texture or soul. However, contemporary paper cutting artisans believe that the times are changing, and paper cutting must be transformed and innovated through technology to meet the market demand. This is the only way to protect and spread paper cutting.

In their opinion, the second change is contemporary patterns. Some artists believe that contemporary paper cutting patterns have added modern elements, which are in line with the aesthetic taste of the market, contemporary designs still maintain the core of traditional patterns but many other artists believe that the patterns of contemporary paper cutting are designed to meet the market demand, so many of them have lost the spirit of traditional paper cutting. It violates the original intention of paper cutting. As mentioned in the literature, after research, it is true that some paper cutting or paper cutting derivatives in the market do not express their traditional meanings, but only make use of the method of paper cutting.

What are the primary differences between traditional paper cutting and contemporary paper cutting?

Through the interviews, the artisans expressed the belief that the primary difference between traditional and contemporary paper cutting lies in the changes resulting from the cultural representation and appreciation for the traditional value and meaning of paper-cut art. In the ancient countryside, paper cutting was a custom, which people needed to use to express feelings and pray for good fortune. Even now, some rural areas still maintain this custom (Wu, 2008). In contemporary times, people have gradually forgotten this custom and the tradition of paper cutting is disappearing. Only through the technology and the innovation of this art form can paper cutting be preserved. As an artist said, “contemporary paper cutting is more profitable and commercial. The traditional culture of paper cutting has been gradually forgotten”. Another artist added: “The biggest difference is that it no longer meets people’s needs”.

What do you feel are the biggest opportunities for paper cutting to be applied to contemporary design practice? What are the biggest challenges?

When it comes to opportunities, the artists were in agreement. They argued that contemporary digital production can elevate paper cutting. With large-scale production lines, fast transmission speed, and a wide application of paper cutting, paper cutting has the possibility of becoming relevant once again.

When it comes to challenges, first of all, they believe that mass production will result in a wide variety of paper cuttings that evolve rapidly resulting in the potential decline of artistic value and quality. As this craft has evolved into a contemporary fast-moving consumer good, paper cutting risks no longer being a venerable and cherished cultural commodity. Also, although the patterns of paper cutting conform to the public aesthetic and business interests, most of the designs abandon the traditional paper cutting patterns which express traditional meanings. The artisans expressed that the most important aspect of paper cutting is its "language of paper cutting". Although innovative paper cutting has flooded society, paper cutting no longer belongs to the original "cultural community". People accept the new paper cutting and its application but do not know the origin and attribution of traditional paper cutting. Finally, paper cutting is rooted in life and the artistic expression of life. Only if people keep using it will it not be forgotten. Finding strategies to link paper cutting closely with contemporary life is an important challenge.

CHAPTER 6

DESIGN CRITERIA

DESIGN CRITERIA

Through the previous literature review and information collection, this chapter describes the design criteria of paper cutting and the opportunities in applying paper cutting to packaging design.

6.1 Design Criteria

1.

Reflect a contemporary design aesthetic while referencing traditional patterns common to Chinese paper cutting.

The importance of paper cutting lies in the symbolic meanings it expresses. This research aims to maintain the meaning applied to traditional patterns found in Chinese paper cutting while reflecting a contemporary aesthetic.

2.

Apply paper cutting to the design of contemporary packaging.

In an effort to disseminate the beauty and value of Chinese paper cutting to the masses, this research aims to apply this craft to product packaging. As an element of packaging, this craft will benefit from democratised and universal access that ensures wide exposure.

3.

Design contemporary paper-cut outputs to enable dual functionality: first as packaging and second as an item of decoration.

In addition to meeting the needs of packaging design, this research aims to expand the value of the outputs by designing in capability for the (post-consumer) packaging to be used as decoration. Through this transformation into decorative display, the second life of these paper-cut outputs has an opportunity to preserve the traditional value of expressing good fortune and prosperity.

4.

Apply digital fabrication technologies in the production of contemporary paper-cut outputs.

Over the evolution of Chinese paper cutting, the adoption of digital technology has been found to effectively address contemporary production needs. As a component of packaging, the mass-production enabled by digital technologies is understood to be an asset in ensuring the dissemination and contemporary viability of paper cutting.

6.2 Opportunities in Applying Paper Cutting to Packaging Design

Traditional Chinese paper-cut art contains rich and meaningful graphic symbols and beauty through its delicate and intricate material substance (Zhang, 2008). By combining these elements with the design considerations relevant to contemporary packaging design, this craft may be given an opportunity to flourish today. By employing traditional graphic symbols in modern packaging design – such as fish, lotus, and peony etc. – not only will the packaging obtain a unique aesthetic, but it may also convey good wishes. Through this innovative approach, both the packaging design and the craft itself secure added value.

The following outlines specific opportunities that I have identified in applying my design criteria to packaging design along with related considerations.

1.

The application of paper cutting with traditional symbols that support good wishes for the consumer.

Appling aspects of Chinese paper cutting to packaging effectively supports my desire to use this medium to spread the good wishes afforded by this craft. In a social equity context, the multi-functional strategy of affording access to the beauty and meaning of traditional paper-cut art through the transformation of packaging to decoration is very democratic. Unlike many forms of art, this approach ensures that paper cutting is not only accessible by people in privileged or wealthy circumstances, but instead it will be available to the masses. Additionally:

• The application of paper cutting to package design will afford aspects of the traditional Chinese craft that function to offer good wishes.

• The purpose of establishing a brand standard in packaging is to distinguish it from competitors (Ellicott & Roncarelli, 2010). The paper cutting pattern content will be consistent with the product attributes while having the added advantage of contributing positively to the consumer's outlook.

• The paper-cut packaging will aim to create an emotional connection by enabling an aesthetic experience and narrative with the consumer, which can contribute to a positive interaction (Ellicott & Roncarelli, 2010).

2.

The application of paper cutting as a means to meet the sustainability needs of contemporary package design.

Since packaging contributes significantly to the excess of consumer waste, it is important that packaging design considers sustainable strategies. Candace and Roncarelli (2010) point out that the traditional "three R' s" of reduce, reuse, and recycle are part of a waste hierarchy that should be applied to product and package development. While packaging ensures the protection of goods and primarily functions as

a sales tool, effectively designed packaging can increase product value and, at the same time, address the impacts of harmful waste cycles. In fact, the public is increasingly demanding sustainable packaging. In one study on sustainable and emerging consumer trends, an average of 48% of respondents said sustainable packaging has become one of their consumer expectations (Ellicott & Roncarelli, 2010).

• The design of reusable packaging can extend the life of packaging thus offering a sustainable alternative for post-consumer waste (Steenis et al., 2017). The elements of paper cutting can be transformed into decoration for long-term use and reuse to meet the needs of sustainable multi-functional packaging.

• Functionally, the element of paper cutting as a transformative decoration should be easy to understand and use. This will ensure that the packaging is not discarded but rather reused.

• The element of paper cutting will be produced in recyclable, non-toxic paper. Through cutting to reveal the image, this approach reduces the need for the potentially harmful resources required for ink printing and applied paper finishes.

3.

The application of the colour red to the paper-cut element as a compliment to the overall packaging design.

Through my research in the literature review, I found that red symbolises the origin of life, the power of the sun, and luck. The strength of this colour is why it is one of the most widely used in Chinese paper-cut art. Bold packaging and contrasting designs are understood to be exciting and eye-catching (Ellicott & Roncarelli, 2010) thus this will be taken into consideration in my designs.

• The paper-cut package prototypes will be constructed in red paper.

• The paper-cut element and its colour will aim to compliment all other packaging design elements.

CHAPTER 7

DESIGN OUTPUTS AND PROCESS

DESIGN OUTPUTS AND PROCESS

7.1 Introduction

This chapter includes four parts: design development, resolved designs, production of prototypes, and application of the final designs to packaging.

The paper-cut packaging designs are divided into three themes: Chinese tea, chocolate, and wine. The three themes will be outlined separately within each corresponding section.

7.2 Design Development

Section one illustrates the ideation of the design, through sketching to the refined development of a digital drawing. During the initial development of the designs, I used sketching as a process to explore the composition of potential design ideas that integrate both traditional and contemporary symbols. During this process, the design criteria functioned to guide my aesthetic, technical, and compositional decisions. Following many sketch iterations, the designs moved from my sketchbook to the computer where I was able to clarify the drawings using digital software. As digital drawings, these files were translated easily to support the digital production process.

7.2.1 Design for CHINESE TEA PACKAGING

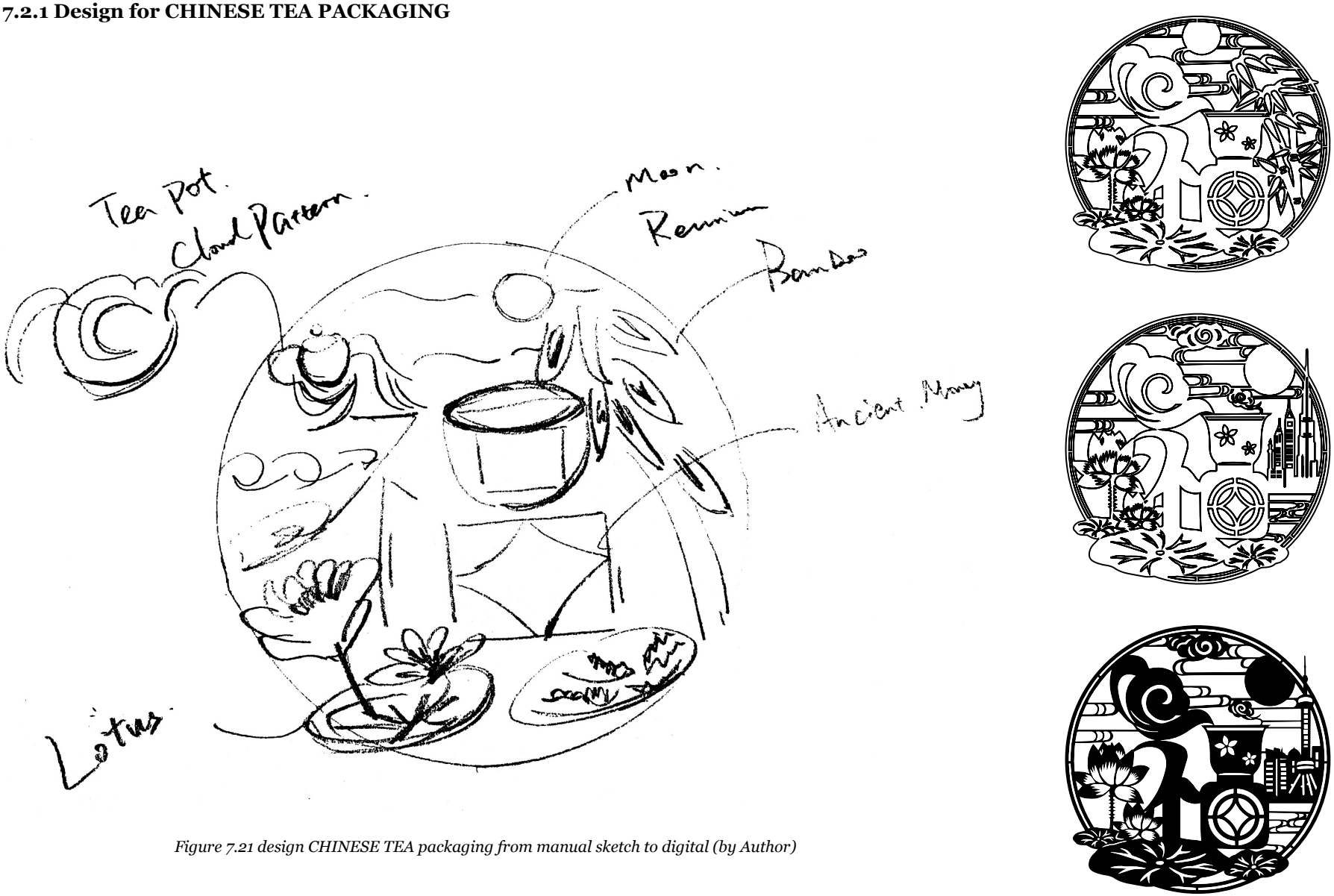


Figure 7.21 design CHINESE TEA packaging from manual sketch to digital (by Author)

7.2.1 Design for CHOCOLATE PACKAGING

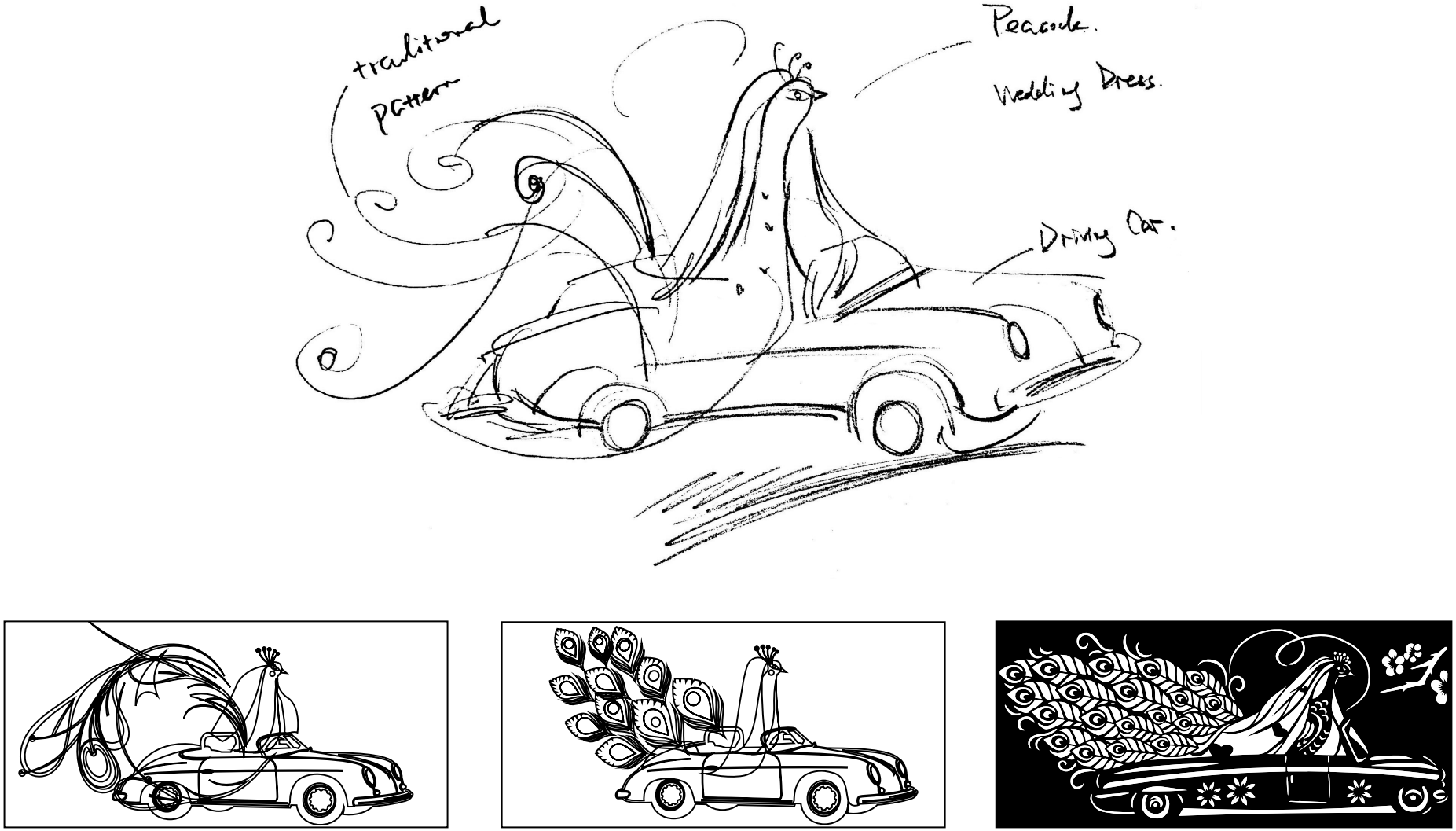
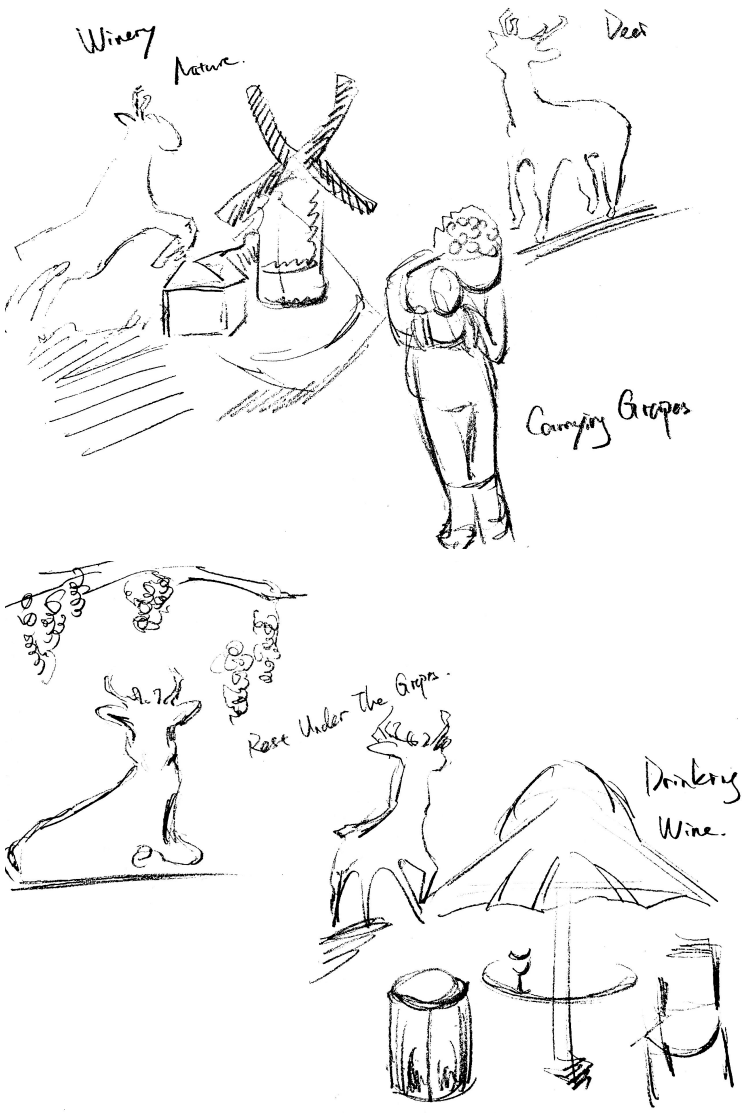


Figure 7.22 design CHOCOLATE packaging from manual sketch to digital (by Author)

7.2.1 Design for WINE PACKAGING



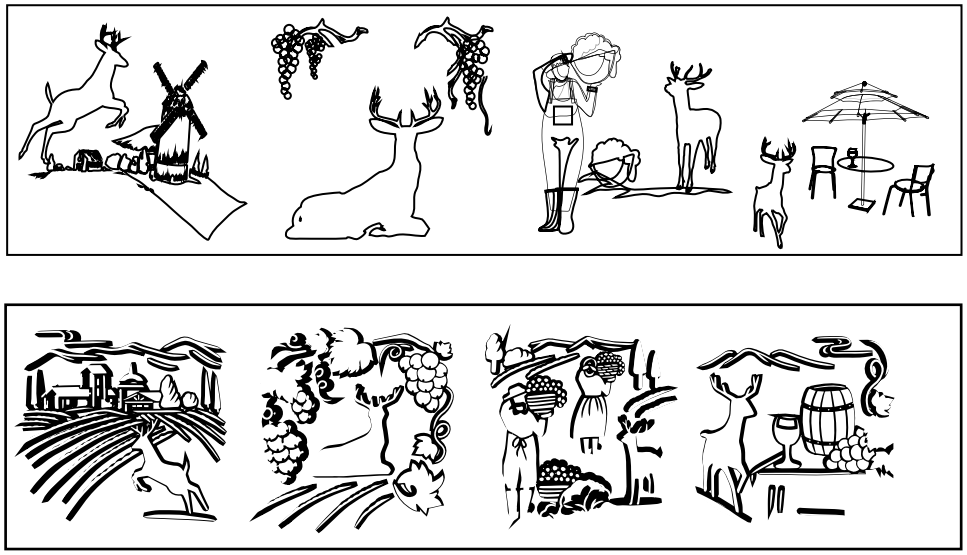


Figure 7.23 design WINE packaging from manual sketch to digital (by Author)

7.3 Resolved Designs

This section provides an overview of the three final designs according to the themes noted.

Figure 7.31 the final design of CHINESE TEA packaging (by Author)

Figure 7.32 the final design of CHOCOLATE packaging (by Author)

Figure 7.33 the final design of WINE packaging (by Author)

7.3.1 Final design: CHINESE TEA PACKAGING

Teapot
Pattern: Cloud pattern
Symbolism: Cloud patterns symbolise good luck. The teapot converted with a cloud pattern conforms to product attributes.

Moon
Pattern: Moon
Symbolism: Reunion - a symbol of family or friends sitting together watching the moon.

Botany
Pattern: Jasmine
Symbolism: Loyalty, respect, purity - generally used as a flower of friendship, meaning respect, and friendship. It has become a symbol of hospitality and etiquette.

Botany
Pattern: lotus
Symbolism: Describes a person with noble qualities.

Chinese word
Pattern: FU
Symbolism: Fortune, happiness, luck.
Pattern: China Ancient Money
Symbolism: Fortune, happiness, luck.
The table and the teacup are designed with the Chinese word “fu”. Which satisfies the product’s attributes and publicises the role of the product.

Design concept

In this design, I was inspired by memories of family and friends sitting together under the moonlight enjoying tea. It is a traditional Chinese custom to drink tea and admire the moon. The design represents lasting friendship and family reunion. Because of COVID-19, many family members have been separated and cannot get together, so this design is timely. It expresses good wishes, reunion, and peace.

Correlation to the first design criteria

Reflecting a contemporary design aesthetic while referencing traditional patterns common to Chinese paper cutting. This design uses the symbolic meaning of paper cutting itself to publicise the traditional Chinese tea culture and send good wishes for a reunion.

The traditional elements include a full moon, a lotus, a cloud pattern, the Chinese word “fu”, ancient Chinese money, and jasmine. In this design, the Chinese character fu, as the main body, has been transformed to conform to contemporary design aesthetics and product attributes. Taking China’s typical contemporary architecture as the background, traditional elements are integrated into a contemporary context, reflecting the contemporary aesthetic while at the same time highlighting traditional elements.

7.3.1 Final design: CHINESE TEA PACKAGING

7.3.2 Final design: CHOCOLATE PACKAGING

Shape
Pattern: Crescent - it mainly appears in eyes, mouths, eyebrows, and as features of clothing.
Symbolism: Good luck.

Animal
Pattern: Peacock
Symbolism: Peacocks are the kindest, most intelligent, freedom-loving and peaceful bird, they are a symbol of happiness. In Greek mythology, the peacock is a symbol of the goddess Hera.

Botany
Pattern: Plum blossom
Symbolism: Nobility, strength, self-confidence.

Design concept

The design starts with the sweetness of chocolate. I designed an anthropomorphic peacock in a wedding dress, spreading its wings confidently, driving in the pursuit of love. The design conveys to contemporary people good wishes for love and a happy life.

Correlation to the first design criteria

Reflecting a contemporary design aesthetic while referencing traditional patterns common to Chinese paper cutting.

The main traditional element is the peacock, symbolising a beautiful and happy life. The peacock spreading its feathers means courtship.

On the basis of retaining the implication of traditional elements, the main traditional patterns are designed to personify the peacock. The feathers of the peacock are decorated with the traditional crescent pattern. In the background are plum blossoms, the traditional meaning of which symbolises confidence. The designed car is contemporary transportation. The design conveys good wishes for people to freely and confidently pursue sweet love in the contemporary context.

7.3.2 Final design: CHOCOLATE PACKAGING

7.3.3 Final design: **WINE PACKAGING**

Animal
Pattern: Deer
Symbolism: Chinese homophonic sound is similar to the Chinese word for “fu”, representing happiness and luck.

Shape
Pattern: Cloud pattern
Symbolism: Good luck - in Chinese culture, clouds are often referred to as “lucky clouds”.

Botany
Pattern: Grape
Symbolism: The grapes are clusters of many grains, which means “many children and many blessings” (implying a prosperous population). The other means a big harvest.

Botany
Pattern: lily
Symbolism: Good luck and purity.

Botany
Pattern: Chrysanthemum
Symbolism: Chastity, honesty, and long life.
Chinese word pronunciation: “ju” is similar to the Chinese word “jiu”, meaning long life.

Botany
Pattern: Peony
Symbolism: Peony flowers are called rich flowers in China, they are the king of flowers, expressing people’s beautiful yearning for life and the desire for wealth.

Botany
Pattern: Chinese rose
Symbolism: Happiness, meaning the four seasons are like spring.

Design concept

The design describes the story of the deer at the winery.

The four pictures respectively show winery scenery, farmers carrying grapes, grapevines, and wine drinking. The design allows people to feel the freshness of the grapes and the beauty of the winery. The deer's winery trip is also close to the leisure state of contemporary people's holidays.

Correlation to the first design criteria

Reflecting a contemporary design aesthetic while referencing traditional patterns common to Chinese paper cutting.

The deer is the first traditional Chinese element, and its Chinese homophonic sound is consistent with the Chinese word for "ju", representing happiness and luck. The deer is displayed walking through the winery in four different frames and this sequence collectively reflects the beauty and nature of the winery. The second traditional element is the grape, which symbolises the prospect of having many children and a good harvest in the Chinese tradition. Four different traditional Chinese flowers are used as the background in the frames: lilies, chrysanthemums, peonies, and Chinese roses. These all symbolise good wishes. Finally, there are traditional cloud pattern embellishments. These diverse traditional elements describe the beautiful landscape of the contemporary winery.

7.4 Contemporary Packaging with Final Design Application

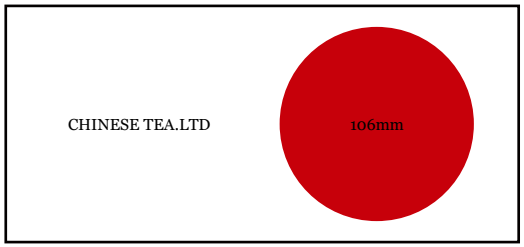
This section includes the three final designs of paper cuts applied to three contemporary packaging design schemes. Each packaging application has two options aimed at the customer's visual choice. At the same time, the second design criteria are met: apply paper cutting to the design of contemporary packaging.

Figure 7.41 the final design application of CHINESE TEA packaging (by Author)

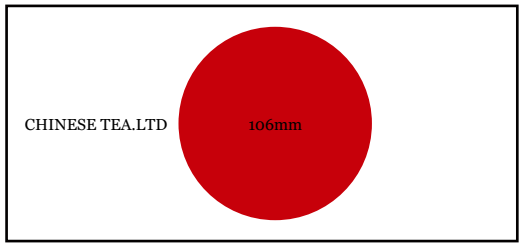
Figure 7.42 the final design application of CHOCOLATE packaging (by Author)

Figure 7.43 the final design application of WINE packaging (by Author)

7.4.1 CHINESE TEA paper cutting packaging



281mm*130mm

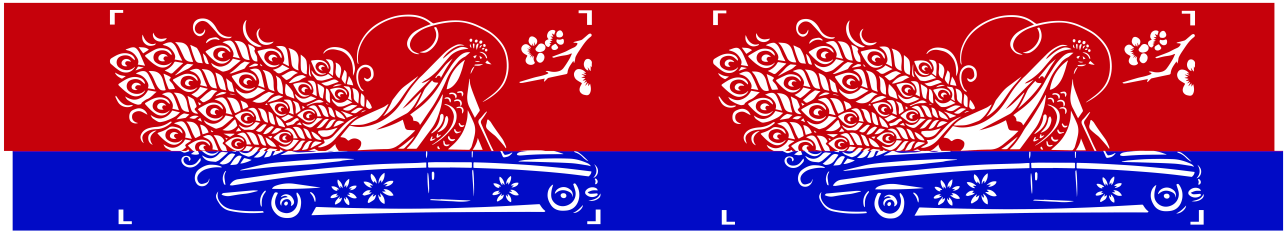


281mm*130mm

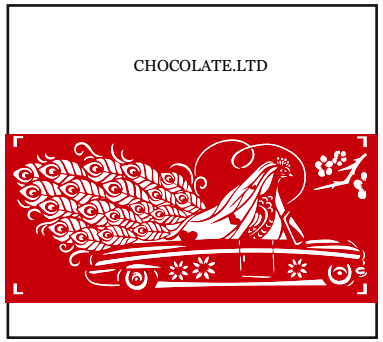
CHINESE TEA packaging model (option1)

CHINESE TEA packaging model (option2)

7.4.1 CHOCOLATE paper cutting packaging



Paper Cuting Band: 457*82mm



182mm*163mm

182mm*163mm

Chocolate Packaging Model (Option 1)

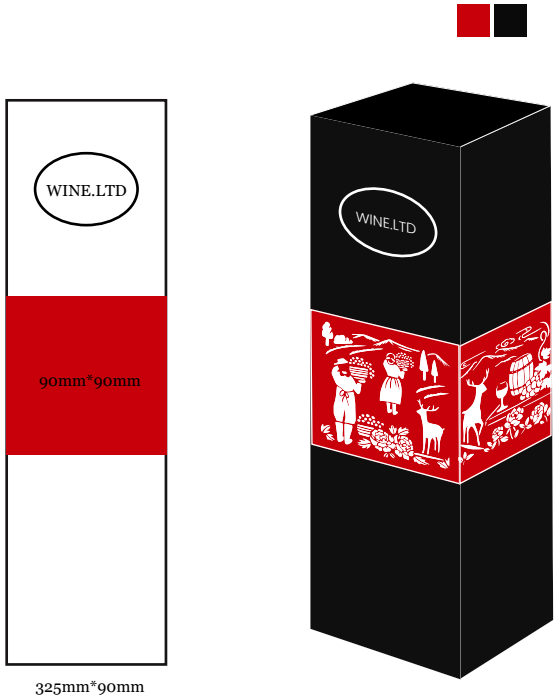
Chocolate Packaging Model (Option 2)

7.4.1 WINE paper cutting packaging

Paper Cuting Band :373*90MM

325mm*90mm

WINE Packaging Model (Option 1)



325mm*90mm

WINE Packaging Model (Option2)

7.5 Production of Prototype

This section outlines the prototyping process and production. The laser cutter was employed to create the paper cut outputs. Use of this technology addresses the fourth design criteria: applying digital fabrication technologies in the production of contemporary paper-cut outputs. The final design outputs include three original paper cut designs applied to contemporary packaging design.

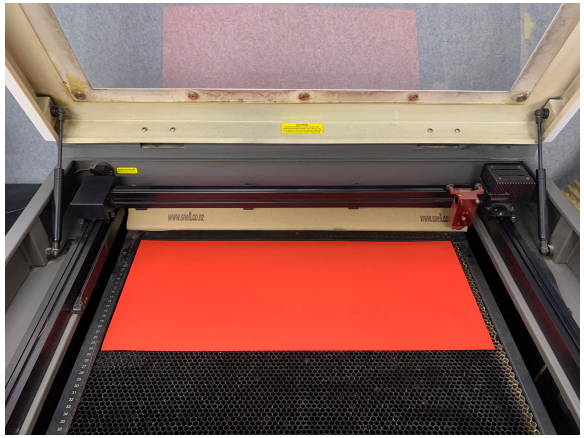
7.5.1 Laser cutter

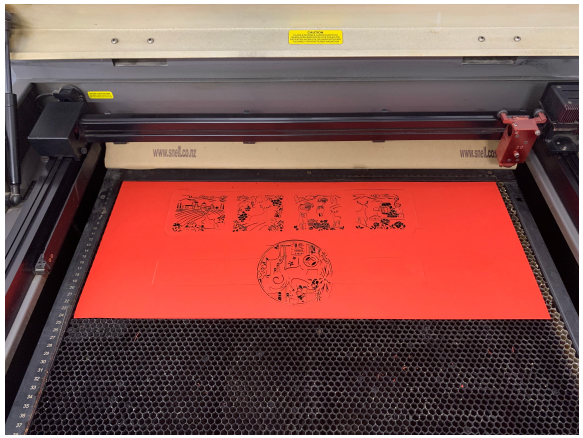
The laser cutter is a high precision CNC thermal process that uses a high-power laser beam to cut, melt, etch, or burn a sheet material. It uses a focussed beam of light to cut and etch sheet material to the digital design specification. This fabrication method is ideal for a variety of sheet material types, including metals, wood, cardboard, and certain polymers.

Figure 7.51 laser cutter (by Author)

Preparation

Material: 0.5mm red cardboard
(400mm*600mm)
The format of the file:
Artboard:600*400
Colour Mode: RGB colour mode
Stroke weight: 0.001mm
Vector Cutting: R-255 G-0 B-0





Placing the paper on the machine bed, processing the operation, and completed product.

Figure 7.52 the process of production of prototype (by Author)

7.5.2 Final prototype

Because of the thinness of the material, the heat-based process of cutting on the laser cutter means that it is easy to catch fire and for the delicate graphics to fracture. This required a great deal of attention on the adjustment of temperature and beam distance. I repeated the operation multiple times and made adjustments in order to produce high quality final outputs.

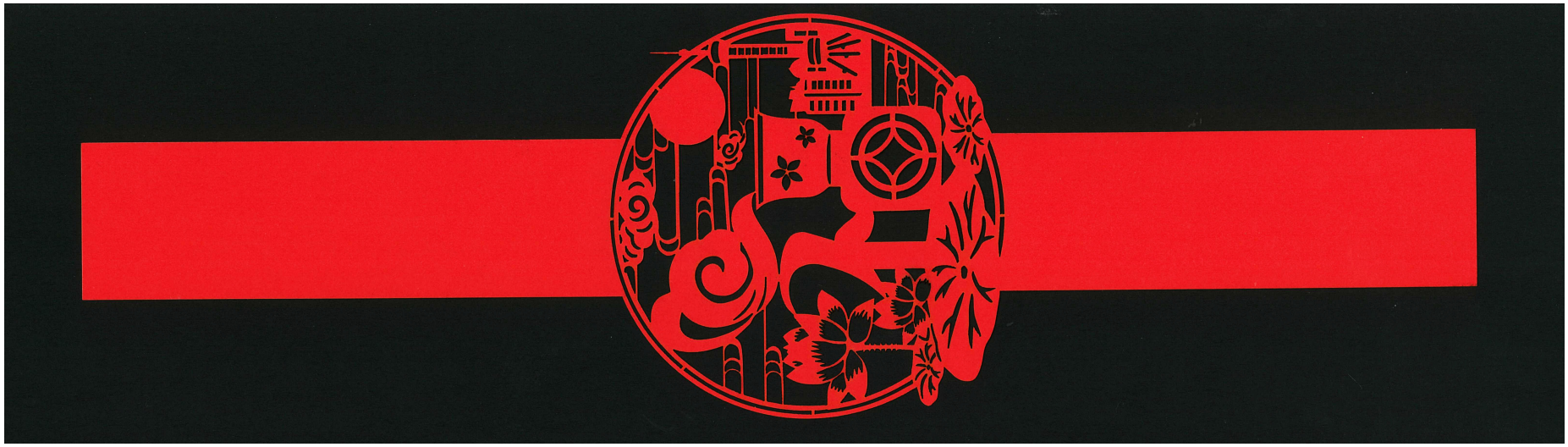


Figure 7.53
the final prototype of CHINESE TEA packaging paper cutting

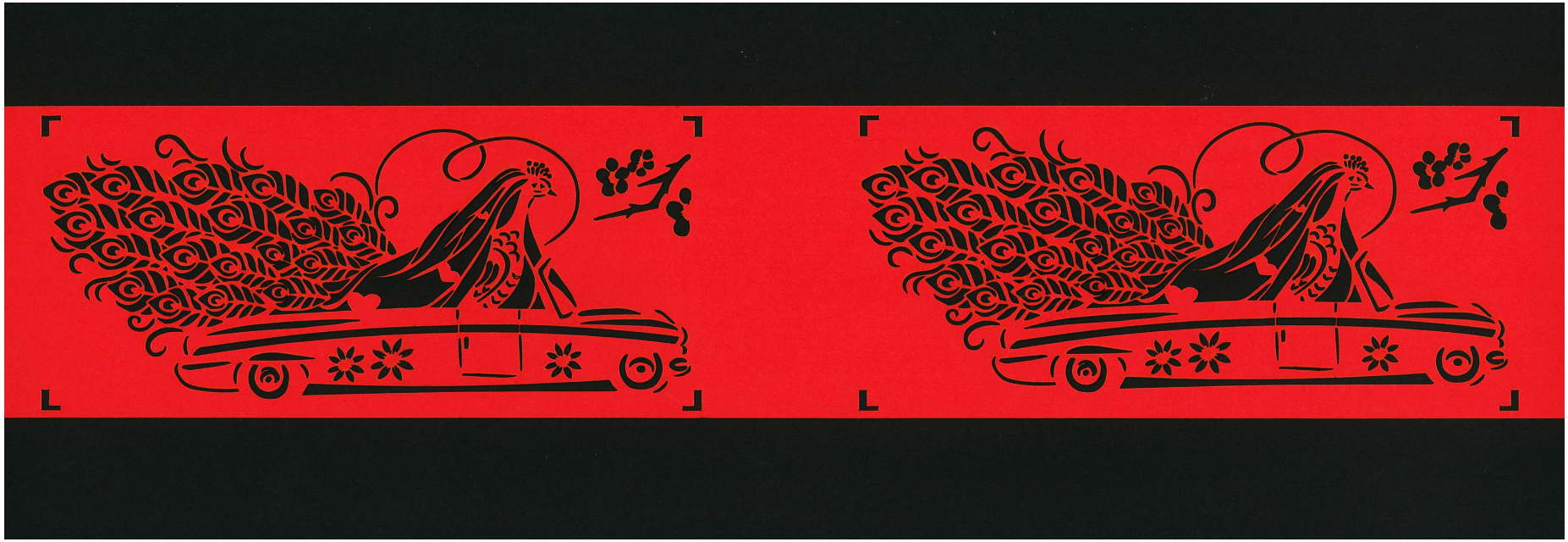


Figure 7.54
the final prototype of CHOCOLATE packaging paper cutting

Figure 7.55
the final prototype of WINE packaging paper cutting (by author)

7.5.3 Application of final design

Figure 7.56
the final prototype of CHINESE TEA packaging application (by author)

Figure 7.57
the final prototype of CHOCOLATE packaging application (by author)

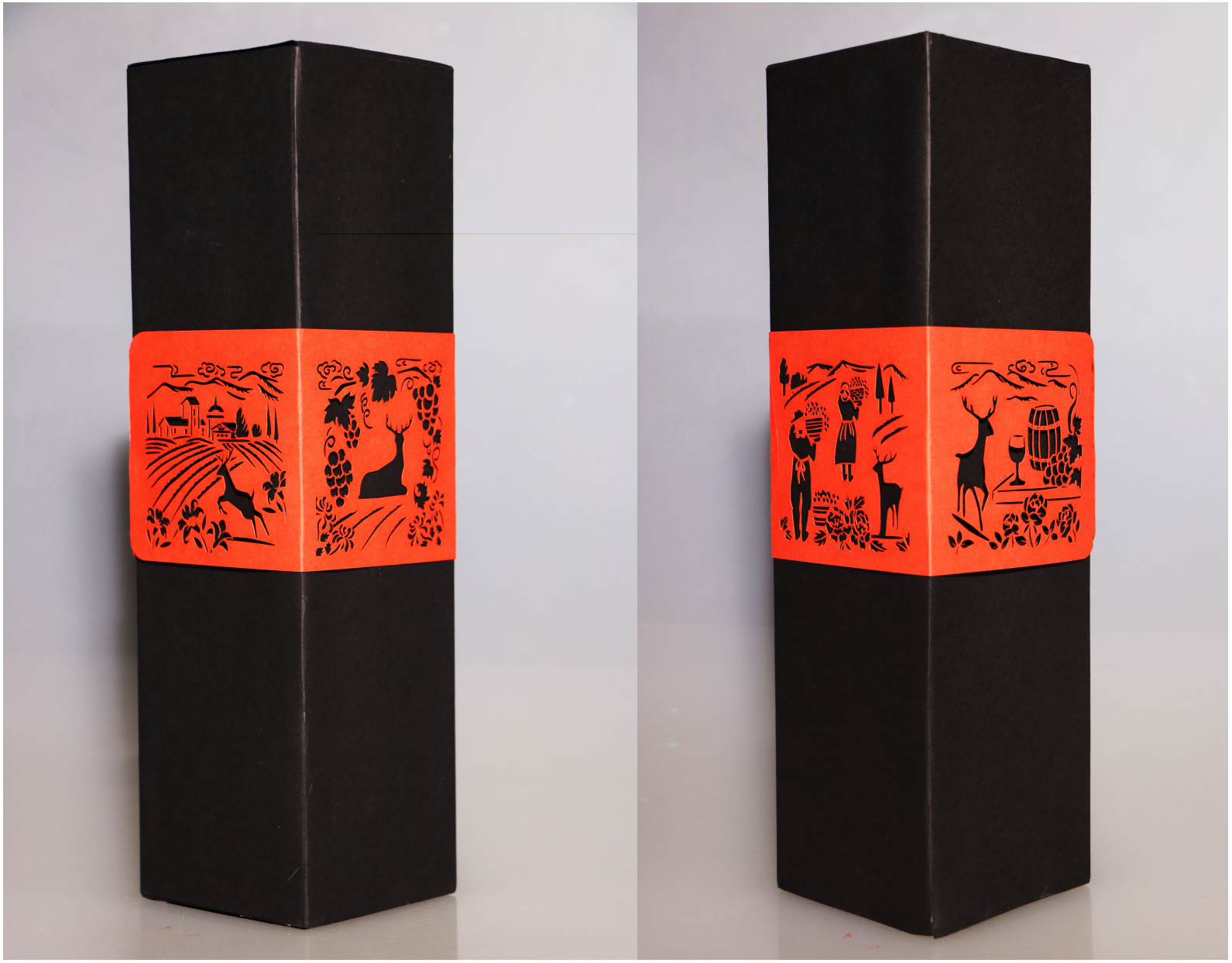


Figure 7.58
the final prototype of WINE packaging application (by author)

Figure 7.59
the final prototypes of packaging application (by author)

7.6 Secondary Function of Design as Decoration

In addition to meeting the needs of packaging design, this research aims to expand the value of the outputs by enabling a secondary function as decoration. Through this transformation into decorative display, the second life of these paper-cut outputs has an opportunity to preserve the traditional value of expressing good fortune and prosperity. The three paper-cut designs demonstrate a variety of approaches and compositions that may be used effectively as decorations. This output meets the third design criteria: design contemporary paper-cut outputs to enable dual functionality: first as packaging, and secondly as an item of decoration.

In the previous review of the traditional customs of Chinese paper-cut functions, the research showed that paper cutting has many decorative functions, the most popular of which are used as window flowers and gift flowers. At the same time, the paper cutting can be used as decorative wall-hangings, bookmarks, and other functions in the contemporary context.

Figure 7.61
My daughter is sticking up the window flower at home (by author)

WINDOW FLOWER

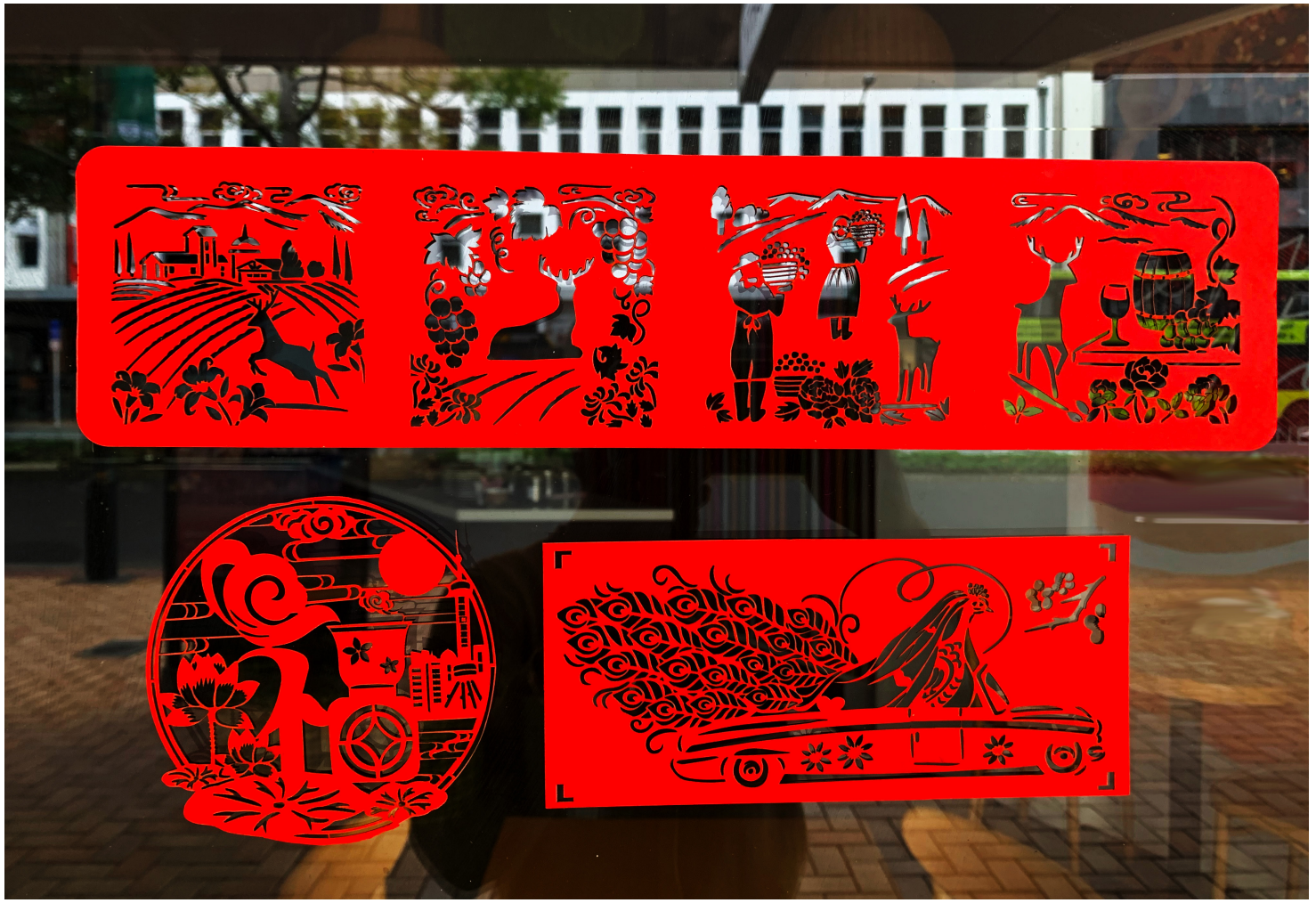


Figure 7.62
Decorative window flower in a street shop (by author)

WINDOW FLOWER

DECORATIVE PICTURE

Figure 7.64
Decorative Picture (by author)

GIFT FLOWER

Figure 7.63
Gift flower (by author)

Figure 7.65
Wall decoration (by author)

WALL DECORATION

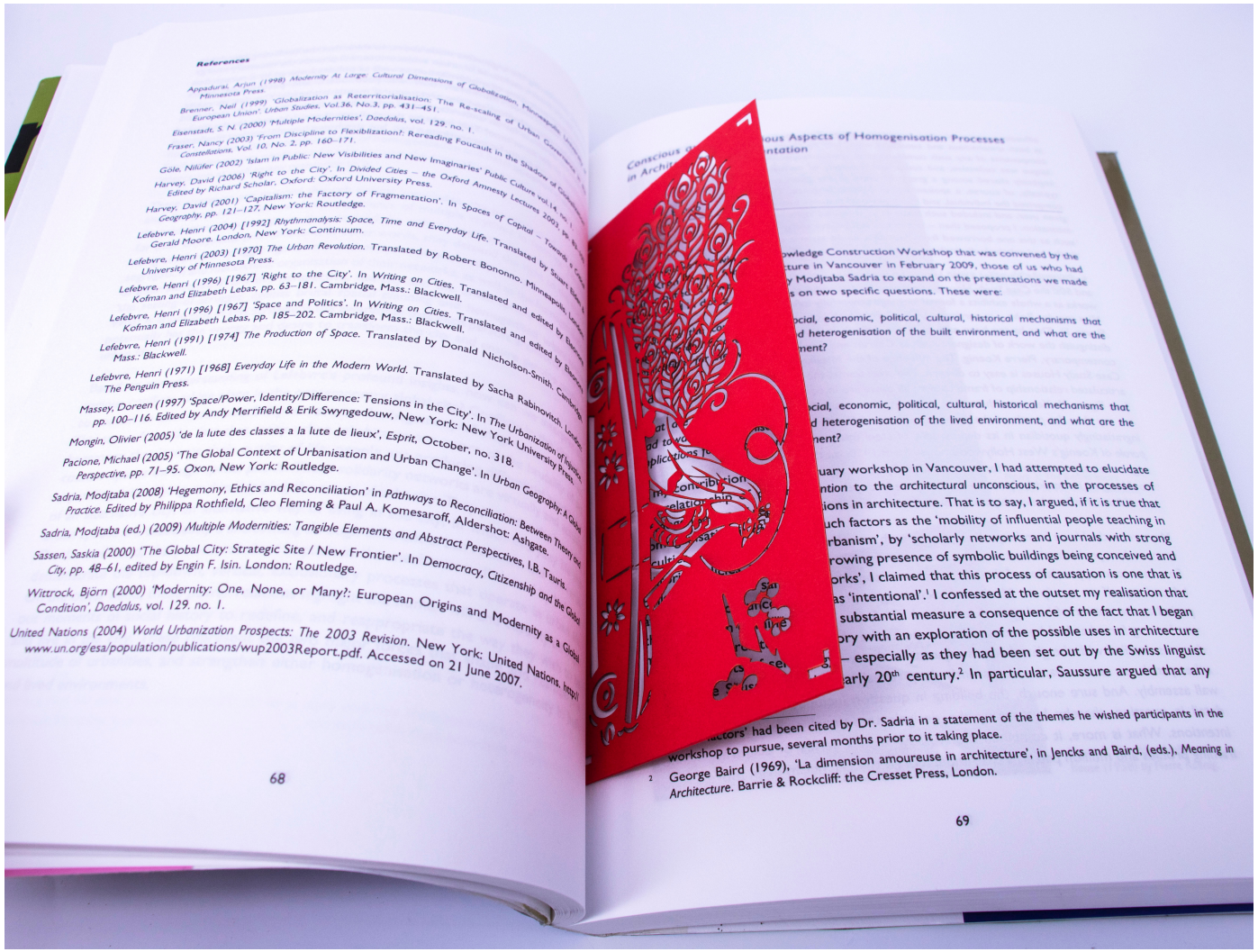


Figure 7.66
Book mark (by author)

BOOK MARK

CHAPTER 8

CONCLUSION

CONCLUSION

The purpose of this study is to protect and inherit the traditional Chinese cultural heritage by transforming the traditional Chinese paper cutting technology into the practice of contemporary design. This study elucidates the development history, style, craft, and cultural implications of paper cutting. Combined with contemporary production technologies, this research explores opportunities to revitalise and transform the traditional craft of Chinese paper cutting in contemporary packaging design. Through this integrated approach, paper cutting can be widely disseminated so that the public can more easily access the value of paper cutting in their everyday lives. The study highlights that the evolution of paper cutting is a valid strategy to support the preservation and inheritance of the values of this craft.

Through the application of a design research methodology, this research offers possible avenues of transformation that aim to support the flourishing of this craft. The study both preserves the cultural connotation of traditional paper cutting while reflecting contemporary aesthetic and production-centred considerations. This study combines traditional craftsmanship with contemporary design and production methods with new and more modern cultural symbols and patterns in an attempt to open up a new market for traditional paper cutting art. It is hoped that Chinese paper cutting, a masterpiece of intangible cultural heritage, will be shared with the contemporary world as an art form in China and even in the world at large and give good wishes.

8.1 Suggestion for Future Exploration

In reflecting on the development and outcome of this research, I believe that the application of traditional paper cutting in product packaging and other forms of contemporary design can be further expanded. In regard to the application of this craft to packaging specifically, traditional paper cutting can be applied to more diversified packaging design schemes in both two- and three-dimensional applications in a manner that allows paper cutting more prominent integration with and expression of the product. In addition to its application in product packaging, modern applications of traditional paper cutting could be further explored across other types of design outputs such as furniture, architecture, and media design.

Through interviews with traditional paper cutting artists, I learned that hand-made paper cutting is being marginalised. One potential strategy considered during the research entailed focusing on hand-made design innovations and devising opportunities for customers to do their own DIY paper cutting. This is a possible way to revitalise the traditional hand-made paper cutting industry and increase the pleasure of contemporary people who are interested in learning the craft of hand-made paper cutting.

The proposed secondary function of my design outcomes supports the application of paper cutting as decoration in the contemporary context. I believe that this strategy could be further developed and incentivised through user-centred activities. This might include the

sharing of photos of creative displays of the paper-cut packaging. This might target young people as a means to incite understanding and participation. Paper cutting could also be added to school interest courses to cultivate and strengthen students' artistic skills in this craft. Organising paper cutting activities in alignment with traditional Chinese festivals could be an opportunity to develop students' knowledge and understanding of traditional folk art. Through the cultivation of a community of paper cutting lovers, the art of paper cutting can continue to flourish.

REFERENCES

REFERENCES

Adams, W. C. (2015). Chapter 19. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.), *Handbook of Practical Program Evaluation, 4th Editions* (pp. 492–505). John Wiley & Sons, Inc. https://doi.org/10.1002/9781119171386.ch19

Bai, Q. S., & Yu, F. M. (2009). *Paper Cutting Technique*. China Labor Security Society Publishing House, Beijing.

Chen, J. (2007). *History of Chinese Folk Paper-cutting*. Peking University Publication.

Chen, J., & Tao Y. F. (2008). *International paper cutting fine works*. Yellow River.

Cole, F. L. (1988). Content Analysis. *Clinical Nurse Specialist, 2*(1), 53-57.

Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.

Ellicott, C., & Roncarelli, S. (2010). *Packaging Essentials: 100 Design Principles for Creating Packages*. Rockport Publishers.

Huang, C. S. (2008). A discussion into art feature of paper cutting art in Hailun. *Journal of Suihua University*, *28*(4).

Kvale, S. (2003). The psychoanalytic interview as inspiration for qualitative research. *Qualitative Research in Psychology: Expanding Perspectives in Methodology and Design,* 275–297.

Karjaluoto, E. (2013). The design method: A philosophy and process for functional visual communication. *New Riders*.

Krippendorff, K. (1980). Validity in content analysis. In E. Mochmann (Ed.), *Computerstrategien die kommunikationsanalyse,* (pp. 69-112). Campus-Verlag.

Krogh, P. G., Markussen, T., & Bang, A. L. (2015). Ways of drifting—Five methods of experimentation in research through design. In A. Chakrabarti (Ed.), *ICoRD'15 – Research into Design Across Boundaries, Volume 1* (pp. 39–50). Springer.

Martin, B., & Hanington, B. (2012). *Universal methods of design: 100 ways to research complex problems, develop innovative ideas, and design effective solutions*. Rockport Publishers.

Jing, Z. L. (2010). *China Folk Paper Cutting*. Gansu People Art Publication House.

Lee, Y. B. (2004). *Lee Yao Bao paper cutting collection*. Fujian Education Publication.

Liu, X.C. (2002). *Symbolism: an examination of a pattern of folk culture*. Academy Publication.

Qiang, H. (2009). Changes of cultural function and connotation of Chinese folk paper-cut art. *Journal of Northwest University for Nationalities* (6)*:* 78-83.

Qiao, X. G. (2010). *The study and Creation of Paper Cutting*. Shen Dong Fine Art Publishing House, Tsinan.

Ramirez-Rodriguez, E. (2017). A Postgraduate Thesis Model for Research through Design Based on Design Criteria. *The International Journal of Designed Objects, 11,* 11- 27.

Steenis, N. D., van Herpen, E., van der Lans, I. A., Ligthart, T. N., & van Trijp, H. C. M. (2017). Consumer response to packaging design: The role of packaging materials and graphics in sustainability perceptions and product evaluations. *Journal of Cleaner Production, 162,* 286-298.

Wang, S. C. (2007). *Aesthetic and historical discussion of Chinese folk paper cutting art*. Baihua Literature and Art Publication House.

Wang, Q. S. (2009). *Paper Cutting's Cultural Interpretation*. Beijing University Publishing House, Beijing.

Wen, H, W. (2006). Chinese Folk Paper-cutting. *Shenzhou Scholar, 6,* 33-33.

Wu, A. F. (2008). A discussion of the development and protection for Chaozhou paper cuttings. *Public Art*, 3.

Yang, Y. Y. (2009). A discussion into cultural significance and protection of Miao group's paper cutting art. *New West, 8*.

Yao, S. F. (2010). Paper cutting art in Xuzhou. *Research on Art Education, 6*.

Zhang, C. P. (2008) Folk paper cutting art in Zhejiang. *Zhejiang Craft and art, 4.*

Zhu, G. Q.(1979) *Aesthetics (Mei Xue)*. The Commercial Publication House.

Zhang, S. S. (2005) Chinese folk paper cutting. *CHINA TODAY*.

Zhang, D. T. and Zhang, D. (2009) *An Introduction to Guangling Paper-Cuts In China*. Shanxi Educational Publishing House, Shanxi, China.

Zhan,Q. (2019). World Paper cutting Art. *Minyi, 6*.

Zhou, F. (2011) The art feature of paper cutting art in Helingeer. *Journal of College of Inner Mongolia University, 8*.

Image references

All unlisted figures belong to the author.

Figure 2.1 Ni, H. M. (2009). Example of Heilongjiang Founder Paper Cutting. Silhouettes Series of Works by Six National Intangible Cultural Heritage Paper Cutting Masters. Retrieved from https://m-news.artron.net/news/20180917/n1178513.html

Figure 2.2 (n.d). Example of Yangzhou Paper cutting. China Art World

Figure 2.3 (n.d). Example of Botany paper cutting. Retrieved from https://mts.jk51.com/tushuo/1070470.html#lg=1&slide=4

Figure 2.4 (n.d). The Mandarin Ducks In The River. Retrieved from http://boxuetu.com/

Figure 2.5 Zhang, C. P. (2008). Chinese auspicious words. Folk paper cutting art in Zhejiang.

Figure 2.7 (2019) Example of Paper Cutting Window. Retrieved from https://www.sohu.com/a/293802703_241492

Figure 2.8 (2008) Example of Paper cutting door hangings in Chinese Rural. Retrieved from http://boxuetu.com/

Figure2.9 (2007). Paper Cutting Gift flower. Retrieved from http://www.kaiwind.com/c/2015-01-31/831410.shtml

Figure 2.10 (2018). Mr. Huang and the community members together to put up the celling flower. Retrieved from https://www.sohu.com/a/451836364_120461345

Figure 2.11 Matisse, H. (1943). The Fall of Icarus. Retrieved from https://www.artsy.net/artwork/henri-matisse-la-chute-dicare-the-fall-of-icarus

Figure 2.12 Walker, K. (2001). Darkytown Rebellion. Retrieved from https://www.mprnews.org/story/2007/02/20/karawalker

Figure 2.13 Bovey, L. (2014). Outgrow-Rice Grains. Retrieved from https://www.boveylee.com/cut-paper-2011-2015/outgrowrice-grains-2014

Figure 2.14 Schröter, A. (1956). Frau in Waffen. Retrieved from https://eaobjets.wordpress.com/2010/11/14/hamburger-kunsthalle-12/

Figure 3.1 Traditonal Chinese Animals Symbols. Retrieved from https://zhihuimami.com/jianbihua/20-29/

Figure 3.3 Traditonal Chinese Botany Symbols. Retrieved from https://zhihuimami.com/jianbihua/3541.html

APPENDICES

Ethical Approval

VICTORIA UNIVERSITY OF WELLINGTON
TE HERENGA WAKA

Phone 0-4-463 6028
Email judith.loveridge@vuw.ac.nz

TO	Olina Huang
FROM	Associate Professor Judith Loveridge, Convenor, Human Ethics Committee
DATE	3 December 2020
PAGES	1
SUBJECT	**Ethics Approval** **Number:** 29017 **Title:** Chinese Paper Cutting Through a Traditional and Contemporary Context

Thank you for your application for ethical approval, which has now been considered by the Human Ethics Committee.

Your application has been approved from the above date and this approval is valid for three years. If your data collection is not completed by this date you should apply to the Human Ethics Committee for an extension to this approval.

Best wishes with the research.

Kind regards,

J. A. Loveridge

Judith Loveridge

Convenor, Victoria University of Wellington Human Ethics Committee