



**THE FUSION OF CULTURE AND PRODUCT DESIGN: DESIGN
EXPERIENCE OF COMBINING PORTABLE TEA SET
WITH ZHUANG CULTURE**



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF FINE ARTS IN DESIGN
COLLEGE OF DESIGN**

**GRADUATE SCHOOL, RANGSIT UNIVERSITY
ACADEMIC YEAR 2024**

Thesis entitled

**THE FUSION OF CULTURE AND PRODUCT DESIGN: DESIGN
EXPERIENCE OF COMBINING PORTABLE TEA SET
WITH ZHUANG CULTURE**

by

GUIXIANG MO

was submitted in partial fulfillment of the requirements
for the degree of Master of Fine Arts in Design

Rangsit University
Academic Year 2024

Assoc.Prof. Pakorn Prohmvitak
Examination Committee Chairperson

Prof. Eakachat Joneurairatana, Ph.D.
Member

Assoc. Prof. Pisrapai Sarasalin
Member and Advisor

Approved by Graduate School

(Prof. Suejit Pechprasarn, Ph.D.)

Dean of Graduate School

August 30, 2024

Acknowledgements

Thank you to Rangsit University for giving me the opportunity to study here. Thank you to the Director and ajarns of college of Design for their guidance.

Thank you ajarn Patipat Chaiwitesh for guiding my research. Thank you for the sincere opinions and suggestions provided by the committee professors (Prof.Dr.Eakachat joneurairatana, Assoc.Prof.Pisrapai Sarasalin, Assoc Prof.Pakorn Prohmvitak, Assoc.Prof.Paiiit ingsiriwat, Asst.Prof.Dr.Sirada Vaiyavatiamai, Asst.Prof.Rewat Chumnarn, Asst.Prof.Dr.Sammiti Sukbunjhong, Asst.Prof.Jinabhadh Kantaputra, Danu Phoomalee(Ph.D), Sridhar Ryalie, Patipat Chaiwitesh, Chitpaphop Prasertpitoon) during these six presentations.

Thank you the recommendations provided by three experts, Assoc. Prof. Dr. Sant Suwatcharapinun, Asst. Prof. Prakaikavin, and T-ra Chantasawasdee, in the "MFA thesis Master Processing".



Guixiang Mo
Researcher

6509162 : Guixiang Mo
 Thesis Title : The Fusion of Culture and Product Design: Design Experience
 of Combining Portable Tea Set with Zhuang Culture
 Program : Master of Fine Arts in Design
 Thesis Advisor : Assoc. Prof. Pisrapai Sarasalin

Abstract

China's tea culture has a long history of over 2500 years and has become a part of modern people's daily lives. Zhuang culture, the second largest ethnic minority culture in China, has a history of over a thousand years. Portable tea sets are the most commonly used tea-making utensils nowadays. Integrating Zhuang cultural elements into the design of portable tea sets can help more people understand Zhuang culture. The research objectives are 1) to resolve some of the current issues with portable tea sets, 2) to extract essence from Zhuang culture and use it in the design of portable tea sets, including tea cups, teapots, tea towels, and portable tea set packaging boxes, 3) to combine two traditional Chinese cultures to design portable tea sets that better meet the demands of modern people, and 4) to design branding for portable tea sets. The methodology for conducting research includes: 1) research on Chinese tea culture and Zhuang culture, 2) theoretical research on material texture and color psychology, and 3) product feasibility analysis through user research, material study, case studies, and market positioning.

The research results revealed the followings: 1) extraction and redesign of Zhuang ethnic elements; 2) portable tea set design, including teapots, cups, tea towels, and portable tea set bags; and 3) tea set brand design. Through this research, the brand and product design have been completed. Following up with channels, such as finding product manufacturers, the product can be put into the market for sale, which can quickly generate economic benefits.

(Total 75 pages)

Keywords: Portable Tea set, Tea Set Brand, Chinese Tea Culture, Zhuang Culture

Student's Signature..... Thesis Advisor's Signature

Table of Contents

	Page
Acknowledgements	i
Abstracts	ii
Table of Contents	iii
List of Tables	v
List of Figures	vi
Chapter 1 Introduction	1
1.1 Background and Significance of the Problem	1
1.2 Research Objectives	2
1.3 Research Questions	2
1.4 Research Framework	3
1.5 Definition of Terms	4
Chapter 2 Literature Review	6
2.1 Chinese Tea Culture	6
2.2 Zhuang Culture	12
2.3 Feeling of Textures	16
2.4 Color Psychology	18
Chapter 3 Research Methodology	21
3.1 User Research	21
3.2 Material Studies	24
3.3 Case Studies	27
3.4 Market Positioning	32
3.5 Research Conclusion	34

Table of Contents (Continued)

	Page
Chapter 4	
Design Experience	36
4.1 Brand Design	36
4.2 Extration of Zhuang Culture Elements	40
4.3 Portable tea set design	49
Chapter 5	
Conclusion and Recommendations	63
5.1 Conclusion	63
5.2 Recommendations	63
References	65
Appendix	69
Biography	75



List of Tables

	Page
Tables	
1.1 Research framework	3
3.1 User profile details	22
3.2 Comparison of traditional materials	25
3.3 Comparison of different materials	27
3.4 Competitive analysis comparison chart	32
3.5 The research results	34



List of Figures

Figures	Page
2.1 Chinese tea culture timeline	6
2.2 The main reasons for chinese consumers drinking tea in 2021	7
2.3 Tea drinking frequency by age group	8
2.4 Traditional kung fu tea set and protable tea set	9
2.5 The cup is prone to slipping	9
2.6 Teapots among portable tea sets on the market	10
2.7 Tea towels among portable tea sets on the market	11
2.8 Portable tea set bags on the market	11
2.9 Zhuang bronze drum performance	12
2.10 Bronze drum	13
2.11 Zhuang brocade	14
2.12 Nixing pottery household utensils	15
2.13 Huashan rock painting	16
2.14 A total of 21 textures were used in the experiment	17
2.15 Colors and emotions	19
2.16 Color and consumer purchases	20
3.1 Usage scenarios	22
3.2 Main classification of tea sets images	25
3.3 Comparison of different materials	26
3.4 sanxun_Light-drink Travel kit_One pot and two cups	27
3.5 sanxun_Light-drink Travel kit_One pot and one cup	28
3.6 KAFFTEC coffee grounds stainless steel beer cup	29
3.7 como tomo liquid silicone milk bottle	30
3.8 Common glass cups on the market	31
4.1 Brand color	37
4.2 Brand logo	38
4.3 Colored brand logo	39

List of Figures(Continued)

Figures	Page
4.4 Primary color definition	39
4.5 Pattern from brand	40
4.6 Patterns from Zhuang brocade 1	41
4.7 Patterns from Zhuang brocade 2	41
4.8 Patterns from Zhuang brocade 3	42
4.9 Patterns from Zhuang brocade 4	42
4.10 Patterns from Zhuang brocade 5	43
4.11 Patterns from Huashan rock painting	43
4.12 Patterns from bronze drum sun patterns	44
4.13 Extracted Zhuang elements	44
4.14 Redesign Zhuang elements_geometry	45
4.15 Redesign Zhuang elements_birds	46
4.16 Redesign Zhuang elements_human	46
4.17 Redesign Zhuang elements_flowers	47
4.18 Redesign Zhuang elements_sun pattens	48
4.19 Redesign Zhuang elemens	48
4.20 Portable tea set concepts	51
4.21 Portable tea set concept 02_porcelain	52
4.22 Portable tea set concept 03_glass	53
4.23 Portable tea set concept 05_porcelain	53
4.24 ortable tea set concept 07_glass	54
4.25 Tea towel concept 01	55
4.26 Tea towel concept 02	55
4.27 Tea towel concept 03	56
4.28 Tea towel concept 04	56
4.29 Tea towel concept 05	57
4.30 Tea towel concept 06	57

List of Figures(Continued)

Figures	Page
4.31 Tea towel concept 07	58
4.32 Tea towel concept 05_real sample	58
4.33 Pattern design for portable tea set bags_concept 02	59
4.34 Pattern design for portable tea set bags_concept 03	59
4.35 Pattern design for portable tea set bags_concept 05	60
4.36 Pattern design for portable tea set bags_concept 07	60
4.37 Pattern design for portable tea set bags_concept 05_real sample	61
4.38 Pattern design for portable tea set bags_concept 05	61



Chapter 1

Introduction

1.1 Background and Significance of the Problem

In today's fast-paced life, the main labor force in China, the general working population, is facing the dual pressure of work and family. In terms of work, most of the working hours are from nine to nine, especially in first tier cities such as Beijing, Shanghai, Guangzhou, and Shenzhen, where work pressure is greater. In terms of family, these ordinary people are all born in the 1980s and 1990s, many of whom are only children. If only children marry only children, it means they need to support four parents and one to three children, and most of them also need to pay off their mortgage and car loans every month. The economic pressure is enormous. This has led to the development of some unhealthy lifestyle habits. This can lead to insomnia and depression.

Drinking tea has been popular in ancient China since 2500 years ago, and it is now widely recognized as a way to maintain health. In this paper, I will use tea set design and brand promotion to encourage everyone to drink more tea, promote health, refresh, and relieve stress through drinking tea. Portable tea sets are also a very popular type of tea set nowadays. It is different from traditional kung fu tea sets. Because Kung Fu tea sets contain a wide range of content, they do not match the simple and fast-paced lifestyle of modern people. So portable tea sets have become everyone's new favorite.

The Zhuang ethnic group is a minority in southern China and the second largest ethnic group in China. Zhuang culture, like tea culture, has a long history. The bronze drum, Zhuang brocade, rock paintings, and clay pottery in Zhuang culture all have rich ethnic cultural characteristics. We need to inherit and promote this culture,

so that more people can understand it.

With this idea in mind, in my thesis, I will combine these two long-standing Chinese cultures and apply the characteristics of Zhuang culture to the design of portable tea sets. Enable the inheritance of ethnic culture and enable more people to understand these cultures. And through portable tea sets and brand design, modern people can slow down the pace and feel the relaxed feeling brought by traditional Chinese culture in fast-paced and high-intensity life. Release stress in daily life. Because “True wealth is the smile on your face.”

1.2 Research Objectives

1.2.1 To resolve some of the current issues with portable tea sets.

1.2.2 To extract essence from Zhuang culture and use it in the design of portable tea sets. Including tea cups, teapots, tea towels, and portable tea set packaging boxes.

1.2.3 To combining two traditional Chinese cultures to design portable tea sets that better meet the demands of modern people.

1.2.4 To design branding for portable tea sets.

1.3 Research Questions

Firstly, it is necessary to study what portable tea sets are. What are the characteristics of portable tea sets. Are there any functional defects in the portable tea sets currently available on the market. What is the user group. What are the usage scenarios. What materials are needed for portable tea sets to better meet the user's needs.

Furthermore, in addition to meeting the basic functional requirements, portable tea sets need to be endowed with spiritual value. Through the study of feeling of texture, color psychology, and the use of feeling of texture and color that create a

sense of happiness, the essence of Zhuang culture is extracted through the study of Zhuang culture, combined with portable tea sets to increase the value of tea sets.

Finally, through brand promotion, the value of portable tea sets can be increased, enabling people to understand tea culture and Zhuang culture, truly achieving the goal of helping young people in China release work and life pressure, or relax both physically and mentally, through daily activities.

1.4 Research Framework

The research framework of this paper is shown in Figure 1.1, which includes three parts: Literature Review, Theories, and Research Methodology.

Table 1.1 Research framework

Literature Review	Research Methodology
Chinese Tea Culture	User Research
Zhuang Culture	Material Studies
Feeling of Texture	Case Studies
Color Psychology	Market Positioning

The Literature Review consists of two parts, one is the study of Chinese tea culture and the other is the study of Zhuang culture. China's tea culture can be traced back 2500 years ago, with a history and cultural heritage of 2500 years. Nowadays, it has become a part of people's lives. Zhuang culture is a minority culture in Guangxi Zhuang Autonomous Region, China, with a history of thousands of years. These two cultures have a history and culture of thousands of years in China, and their collision in modern life, especially in the design of portable tea sets, is rare. So through my research, I hope to have a better integration of these two cultures.

The theoretical part also includes two parts, one is the feeling of texture, and the other is color psychology. For product design, the feeling of texture and the use of

color are very important. Through the study of material texture and color psychology, it can provide more powerful support for my material and color choices.

The research methodology consists of four parts, namely: user research, material research, case study, and product market positioning. Through user research, I can understand the preferences and needs of the target group, making the design more in line with their needs. Through material research, understand what materials are currently used in portable tea sets on the market, and whether there are new materials that are more suitable for the design of portable tea sets. Through case studies, understand the characteristics and shortcomings of portable tea sets currently available in the market, as well as the techniques used for production. Through product market positioning, understand what are the competing brands of portable tea sets in the current market? How do they all do it, and what is the price. Through these studies, one can better highlight their product characteristics and advantages.

1.5 Definition of Terms

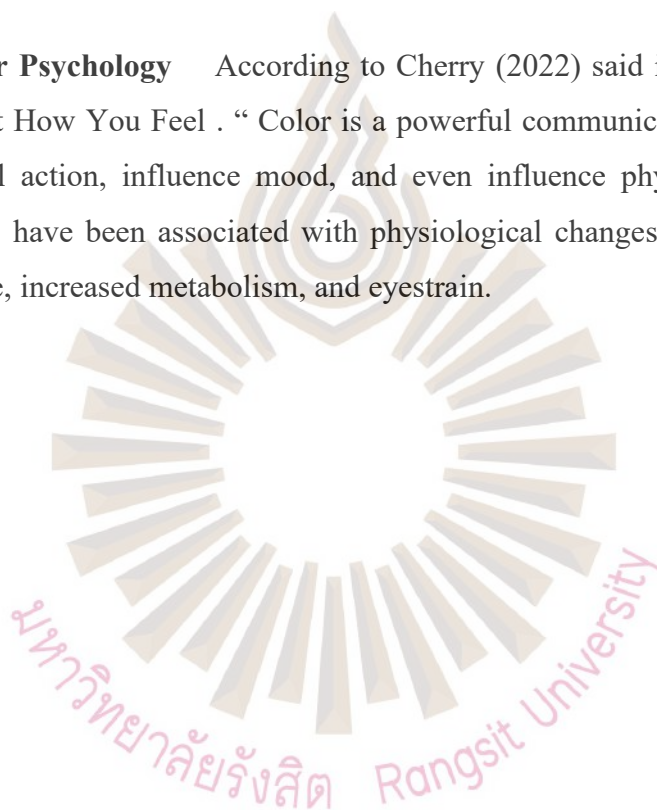
Portable Tea Set Different from traditional Chinese kung fu tea sets. Usually includes 1-4 tea cups, a teapot or lid bowl, a tea towel, and a portable packaging bag. Convenient to carry.

Chinese Tea Culture Chinese tea culture can be traced back to 2500 years ago. It can also be said that it began in the Han Dynasty, risen in the Tang Dynasty, and flourished in the Song Dynasty. It has continued to this day. Drinking tea has become a daily necessity for modern people. (Xu, 2017)

Zhuang Culture Zhuang culture is also one of the ancient ethnic cultures in China. The Zhuang people are indigenous peoples who have lived in Lingnan for generations. Its historical origins can be traced back to the "Liujiang people" about 40000 to 50000 years ago. Zhuang culture includes Bronze drum culture, Zhuang brocade culture, Household appliances, Huashan Rock Painting, Embroidery ball culture, etc. (Kjt.GXZF, 2023)

Feeling of Texture According to B. A. Richardson said in Learning to Feel Textures: Predicting Perceptual Similarities From Unconstrained Finger-Surface Interactions, Feeling of texture is “ Whenever we touch a surface with our fingers, we perceive distinct tactile properties that are based on the underlying dynamics of the interaction ”, and “ the brain aggregates the sensory information from these dynamics to form abstract representations of textures. ” Richardson, Vardar, Wallraven, and Kuchenbecker (2022).

Color Psychology According to Cherry (2022) said in Color Psychology: Does It Affect How You Feel . “ Color is a powerful communication tool and can be used to signal action, influence mood, and even influence physiological reactions. Certain colors have been associated with physiological changes, including increased blood pressure, increased metabolism, and eyestrain.



Chapter 2

Literature Review

2.1 Chinese Tea Culture

Chinese tea culture can be traced back to 2500 years ago. It can also be said that Chinese tea culture starting from the Han Dynasty, rising in the Tang Dynasty, prosperous during the Song Dynasty. According to the famous lyricist Wang Bao of the Eastern Han Dynasty in his book "僮约(Tong Yue)", it is recorded that the term "烹茶尽具 (Cooking tea with utensils)" refers to tea utensils. Tea sets go from shared to specialized, from rough to exquisite.

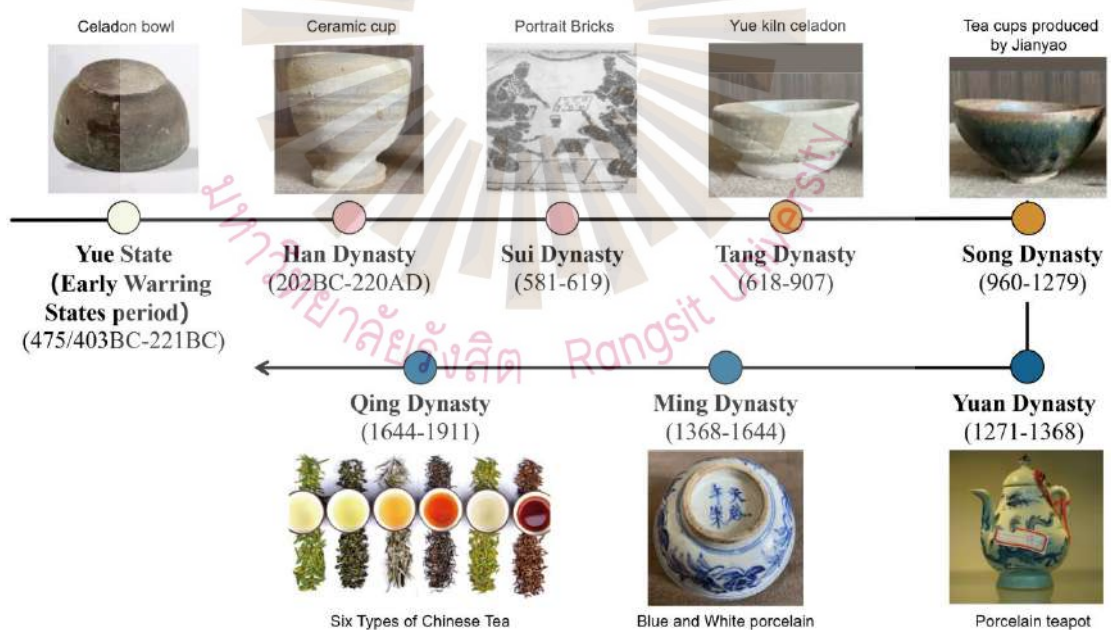


Figure 2.1 Chinese tea culture timeline

Source: Researcher

Figure2.1 is a brief diagram of the development history of Chinese tea culture.

According to the "2022-2023 China Tea Industry Development and Consumer Insights Industry Report" by iiMedia Research, China's tea production and growth rate have been increasing year by year from 2010 to 2019. The main reasons why people drink tea are as follows: 27.6% for relaxation, 19.5% for life style, 19.1% for health care, and 18.5% for refreshing (Figure 2.2). Young people under the age of 30 are increasingly fond of drinking tea as they age, and even reach a point where they would rather have no meat for three days than have no tea for a day (Figure 2.3).



Figure 2.2 The main reasons for chinese consumers drinking tea in 2021

Source: iiMedia Research, 2023

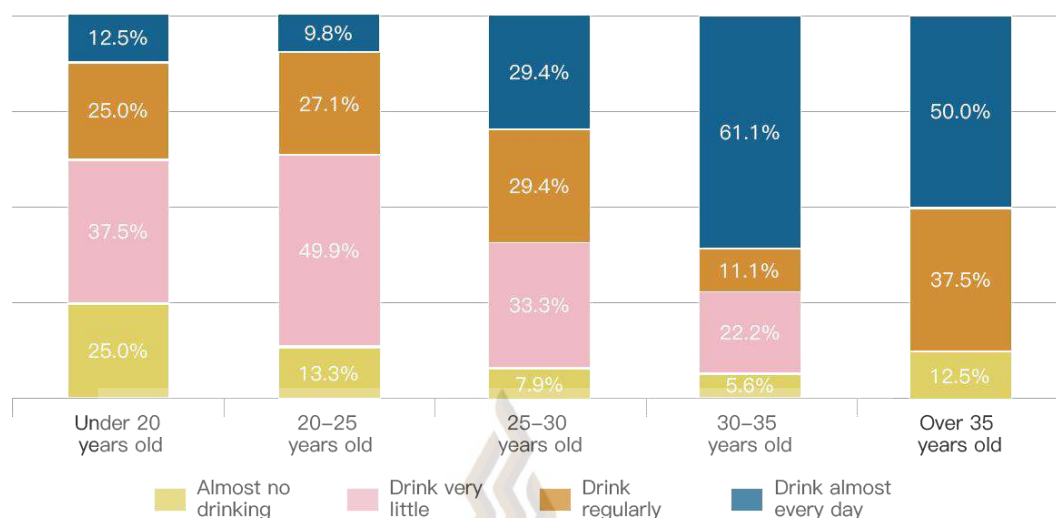


Figure 2.3 Tea drinking frequency by age group

Source: iiMedia Research, 2023

From the above data, it can be seen that Chinese tea culture is deeply rooted, and drinking tea has become a daily necessity for people.

Nowadays, traditional kung fu tea sets are too complex for young people because they usually including cover bowl, tea cup, teapot, fair cup, tea needle, tea knife, tea spoon, tea shovel, tea clip, tea clipper, tea bowl, tea barrel, etc (Figure 2.4). For modern fast-paced life, people tend to prefer portable tea sets that are simple, convenient to carry, and can be used whenever they want. Portable tea sets usually only have 1-4 tea cups, a teapot or lid, tea towels, and packaging boxes. The biggest feature of portable tea sets is that they can be stacked together, making the storage of tea sets smaller and more convenient. This design is more in line with the modern pursuit of simplicity (Figure 2.4).



Traditional kung fu tea set



Portable tea set

Figure 2.4 Traditional kung fu tea set and portable tea set

Source: 1688.com, 2023

Is there any problem with portable tea sets? The answer is yes. Through my use, I have found that whether it is a Kung Fu tea set or a portable tea set, if there is water at the bottom of the cup during use, the cup is very easy to slip over the edge of the table and break (Figure 2.6).

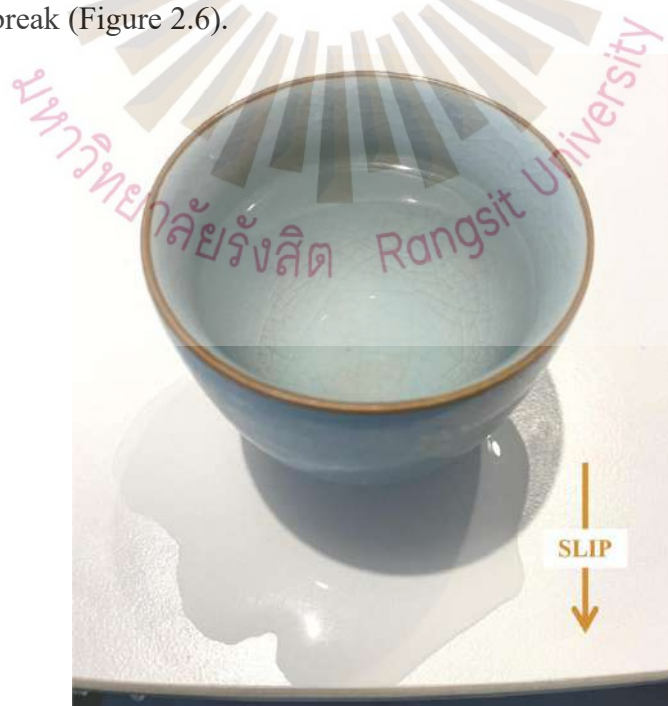


Figure 2.5 The cup is prone to slipping

Source: Researcher

Regarding teapots (Figure 2.6), their features include:

- 1) Mainly made of pottery, porcelain, and glass materials;
- 2) Mainly covering bowls and lifting pots;
- 3) The covered bowl has two ears to prevent scalding and comes with a V-shaped filter;

But there are also some issues, as follows: even with an anti scalding handle, it is still quite hot to the hand; for girls with small hands, it is inconvenient to use.



Figure 2.6 Teapots among portable tea sets on the market

Source: jd.com, 2024

Regarding tea towels (Figure 2.7), their features include:

- 1) Made of cotton and linen fibers with strong water absorption
- 2) There are also those that use polyester ultra-fine fibers at a lower price.

But there are also some issues, as follows: the color is monotonous; some even lack the brand logo; low recognition.



Figure 2.7 Tea towels among portable tea sets on the market

Source: jd.com, 2024

Regarding portable tea set bags (Figure 2.8), their features include:

- 1) The portable bag has a concave shape according to the shape of the tea set;
- 2) There is a carrying rope outside;
- 3) The outer shell is harder and the inner layer is softer;
- 4) There are straps on the inner layer to secure tea sets, and some have tea towel positions;
- 5) Most colors are single, but there are also those with patterns.

But there are also some issues, as follows: the handle is shorter and smaller; the color is monotonous; some even lack the brand logo, low recognition.



Figure 2.8 Portable tea set bags on the market

Source: jd.com, 2024

2.2 Zhuang Culture

Zhuang culture is also one of the ancient ethnic cultures in China. The Zhuang people are indigenous peoples who have lived in Lingnan for generations. Its historical origins can be traced back to the "Liujiang people" about 40000 to 50000 years ago. In the process of its formation and development, it not only absorbed and integrated some other ethnic components, but also assimilated and assimilated some other ethnic groups (mainly Han), and some migrated to the southwest and Southeast Asia, dividing into many branches with different origins and currents.

The Zhuang ethnic group is mainly distributed in the southern border of China, According to the China Statistical Yearbook-2021, the population of the Zhuang ethnic group in China is 19568546. It is the second largest ethnic group in China and the most populous ethnic minority. The Zhuang population of Guangxi Zhuang Autonomous Region accounts for about 32.4% of the total population of the region.



Figure 2.9 Zhuang bronze drum performance

Source: gxnews, 2023

Zhuang culture includes Bronze drum culture (Figure 2.10), Zhuang brocade culture (Figure 2.11), Household appliances (Figure 2.12), Huashan Rock Painting (Figure 2.13), etc.



Figure 2.10 Bronze drum

Source: Researcher filmed at Guangxi Natural History Museum, 2024

According to the special introduction of Zhuang culture on Guangxi Tourism Online, the bronze drum is a percussion instrument and ritual vessel with special significance cast in bronze by ethnic minorities in ancient southern China. It originated around the middle of a thousand BC or earlier. Guangxi is currently the region with the most unearthed and collected bronze drums. The basic form of a bronze drum is like a round pier, with a flat curved waist, a hollow bottomless structure, covered with patterns, and ears attached to both sides. The center of the drum surface usually has a slightly raised sun ray, surrounded by concentric circular patterns of varying widths, known as halos. Some drum surfaces have three-dimensional decorations such as frogs, birds, turtles, knights, etc. on the outermost halo. The bulging chest is slightly protruding, forming a certain spherical arc. The chest is inward contracted into the waist, and the waist is outward protruding into the feet. Two pairs of bulging ears are symmetrically embedded between the chest and waist. The chest, waist, and feet also have halos similar to bulging surfaces, decorated with exquisite geometric patterns and realistic patterns. The sun pattern is one of the basic decorations of copper drums (Figure 11). Composed of light and light. Like a shining sun.



Figure 2.11 Zhuang brocade

Source: Researcher filmed at Guangxi Natural History Museum, 2024

According to the special introduction of Zhuang culture on Guangxi Tourism Online, Zhuang brocade is a traditional handmade art piece woven from cotton yarn and colored silk thread. It first appeared in the Han Dynasty. In the Ming and Qing dynasties, Zhuang brocade shone brightly. The decorative patterns of Zhuang brocade are vivid and exquisite, such as carp jumping over the dragon gate, butterflies in love with flowers, lions rolling embroidered balls, mandarin ducks playing in the water, double dragons playing with pearls, double phoenixes and rising sun, as well as dozens of colorful flowers, such as blessings, prosperity, longevity, and happiness, symbolizing happiness and auspiciousness. There are also chrysanthemums, lotus flowers, cauliflower, peonies, pomegranates, plum blossoms, orchids, characters, red cotton, water waves, and other decorative patterns. It is interwoven with various colored silk threads of red, blue, yellow, green, and purple. In short, the Zhuang brocade pattern is vivid, structurally rigorous, colorful, full of enthusiasm and cheerful national style, reflecting the Zhuang people's pursuit of a better life.

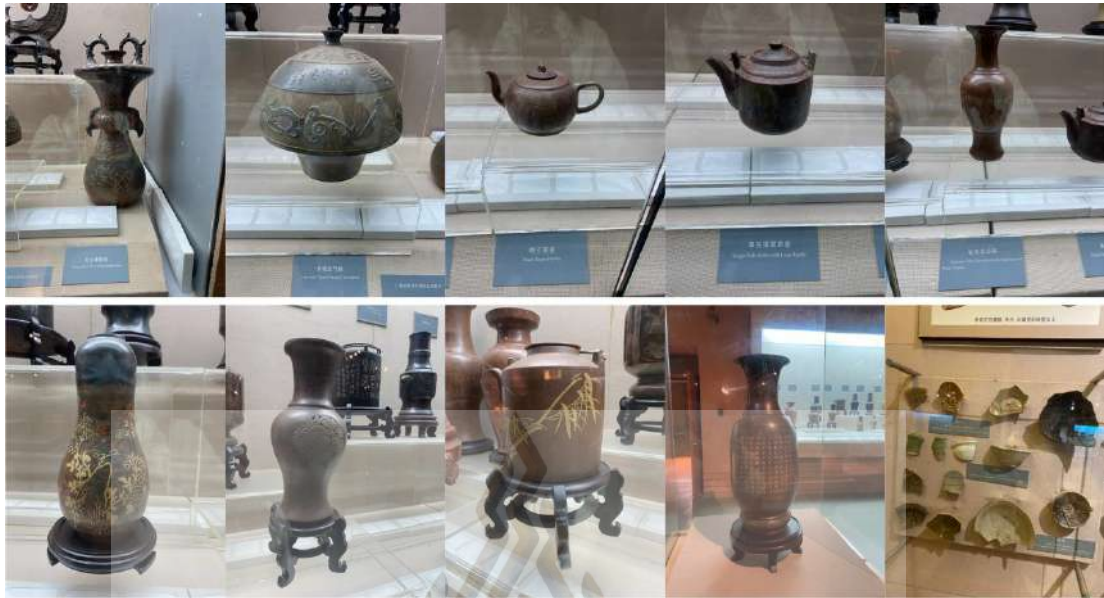


Figure 2.12 Nixing pottery household utensils

Source: Researcher filmed at Guangxi Natural History Museum, 2024

According to the special introduction of Zhuang culture on Guangxi Tourism Online, Qinzhou's Nixing pottery is the most famous among Zhuang ceramics. According to the "Qinzhou County Annals" and research on unearthed cultural relics in Qinzhou, Qinzhou Nixing pottery began in the Sui and Tang dynasties. During the Xianfeng period of the Qing Dynasty, Nixing pottery was already quite prosperous. Among them, various types of tea sets, vases, pen holders, bonsai pots, and tableware are the most famous.



Figure 2.13 Huashan rock painting

Source: Researcher filmed at Guangxi Natural History Museum, 2024

Due to the Zhuang culture's reverence for nature, some plant and animal patterns are commonly seen in bronze drums. The color and pattern design of Zhuang brocade also have strong ethnic characteristics. The scene recording, character and animal pattern design on Huashan Rock paintings are also very interesting. There are also daily household appliances, from stone tools to pottery, from rough pottery to finely carved clay pottery, all reflecting the rich and interesting Zhuang culture.

2.3 Feeling of Textures

Touching different material surfaces can trigger different emotional reactions. This conclusion was confirmed by Benjamin A. Richardson in a recent study. So, which materials will make people feel happy? Iosifyan, M., & Korolkova, O.'s Emotions associated with different textures during touch published in 2019 *Conscientiousness and Cognition*, 71, 79-85. Through experiments, 108 invited individuals (aged 18 to 47) were asked to associate the surfaces of 21 materials (Figure 2.14) with six emotions: Happiness, Surprise, Anger, Fear, Disagree, and Sadness. This experiment proves that “Soft surfaces are generally associated with pleasant

emotions, Rough surfaces - with unpleasant feelings. However, this is not always true. For instance, Plasticine is soft, but is associated with disgust. Glass pebbles might be hard, they are actually associated with happiness. Each of the textures offered to the respondents was usually associated with several emotions. The kitchen sponge was associated fear, disgust, and anger. Almost all of surfaces were perceived with a feeling surprise.”

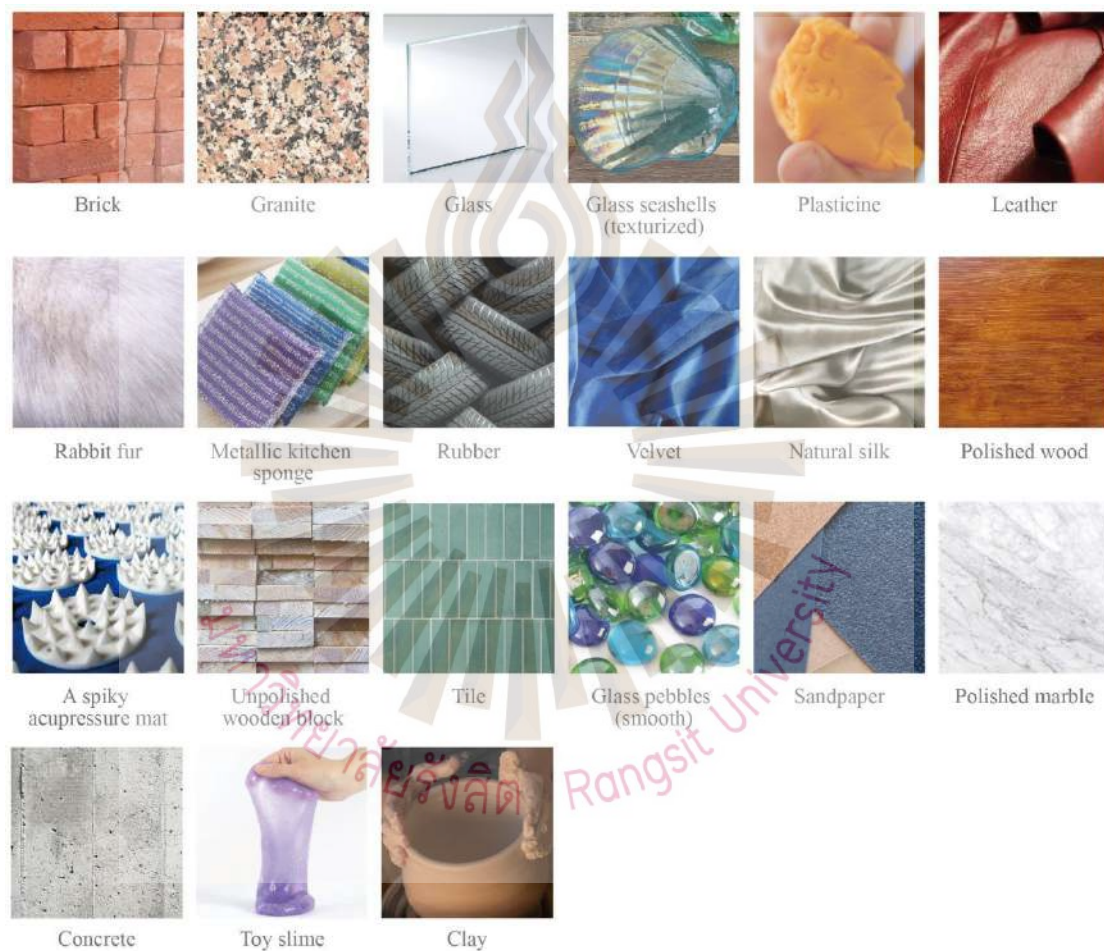


Figure 2.14 A total of 21 textures were used in the experiment

Source: google, 2023

Through the above experimental research, it can be seen that the material surfaces related to happiness include Velvet, Natural Silk, Rabbit fur, Leather, Rubber, Toy slime, Polished wood, Polished marble, Tile, Glass, Clay, Glass pebbles (smooth), Glass seashells (textured). Not all materials are suitable for portable tea set design, so

when selecting materials and surfaces in the future, the corresponding materials will be selected based on this experimental conclusion.

2.4 Color Psychology

Cherry (2022) stated in his article "Color Psychology: Does It Affect How You Feel?": "Color psychology is the study of how different colors affect human mood and behavior. It explores how colors can influence emotional responses, as well as how responses to color are affected by factors such as age and cultural background."

2.4.1 Colors and emotions

From the definition of color psychology, it can be seen that color can affect people's emotions. People can have the same or different emotional reactions to color based on factors such as their age or cultural background.

A survey was conducted as early as 2020, involving 4598 volunteers from 30 different countries and regions. Study the association between 10 colors and 7 emotions in Figure 2.15. These 10 colors include black, white, red, blue, green, yellow, purple, brown, orange, and pink. These 7 emotions include sadness, relief, love, content, joy, pleasure, and doubt. The research results are shown in Figure 2.15 (Cherry, 2022). It can be seen that red and pink are associated with love; White and blue are associated with relief; Yellow and orange are associated with joy; Black is associated with sadness; Green is associated with contentment; Purple is associated with pleasure; Brown is associated with disgust.

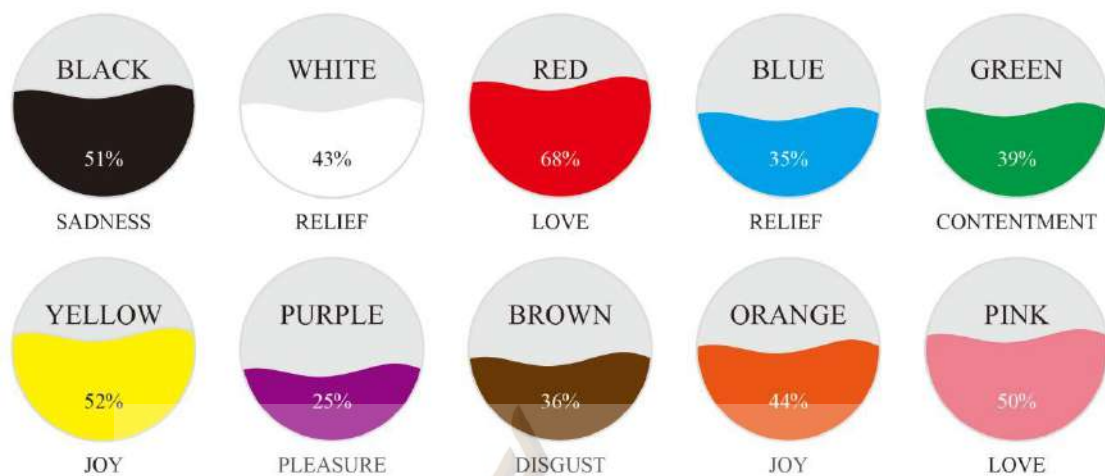


Figure 2.15 Colors and emotions

Source: Researcher

So in the color selection, it is necessary to choose colors with positive emotions, such as white, red, blue, yellow, purple, orange, pink. Instead of choosing brown and black.

2.4.2 Color and Consumer Purchases

On the surface of color psychology, various tones can have various effects, which can affect our emotions and even trigger anxiety. Of course, colors can also make people feel happy and relaxed. From a business perspective, color can influence consumer purchasing desire, leading to purchasing behavior and resulting in better product sales. Of course, color preferences are also influenced by age, gender, and cultural differences. Therefore, after confirming the consumer audience, it is necessary to study consumer preferences, age, gender, regional culture, and so on. Figure 2.16 shows the conventional effects of color on humans based on the theory of color psychology (Cherry, 2022).

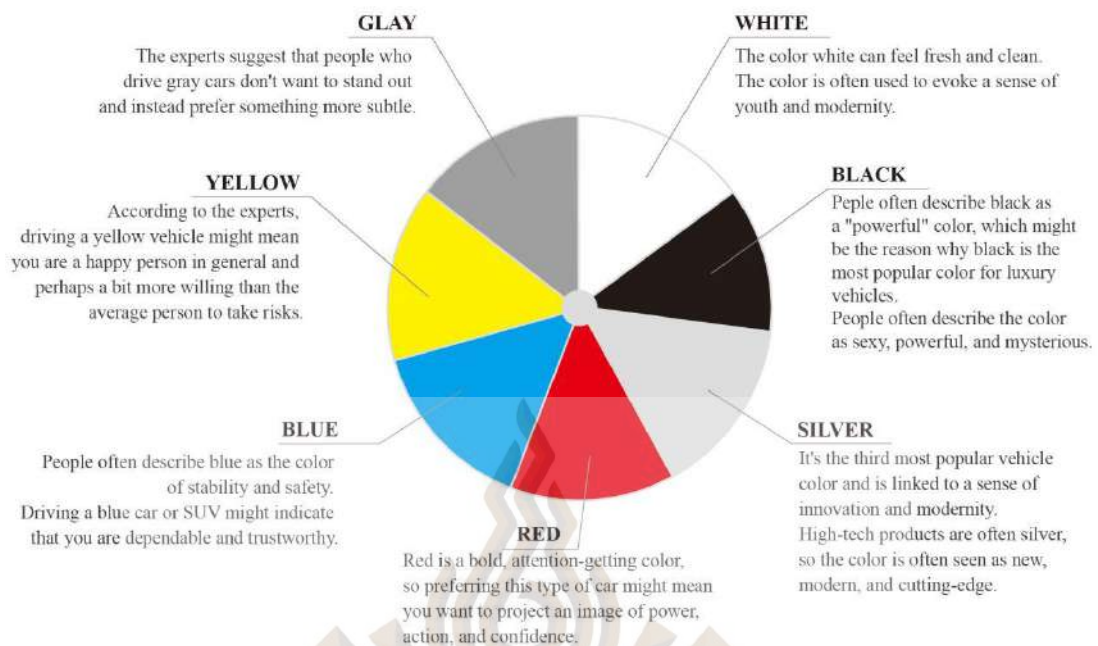


Figure 2.16 Color and consumer purchases

Source: Researcher

From Figure 2.16, it can be seen that white/yellow/blue/red can be well suited for the design of portable tea sets that conform to Chinese culture. Bright colors can also attract the attention of consumers very well.

Chapter 3

Research Methodology

3.1 User Research

3.1.1 Questionnaire Survey

In November 2023, the author conducted a survey on the market demand for Chinese tea and tea sets. A total of 62 people participated, with males accounting for 55.74% and females accounting for 44.26%. The majority of people were aged between 23 and 45 years old, with over 70% drinking tea every week. The reason for drinking tea is mostly for refreshing, health preservation, relaxation, and enjoyment. 67.35% of people spend less than 100 yuan per month on tea related expenses, while 2.02% exceed 300 yuan per month. 32.65% of people use kung fu tea sets to make tea, and nearly 70% use portable or other simple tea sets. Their favorite tea set materials include Porcelain accounting for 44.9%, Pottery accounting for 40.82%, Glass accounting for 32.65%, Purple clay accounting for 30.61%, and Stainless steel accounting for 10.2%. Nearly 90% of people travel short distances every week. Nearly 70% of them have long-term travel every year. Their purpose of appearance is Commuting accounting for 63.27%, Go to the park accounting for 30.61%, Business trip accounting for 26.53%, Long distance travel accounting for 16.33%, and Camping accounting for 12.24%. Please refer to Appendix A for a detailed questionnaire survey report.

From the above data, it can be seen that portable tea sets are still very popular in the market. Of course, traditional Chinese kung fu tea sets also hold a significant position in households, especially when there are many friends and gatherings. But the usage rate of portable tea sets is also very high, suitable for travel, work, or weekend picnics in the park. Due to the need to cater to the mass market, the price positioning

for portable tea sets cannot be very high, as people spend around 100 yuan per month. For the materials of tea sets, the public still tends to use traditional and safe materials, such as pottery, porcelain, glass, etc.

3.1.2 Usage Scenarios

There are three usage scenarios, the first being on transportation vehicles such as airplanes/trains/high-speed trains; The second type is in the office or at home; The third type is in the park or outdoors (Figure 3.1). Carrying portable tea sets during travel is simpler and more convenient. It is more convenient to use when there are only oneself or a few people at home or in the office. In parks or outdoors, using portable tea sets is more lightweight. Sitting down to drink tea and enjoy the scenery is also a relaxed way of life.



Figure 3.1 Usage scenarios

Source: Baidu.com, 2023

3.1.3 Users Portrait

The author created user profiles (Table 3.1) through personal interviews.

Table 3.1 User Profile Details

Name	Gender	Age	Occupation	Situation
Meng	Female	27	Nurse	She often works night shifts and is prone to drowsiness. Drinking tea can also help her stay alert during the night shift.

Table 3.1 User Profile Details (Continued)

Name	Gender	Age	Occupation	Situation
Charlie	Male	37	Department Manager	At home, he needs to raise two children and pay off his mortgage every month. At work, there are often social gatherings, overtime, and business trips. Both family and work face significant pressure, often leading to insomnia, hair loss, etc. He often releases stress through exercise and drinking tea. Due to the time-consuming process of brewing Kung Fu tea in the office, he prefers to use portable tea sets. Drinking a cup of hot tea can effectively relieve nervousness.
Yao	Female	35	Teacher	Frequently traveling to various schools for teaching. No office. Lectures require timely hydration. Making tea in a thermos is her first choice. The disadvantage of thermos cups is that the concentration of tea is difficult to control and the taste is not good. On weekends, she takes her children to the park, where she uses portable tea sets and sits down to savor tea slowly. That is the happiest time of the week.
Marvin	Male	29	Photographer	Frequently go out to shoot. So carrying tea with you is necessary. Tired, sitting on the ground and having a cup of hot tea, immediately washed away the fatigue of the day. Tea can make me feel refreshed, relax well, improve work efficiency, and relieve fatigue. So I particularly enjoy drinking tea. As a new generation, what can be achieved with simple tools is definitely not complicated. So I like to use portable tea sets, which are easy to carry and clean.

3.1.4 Target group

There are three target user groups. They are travelers, workers, and campers. And the age is between 23 and 45 years old. Their demand for portable tea sets should not only include functional needs, but also spiritual needs.

These functional requirements are:

- 1) Easy to store
- 2) Convenient to carry
- 3) With protective layer
- 4) Not fragile
- 5) High temperature resistance
- 6) Non-toxic
- 7) Light
- 8) Can see the color of the tea
- 9) The bottom of the teacup is anti-slip

These spiritual needs are:

- 1) Decompression
- 2) Happiness
- 3) Personality
- 4) Positive energy

3.2 Material Study

Traditional tea sets in China are divided into 8 types based on their different materials, namely Porcelain tea set, Purple sand tea set, Muyu Jade tea set, Lacquerware tea set, Bamboo and wood tea set, Glass tea set, Enamel tea set, and Clay tea set, as shown in Figure 3.2. The performance, manufacturing process, and price of these materials vary. Based on multiple sources, the author collected and compared the Waterproof, High temperature resistance, Non toxic, Odour, Weight, Fragile, Heat preservation, Comfort level, and Price of these materials, as shown in Table 3.2.



Figure 3.2 Main classification of tea sets Images

Source: ebay.com, 2023

Table 3.2 Comparison of traditional materials

	Porcelain	Purple sand	Muyu Jade	Lacquerware	Bamboo	Wood	Glass	Enamel	Clay
Waterproof	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
High temperature resistance	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●○	●●●●○	●●●●○	●●●●●
Non-toxic	NON	NON	NON	NON	NON	NON	NON	NON	NON
Odour	NO	NO	NO	NO	YES	YES	NO	NO	NO
Weight	●●●●○	●●●●○	●●●●●	●●●●●	●○○○○	●●○○○	●●○○○	●●●●●	●●●●●
Fragile	●●●●●	●●●●●	●●●●○	●●●●●	●○○○○	●○○○○	●●●●●	●●●●●	●●●●●
Heat preservation	●●○○○	●●○○○	●●○○○	●●●●○	●●●●○	●●●●●	●●●●○	●●●●○	●●●●○
Comfort level	●●●●○	●●●●○	●●●●○	●●●●○	●●●●○	●●●●○	●●●●○	●●●●○	●●○○○
Price	●●●○○	●●●○○	●●●●●	●●●●●	●●○○○	●●○○○	●○○○○	●●●●●	●○○○○

Besides traditional materials, what other materials can be used for portable tea set design?

After extensive research by the author, it was found that the following materials (Figure 3.3) can also be used for tea set design. For example, 304/316 Stainless Steel, Silicone, food grade Melamine, PP, PLA, Corn stalk, Coffee grounds, and so on. I have also summarized the various properties of these materials in Figure 3.3.



Figure 3.3 Comparison of different materials

Source: baidu.com, 2023

The author also made a comparison chart for the various performance comparisons of these materials. As shown in Table 3.3.

Table 3.3 Comparison of different materials

	Stainless steel	Silicone	Melamine	PP	PLA	Corn stalk	Coffee grounds
Waterproof	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
High temperature resistance	●●●●●	●●●○○	●○○○○	●○○○○	●○○○○	●○○○○	●○○○○
Non-toxic	NON	NON	--	NON	NON	NON	NON
Odour	NO	NO	NO	NO	NO	NO	NO
Weight	●●○○○	●●○○○	●○○○○	●○○○○	●○○○○	●●○○○	●●○○○
Fragile	●●○○○	●○○○○	●●○○○	●○○○○	●○○○○	●●○○○	●●○○○
Heat preservation	●●●○○	●●●●●	●●●○○	●●○○○	●●○○○	●●●○○	●●●○○
Comfort level	●●●○○	●●●●●	●●●○○	●●●○○	●●●○○	●●●○○	●●●○○
Price	●●○○○	●●○○○	●●○○○	●●○○○	●●●●●	●●○○○	●●○○○

From the comparison of these materials, it can be seen that ceramics, glass, stainless steel, and silicone are all very good choices.

3.3 Case Studies

3.3.1 Case 01 "sanxun" _Light-drink Travel kit_One pot and three cups_ ¥128



Figure 3.4 "sanxun" _light-drink Travel kit_one pot and two cups

Source: jd.com, 2023

Material: High borosilicate glass, white porcelain, bamboo

Capacity: 300ml

Process: Manual blowing, oxidation firing, underglaze hand painting

Firing temperature: 1320 °C

Glaze color: Transparent glaze

Features:

- 1) Integrated design of pot filter and cup
- 2) Pot surface anti scalding bamboo mat, wrapped in walnut wood
- 3) Underglaze color hand-painted, unique
- 4) Filter design for easy control of the concentration of a cup of tea
- 5) V-shaped flow nozzle for smooth water flow
- 6) Paired with a small tea towel, it is soft and delicate, firm and absorbent
- 7) Shockproof carrying bag with easy zipper closure

3.3.2 Case 02 "sanxun" __Light-drink Travel kit_One pot and two cups__

¥138



Figure 3.5 "sanxun" _light-drink Travel kit_one pot and one cup

Source: jd.com, 2023

Material: High borosilicate glass, white porcelain

Capacity: 95ml

Process: Manual blowing, oxidation firing, underglaze hand painting

Firing temperature: 1320 °C

Glaze color: Transparent glaze

Features:

- 1) One pot and two cups, nested design, small size, easy to carry
- 2) Wide body and narrow bottom design, making tea not hot to the hand
- 3) Under glaze color hand-painted, with transparent glass on the pot body
- 4) 95ml pot capacity, can be consumed alone or in pairs
- 5) V-shaped flow nozzle for smooth water flow
- 6) Paired with a small tea towel, it is soft and delicate, firm and absorbent
- 7) Transparent handbag with easy zipper closure

3.3.3 Case 03 KAFFTEC coffee grounds stainless steel beer cup_ ¥198



Figure 3.6 KAFFTEC coffee grounds stainless steel beer cup

Source: jd.com, 2023

Material: Cup cover - PP, Inner liner -304 stainless steel, Sealing plug/ring - silicone, Shell -30% coffee grounds propylene homopolymer

Capacity: 473ml

Net weight: 135g

Features:

- 1) Two colors available

2) 30% coffee grounds propylene homopolymer, helping with environmental protection

3) The inner liner is made of 304 stainless steel material, which is resistant to oxidation, corrosion, and high temperature

4) Silicone cushion at the bottom of the cup, anti slip and wear-resistant

3.3.4 Case 04 comotomo silicone milk bottle_¥83+83



Figure 3.7 como tomo liquid silicone milk bottle

Source: jd.com, 2023

3.3.5 Case 05 Common glass cups on the market



Figure 3.8 Common glass cups on the market

Source: Researcher, 2023

From the study of the above five cases, it can be seen that conventional portable tea sets (Cases 1 to 2) have the following characteristics:

- 1) Stacked design for easy storage and paired with a storage box.
- 2) Paired with a small tea towel for easy wiping.
- 3) The cup body is mainly made of ceramic, porcelain, and glass materials, paired with bamboo and wood materials to prevent scalding.
- 4) The V-shaped filter design facilitates the control of the speed and flow of tea pouring.
- 5) There are two main ways to separate tea leaves and tea soup: one is a separate filter screen; Another type is the filter hole that comes with the teapot.
- 6) The number of matching tea cups varies from 2 to 4.
- 7) Generally, there is no tea tray or tea can.

Case 3, using environmentally friendly materials and adding silicone as an anti slip pad at the bottom of the cup, is a very good design. Case 4 is made of liquid silicone material, which gives the cup a very good touch texture and gives people a soothing feeling like a mother. Case 5 is a common glass material on the market, and ordinary glass can be colored to make the cup more attractive. And high borosilicate glass can make cups lighter, more heat-resistant, and is also a very good material.

3.4 Market Positioning

Here, I have selected four popular brands currently on the market as my competitors for analysis. Their main sales channels are all e-commerce. Such as JD, Tmall, etc. Figure 3.21 is a comparison chart of these four brands, including their materials, prices, target market, user evaluations, advantages and disadvantages.

Table 3.4 Competitive analysis comparison chart

Brand	Material	Price	Target Market	User Evaluate	Advantage	Disadvantage
叁旬 SUNXUN	Pottery Porcelain Glass	¥88- 258	○ LOW ● MID ○ HIGH	<ul style="list-style-type: none"> ● Sales average ● Packaging is average ● Good quality ● Consumer satisfaction 	<ul style="list-style-type: none"> ● Material safety ● Good quality and high cost-effectiveness ● Multiple design themes 	<ul style="list-style-type: none"> ● The design of tea towels and packaging bags is not exquisite enough to highlight the brand's characteristics.
万仟堂 Edenus	Pottery Porcelain	¥258- 698	○ LOW ● MID ○ HIGH	<ul style="list-style-type: none"> ● High sales ● Exquisite packaging ● Good quality ● Favored by consumers 	<ul style="list-style-type: none"> ● From tea sets to accessories, everything is exquisitely designed with Chinese classical elements. ● Good quality, high consumer evaluation. 	<ul style="list-style-type: none"> ● There are too many design elements and the theme is not clear.
唐丰 TANGFENG	Porcelain (Ru Ware)	¥138- 268	○ LOW ● MID ○ HIGH	<ul style="list-style-type: none"> ● Sales average ● Packaging is average ● Good quality ● Consumers are relatively satisfied 	<ul style="list-style-type: none"> ● Starting from the design elements of the Tang and Song dynasties in China, there is a professional design team. ● Good quality, there are many designs for Kung Fu tea sets. 	<ul style="list-style-type: none"> ● There are few types of portable tea sets, and the design is not exquisite enough.
东道汝窑 DONGDAO RU WARE	Porcelain (Ru Ware)	¥1000 -2500	○ LOW ○ MID ● HIGH	<ul style="list-style-type: none"> ● Sales average ● Exquisite packaging ● The quality is very good ● Consumer satisfaction 	<ul style="list-style-type: none"> ● Design Master Level Collection and use coexist ● Focusing on the production process of Ru wareTianqing color 	<ul style="list-style-type: none"> ● High price

3.4.1 Competitor 01 叁旬 SANXUN

This brand is located in Quanzhou, Fujian, China. They combine new Chinese aesthetics with Chinese style design of tea sets. The main products include portable tea sets, portable tea sets, mugs, water cups, tea plates, and tea cookers. The materials of tea utensils include glass, pottery, and porcelain. The selling price of portable tea sets ranges from 88 to 258 yuan, targeting the medium to low market with good sales volume.

3.4.2 Competitor 02 万仟堂 Edenus

The products sold by this brand include Kung Fu tea sets, portable tea sets, teapots, tea cups, tea pet ornaments, tea plates, tea trays, and tea set accessories. Rich product types and good sales volume. Part. The design inspiration comes from Chinese folk customs such as the Tang Palace, good luck in everything, and good luck. The material is mainly ceramic. The selling price of portable tea sets ranges from 258 to 698 yuan. Although the price is slightly expensive, the packaging is exquisite and comes in gift boxes, resulting in high consumer satisfaction.

3.4.3 Competitor 03 唐丰 TANGFENG

This brand's tea sets mainly consist of two series, inspired by the Tang and Song dynasties. The main materials are pottery and porcelain, with porcelain being mainly sky blue in color. The price of portable tea sets ranges from 138 to 268 yuan, and the monthly sales volume is good. Focusing on the mid-range market, but there are fewer types and styles of portable tea sets to choose from.

3.4.4 Competitor 04 东道汝窑 DONGDAO RU WARE

DONGDAO RU WARE mainly adopts the technology of Ru ware. The products are mainly in the famous sky blue color of Ru ware, and some of them are designed by national intangible cultural heritage inheritors, with collection level and high prices. The products sold include tea cups, teapots, wine sets, Kung Fu tea sets, portable tea sets, etc. The price of portable tea sets ranges from 1000 to 2500 yuan. Few types, high prices.

3.5 Research Conclusion

From the case studies, competitor analysis, and market positioning analysis above, it can be seen that my product advantages are as follows:

- 1) Moderate price
- 2) Focusing on Zhuang ethnic element themes
- 3) Emphasize design details
- 4) Catering to modern aesthetics
- 5) Emphasize brand effect

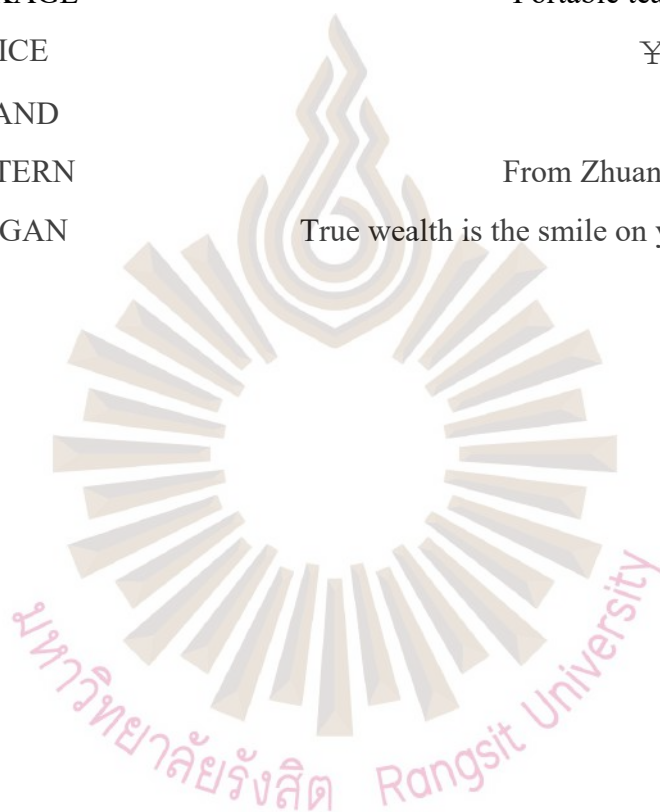
The research Results are shown in the table below:

Table 3.5 The research results

Research Results		
TARGET AUDIENCE	23-45 years old	Travelers
		Workers
		Campers
MATERAIL	Porcelain / Glass / Silicone	
	Cotton and Linen fibers	
	Zhuang brocade (cotton yarn and colored silk)	

Table 3.5 The research results (Continued)

Research Results	
COLOR	Pink / Blue / Yellow / White
PORTABLE TEA SETS	Tea cups
	Teapot
	Tea towel
PACKAGE	Portable tea set bags
PRICE	¥ 200-500
BRAND	TeaTime
PATTERN	From Zhuang culture
SLOGAN	True wealth is the smile on your face



Chapter 4

Design Experience

Based on the research results, design will be conducted in this chapter. The design content includes: 1) Brand design of tea sets; 2) Extraction and redesign of Zhuang elements; 3) Portable tea set design (including teapot, teacup, tea towel, tea set bag).

4.1 Brand Design

4.1.1 Brand Keywords

Based on the research topic and direction, the keywords of the brand are as follows: tea, tea sets, traditional Chinese culture, relaxation, relaxing your mind, lighting up, happiness, and releasing stress.

4.1.2 Brand Name

According to the keywords of the brand, "Teatime" will be used as the brand name. "Teatime" directly emphasizes the time of tea, creating a relaxed, warm, and enjoyable atmosphere. Give people a clear and intuitive impression, while maintaining simplicity and ease of memory.

4.1.3 Brand Color

According to Figure 3.22, the brand colors will be selected from four color schemes: pink, blue, yellow, and white. In order to highlight traditional Chinese culture, the brand colors will be selected based on the color card of "Traditional Chinese Colors: Aesthetics of Colors in the Forbidden City" (Guo & Li, 2020), with

four colors selected: pink, blue, yellow, and white. Due to the fact that this book is based on the 24 solar terms and 72 phenology, 96 pieces of the Palace Museum cultural relics that are suitable for the festival were selected from several hundred thousand and pieces, and traditional colors were extracted from the cultural relics. Therefore, I will choose a pink color in spring, a blue color in summer, a yellow color in autumn, and a white color in winter. Four colors match four seasons, with the meaning of happiness and joy every day.

These four colors are (Figure 4.1)



Figure 4.1 Brand color

Pink (C0 M35 Y10 K0; R246 G190 B200; # F6BEC8) 桃夭 (Tao Yao) Yao Yao represents the blooming, beautiful, and vibrant appearance of flowers. The color of peach blossoms in full bloom is called peach blossom color by ancient people.

Blue (C85 M50 Y20 K10; R16 G104 B152; # 106898) 柔蓝 (Rou Lan) From a poem by Yel ü Chucai: "风回一镜柔蓝浅, 雨过千峰泼黛浓". It means: the wind returns to a mirror with a soft blue light, and the rain splashes over thousands of peaks with a thick mist. This poem is an ultimate depiction of the scenery of lakes and mountains.

Yellow (C15 M50 Y85 K0; R218 G146 B51; # DA9233) 杏子 (Xing Zi) Also known as apricot yellow. The mature color of apricots. In the Qing Dynasty, it was basically the exclusive color for the Crown Prince and his consorts.

White (C5 M0 Y15 K0; R246 G249 B228; # F6F9E4) 酃白 (Zan Bai) is a slightly precipitated Baijiu. Its color is Wengweng, which is white and green like the stem of Scallion.

4.1.4 Logo Design

The principles for logo design comes from the following:

- 1) Transformation based on brand name "Teatime".
- 2) Simple deformation recognition with high accuracy
- 3) Meets modern aesthetic standards: round, cute, and comfortable
- 4) The embodiment of brand culture, which includes comfort, stress relief, and a sense of happiness.

The logo design diagram is shown in Figure 4.2.



Figure 4.2 Brand logo

According to the brand color, define blue (C85 M50 Y20 K10; R16 G104 B152; # 106898) as the primary color. Pink (C0 M35 Y10 K0; R246 G190 B200; # F6BEC8), yellow (C15 M50 Y85 K0; R218 G146 B51; # DA9233), white (C5 M0 Y15 K0; R246 G249 B228; # F6F9E4) as secondary colors (Figure 4.4). Add brand color to the brand logo as shown in Figure 4.3.



Figure 4.3 Colored brand logo

Primary Color



C85 M50 Y20 K10
R16 G104 B152
#106898

The use of logo on the primary color



Secondary Colors



C0 M35 Y10 K0
R246 G190 B200
#F6BEC8

The use of logo on the secondary colors



C15 M50 Y85 K0
R218 G146 B51
#DA9233



C5 M0 Y15 K0
R246 G249 B228
#F6F9E4



Figure 4.4 Primary color definition

4.1.5 Pattern From Brand

Design the brand pattern based on the "i" in the logo, brand color, brand keywords, and modern aesthetic standards for roundness and cuteness, as shown in Figure 4.5. These patterns can be used in background design or in brand visual recognition application systems, such as business cards, brochures, PowerPoint backgrounds, handbags, paper cups, letters, envelopes, and other designs.

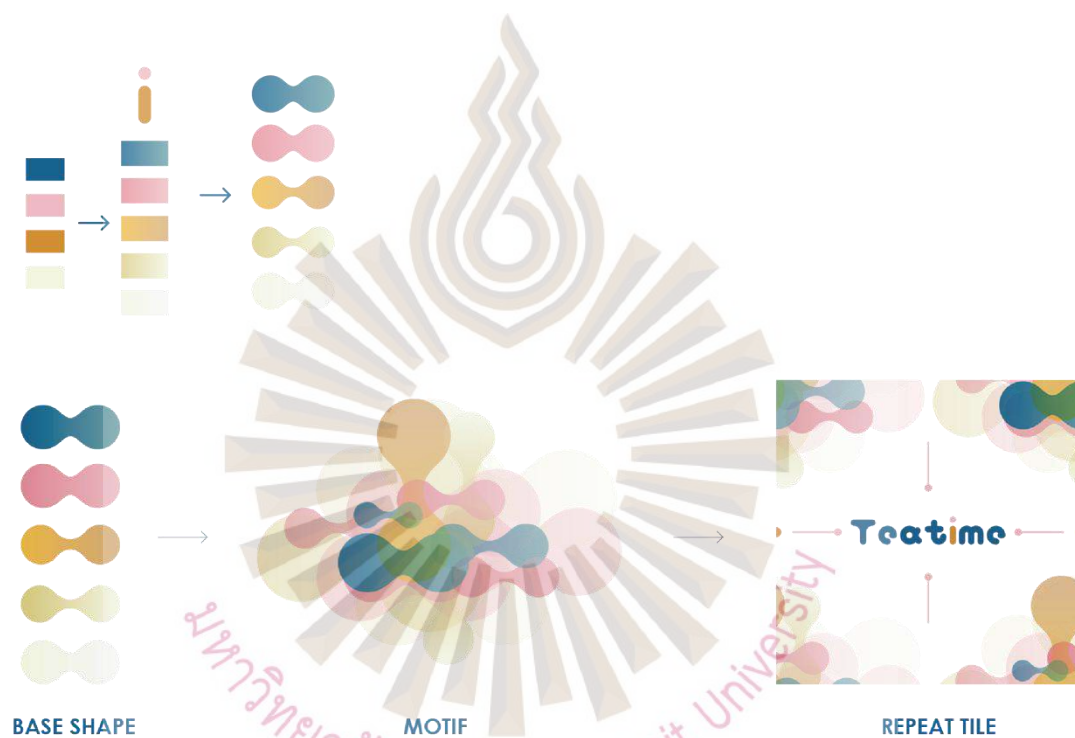


Figure 4.5 Pattern from Brand

4.2 Extration of Zhuang Culture Elements

In this section, patterns are extracted from Zhuang brocade, Huashan rock paintings, and bronze drum sun patterns. And separate them into small elements and redesign these elements.

4.2.1 Elements from Zhuang brocade

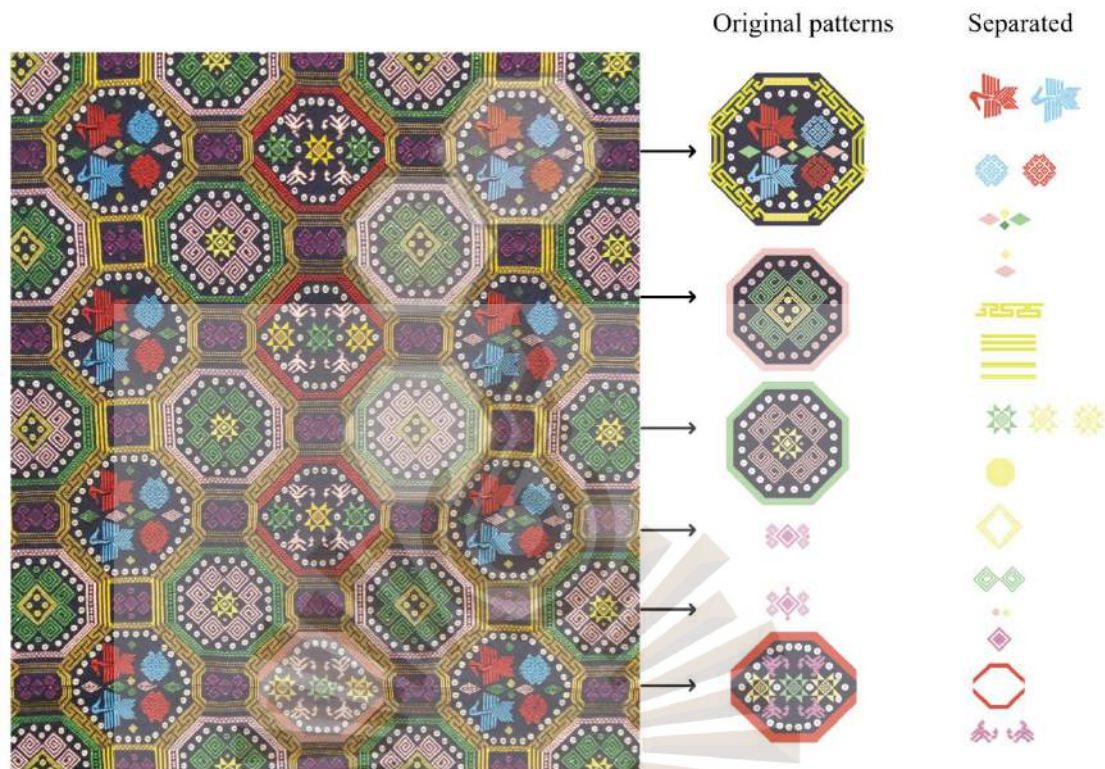


Figure 4.6 Patterns from Zhuang brocade 1

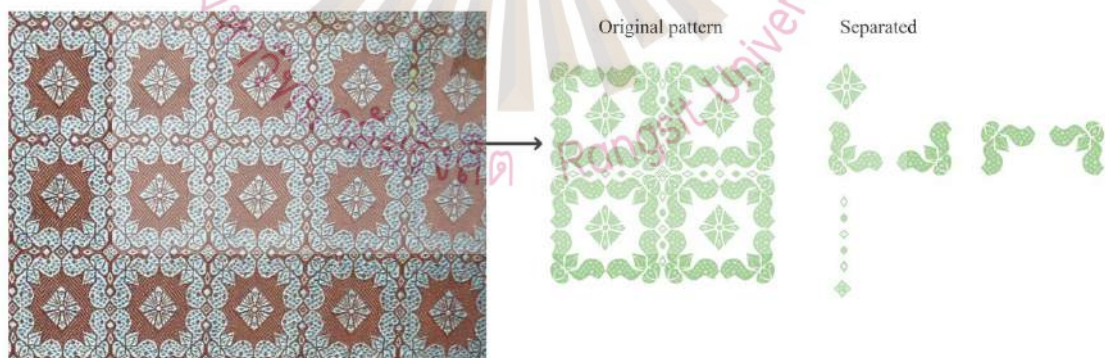


Figure 4.7 Patterns from Zhuang brocade 2

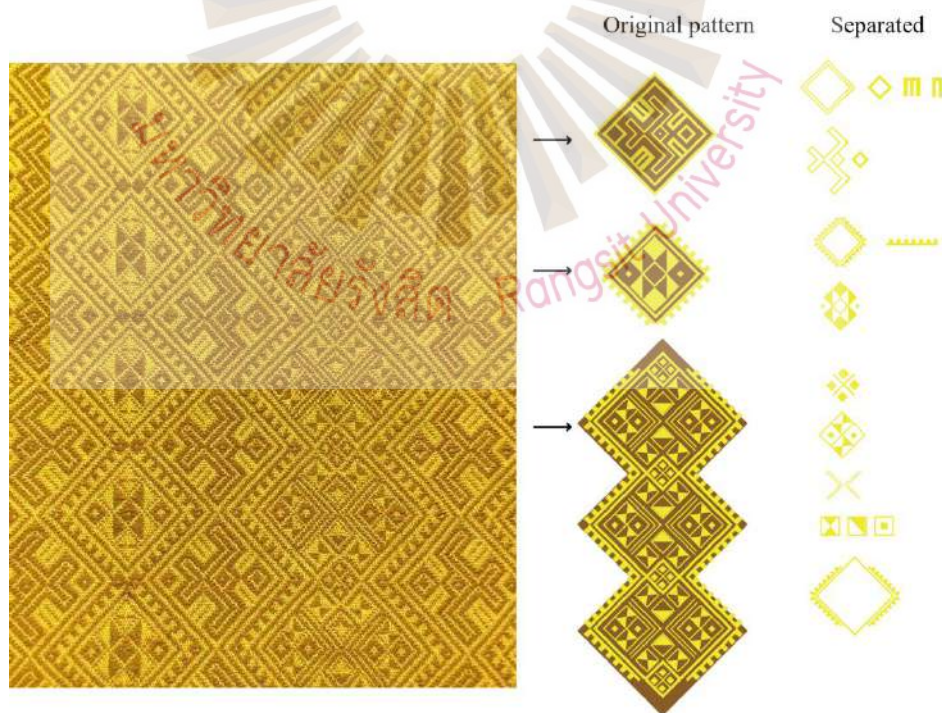
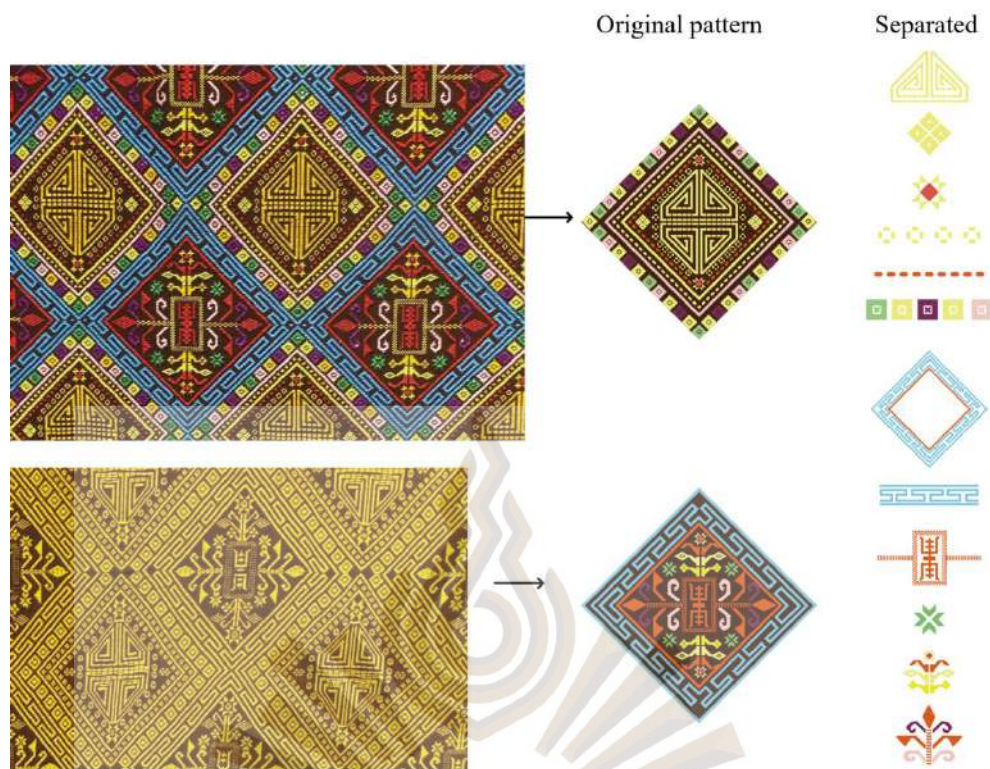




Figure 4.10 Patterns from Zhuang brocade 5

4.2.2 Elements from Huashan Rock Painting



Figure 4.11 Patterns from Huashan Rock Painting

4.2.3 Elements from Bronze Drum Sun Patterns

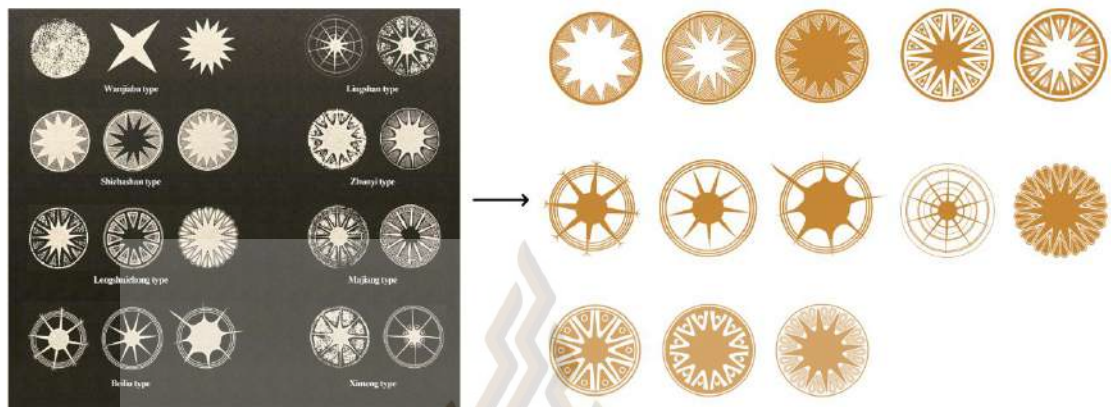


Figure 4.12 Patterns from bronze drum sun patterns

By extracting and separating Zhuang patterns from Figures 4.6 to 4.12, the Zhuang elements shown in Figure 4.13 can be obtained.

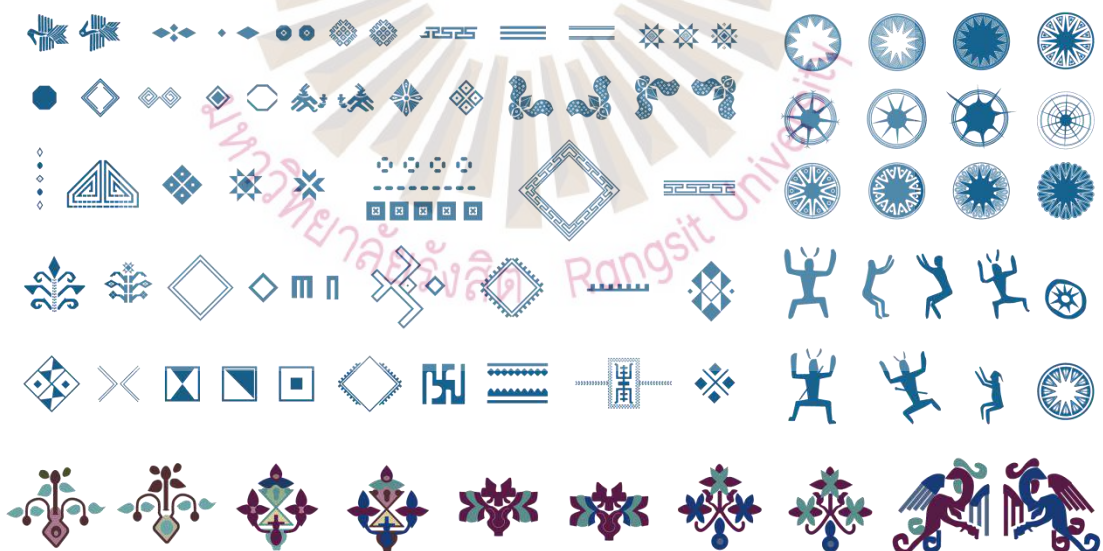


Figure 4.13 Extracted Zhuang elements

4.2.4 Redesign of Zhuang Culture Elements

The design principles of the previous brand logo are also used for the redesign of Zhuang elements. These principles include: simple, round, cute, and comfortable. Using these keywords and brand colors, redesign and classify Zhuang elements into five categories: geometry (Figure 4.14), birds (Figure 4.15), humans (Figure 4.16), flowers (Figure 4.17), and the sun (Figure 4.18). All the redesigned Zhuang elements are shown in Figure 4.19.

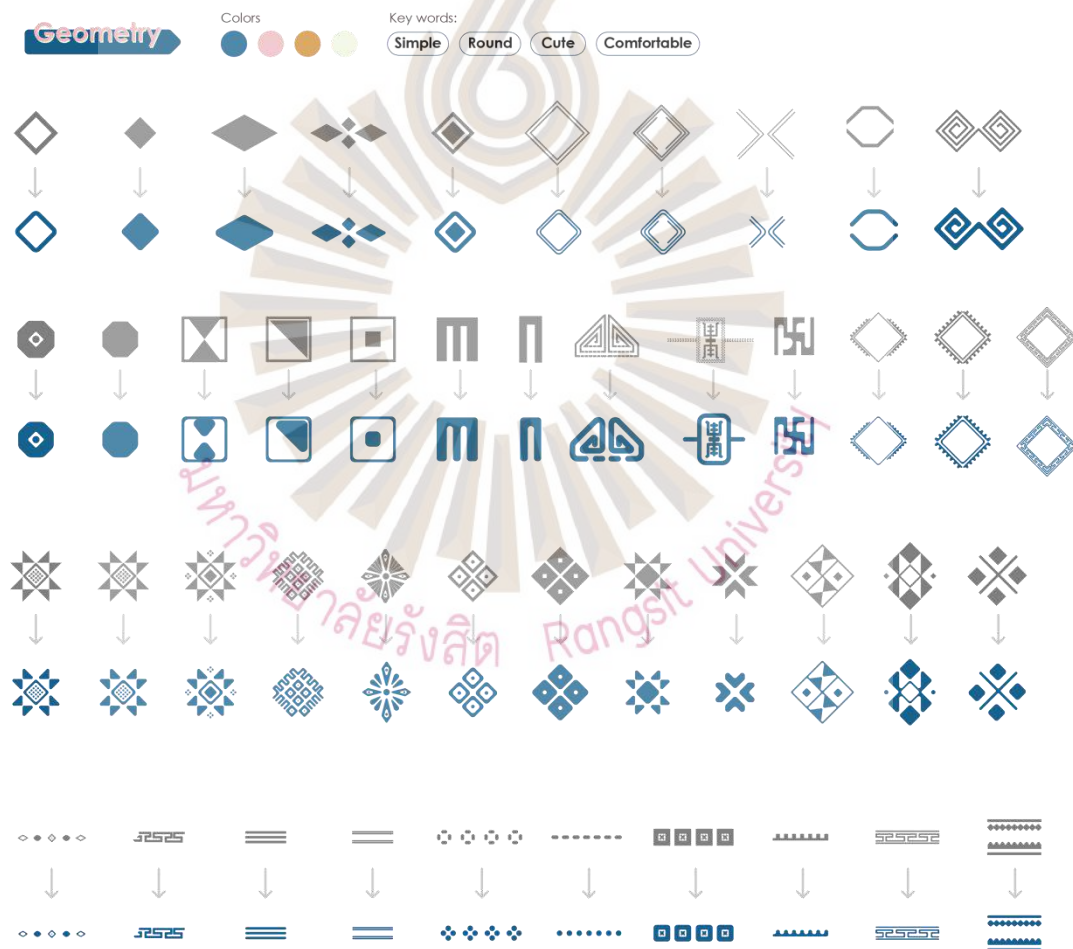


Figure 4.14 Redesign of Zhuang elements

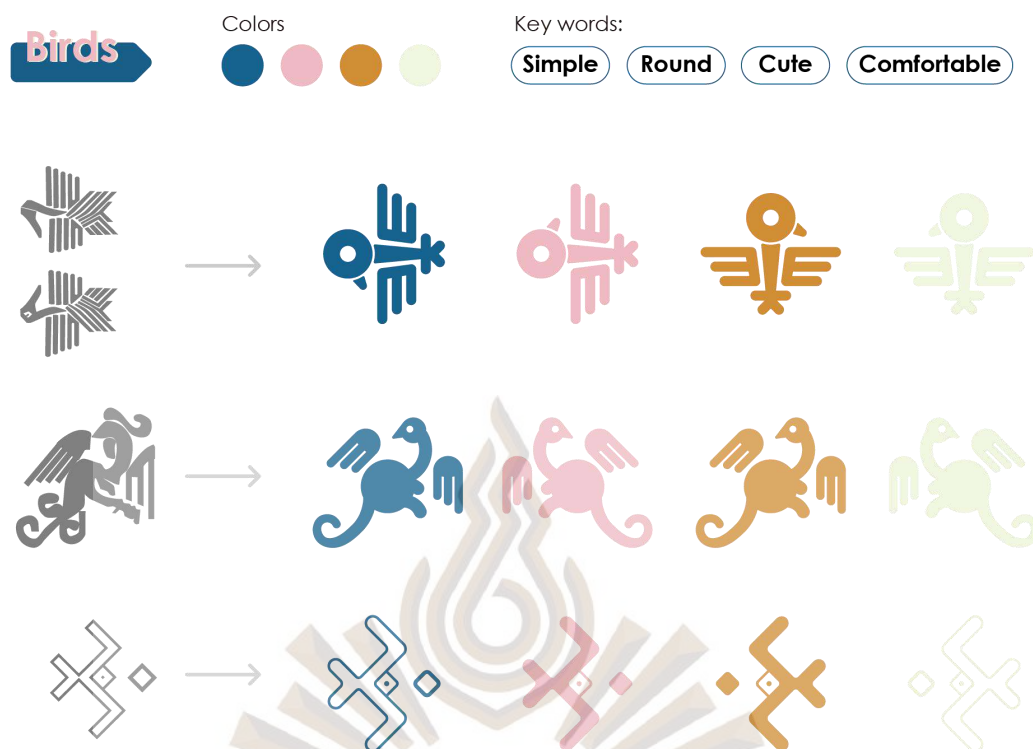


Figure 4.15 Redesign of Zhuang elements_birds

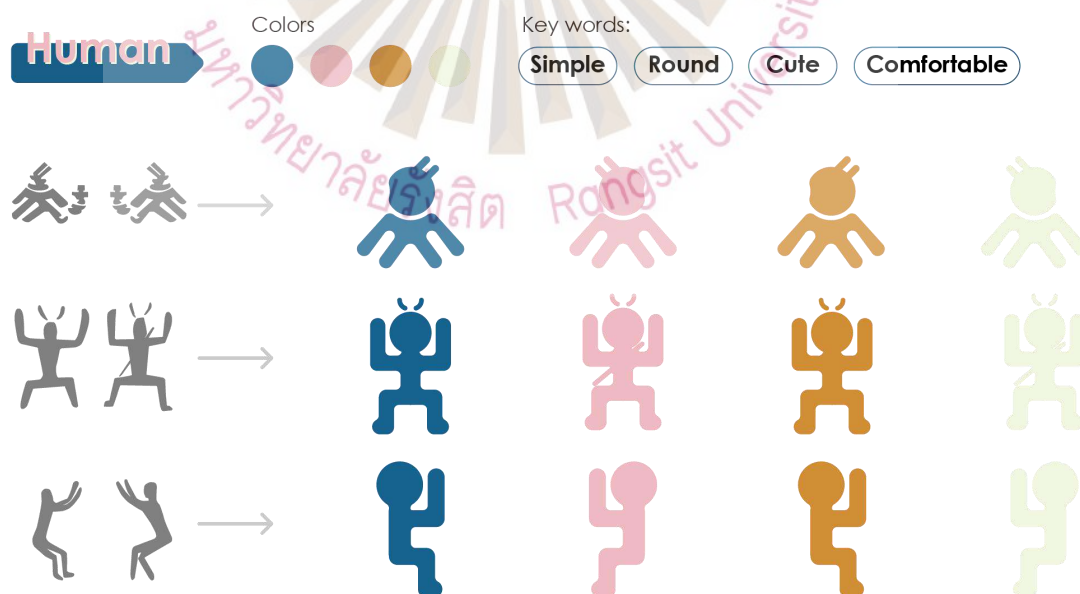


Figure 4.16 Redesign of Zhuang elements_human

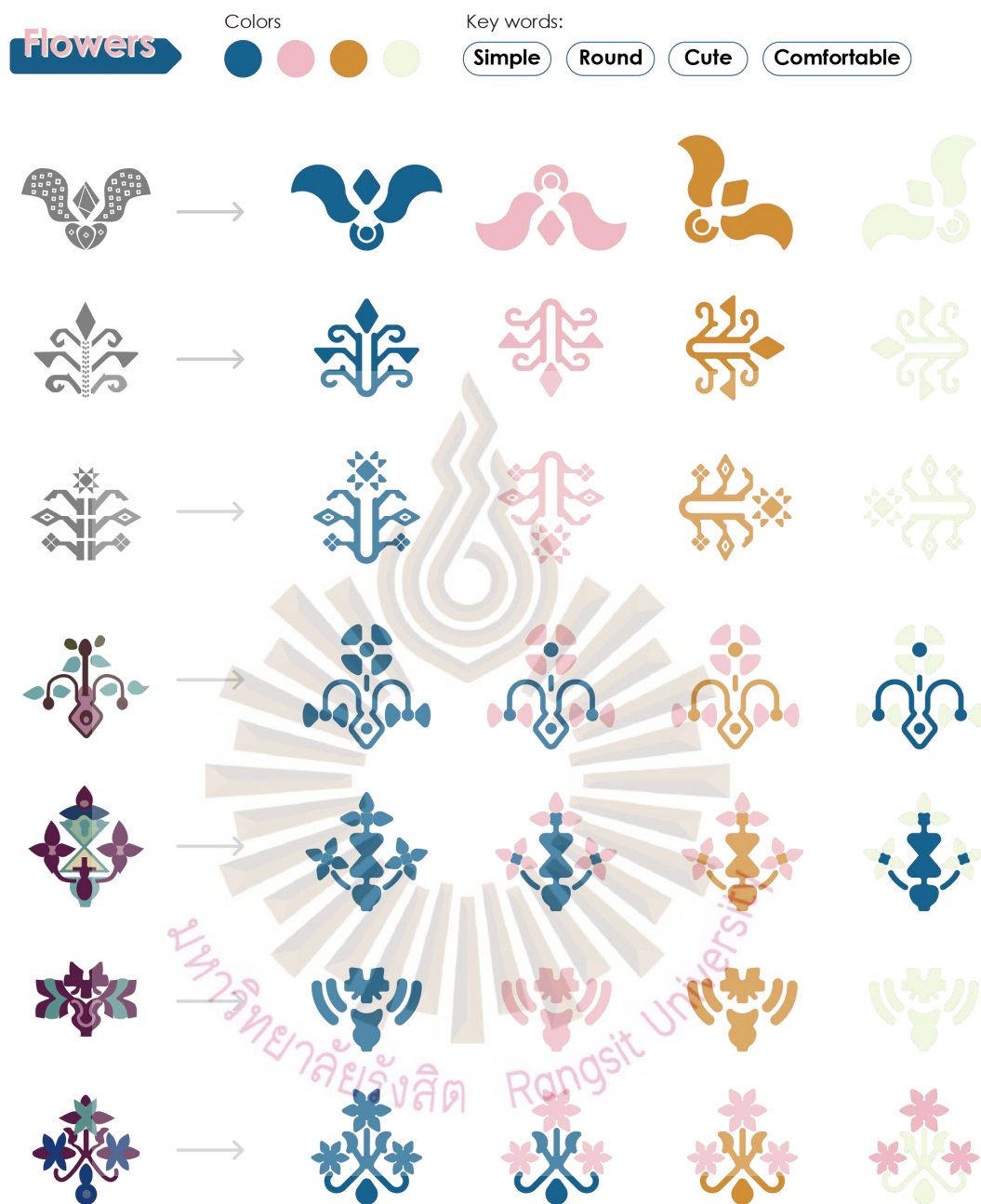


Figure 4.17 Redesign of Zhuang elements_flowers

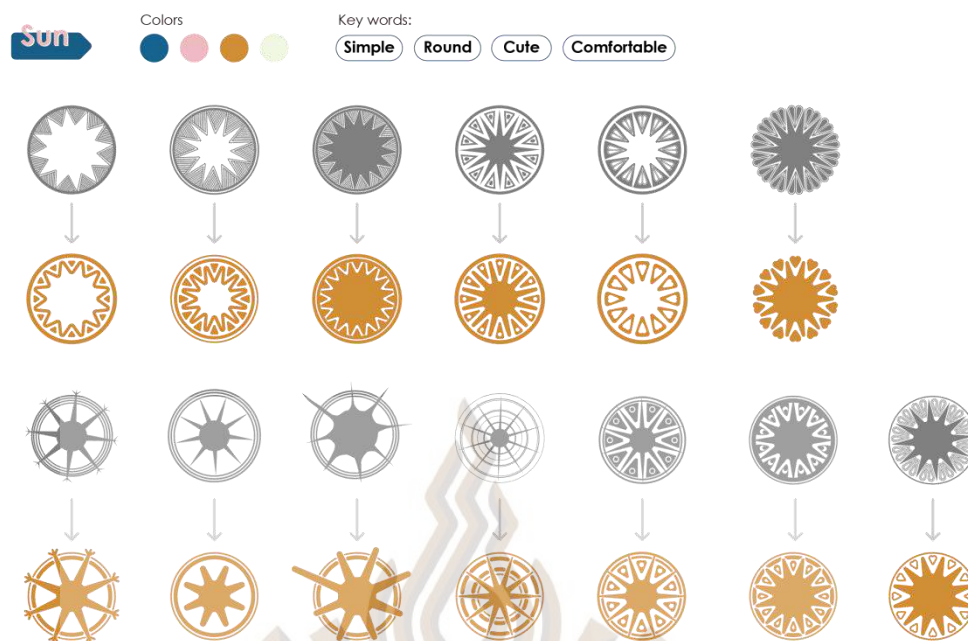


Figure 4.18 Redesign of Zhuang elements_sun patterns

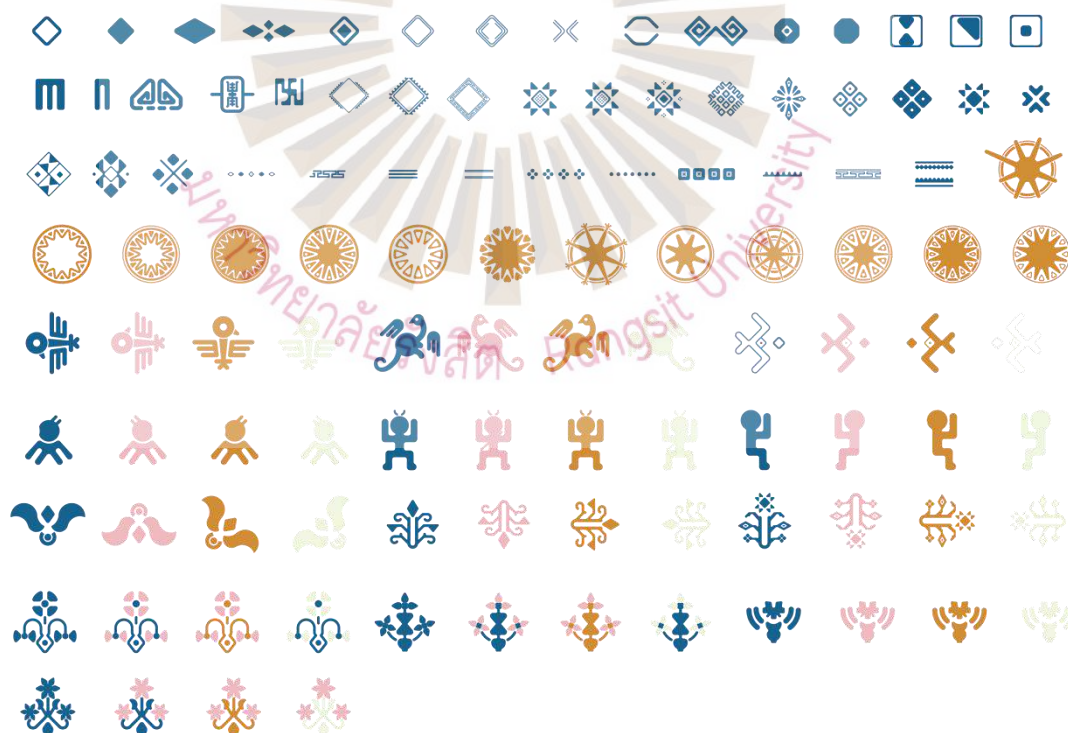


Figure 4.19 Redesign of Zhuang elements

4.3 Portable tea set design

4.3.1 Design Principles

Based on the previous research findings, some new ideas and design principles are proposed for the design of portable tea sets, including tea sets, tea towels, and portable tea set bags.

Tea Set

- 1) Using pottery and glass as materials.
- 2) Based on the redesigned Zhuang elements, design portable tea sets.
- 3) Add silicone pads at the bottom of the teacup and teapot to prevent slipping.
- 4) The tea cup can be placed inside the teapot and stacked for storage.

Tea Towel

- 1) Cotton and Linen fibers with strong water absorption are used as materials.
- 2) Using redesigned Zhuang elements, redesign and combine the patterns into a tea towel.
- 3) Add the brand logo and color.

Portable Tea Set Bag

- 1) The design of the portable tea set bag adopts Zhuang brocade fabric and uses Zhuang redesign elements as the pattern foundation for redesign.
- 2) The middle layer of the tea set bag is filled with cotton for protection.
- 3) Adopting an adjustable length long shoulder strap, it can be carried across the shoulder.
- 4) Add the brand logo and color.

4.3.2 Portable tea set Sketchs

Based on the design principles mentioned above, combined with Zhuang elements and user preferences, the concept 01(Figure 4.20) has been developed based on octagons in geometry. The tea towels and portable tea set bags are also designed in an octagonal shape and feature the brand logo. The appearance of each envisioned tea towel and portable tea set bag is customized according to the shape and pattern of the teapot. Each tea set and brand color can be paired, and there are two options: porcelain and glass. Silicone pads are added at the bottom of the teapot and cup to prevent slipping. Portable tea set bags are equipped with adjustable shoulder straps, and tea sets can be placed in the bag for carrying out.

Concept 02(Figure 4.20) is designed based on the sun pattern in the bronze drum. Concept 03(Figure 4.20) and 04(Figure 4.20) are designed based on the patterns in Zhuang brocade. Concept 05(Figure 4.20) and 06(Figure 4.20) are designed based on the bird pattern in Zhuang brocade. Concept 07(Figure 4.20) is designed based on the human figure pattern in Huashan Rock paintings.

Concept 04/06/07 can be matched with usage scenario 01- trains and airplanes. Concept 01/02/03/04/05/06/07 can be matched with usage scenario 02- office and home. Concept 01/02/04/05/06/07 can be matched with usage scenario 03- outdoor and camp.

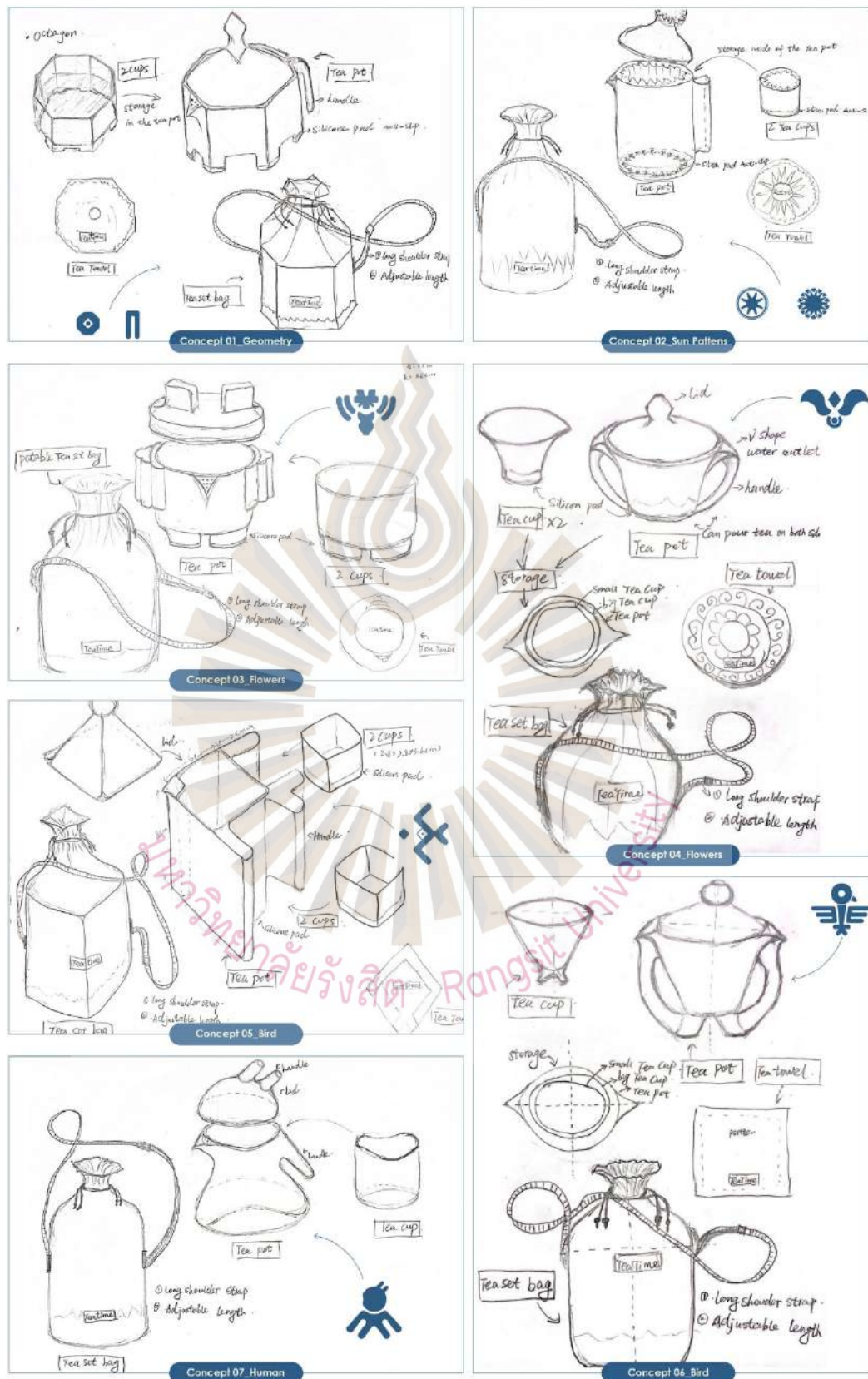


Figure 4.20 Portable tea set concepts

4.3.3 Portable tea set 3D Prototype

Due to the multitude of concepts, the author chose concept 02(Figure 4.21)/03(Figure 4.22)/05(Figure 4.23)/07(Figure 4.24) and created a 3D prototype. Each concept can be made of porcelain and glass materials, with color combinations combining brand colors.

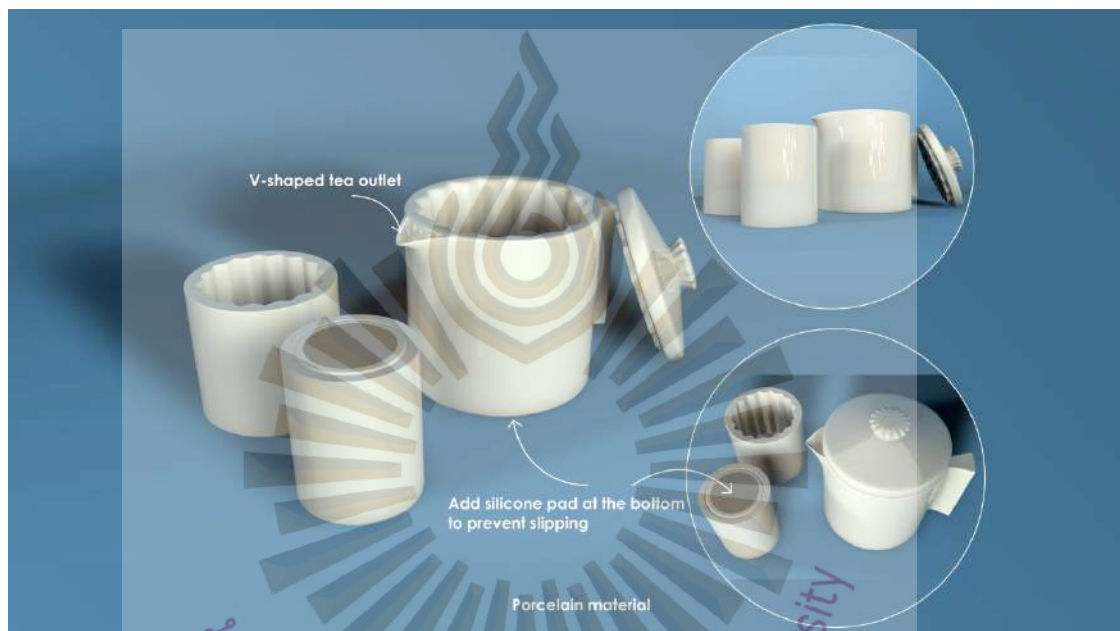


Figure 4.21 Portable tea set concept 02_porcelain

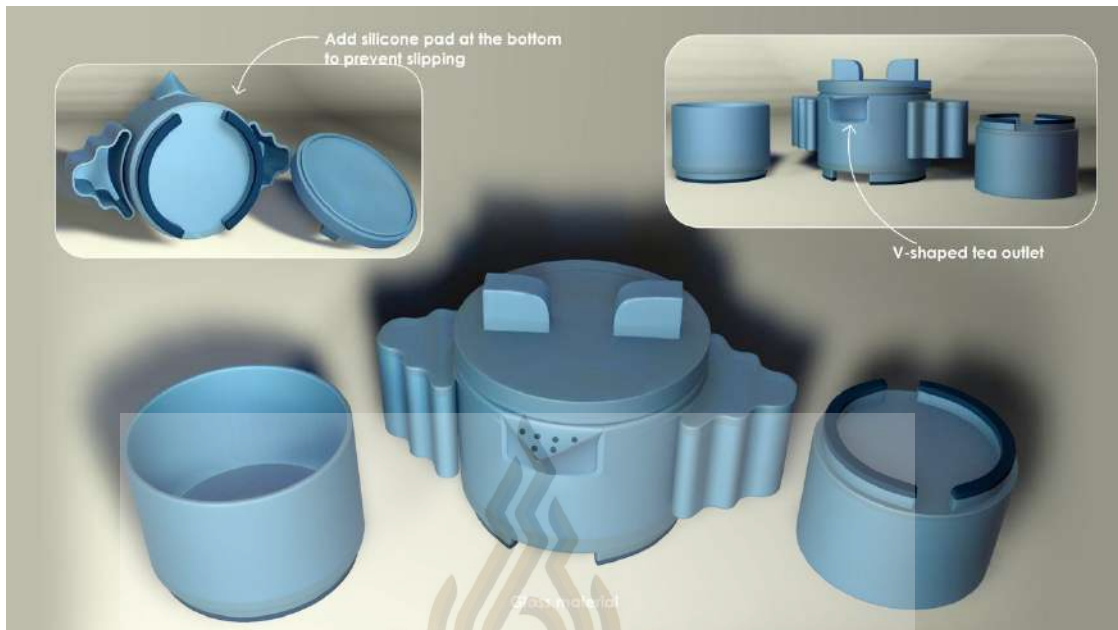


Figure 4.22 Portable tea set concept 03_glass

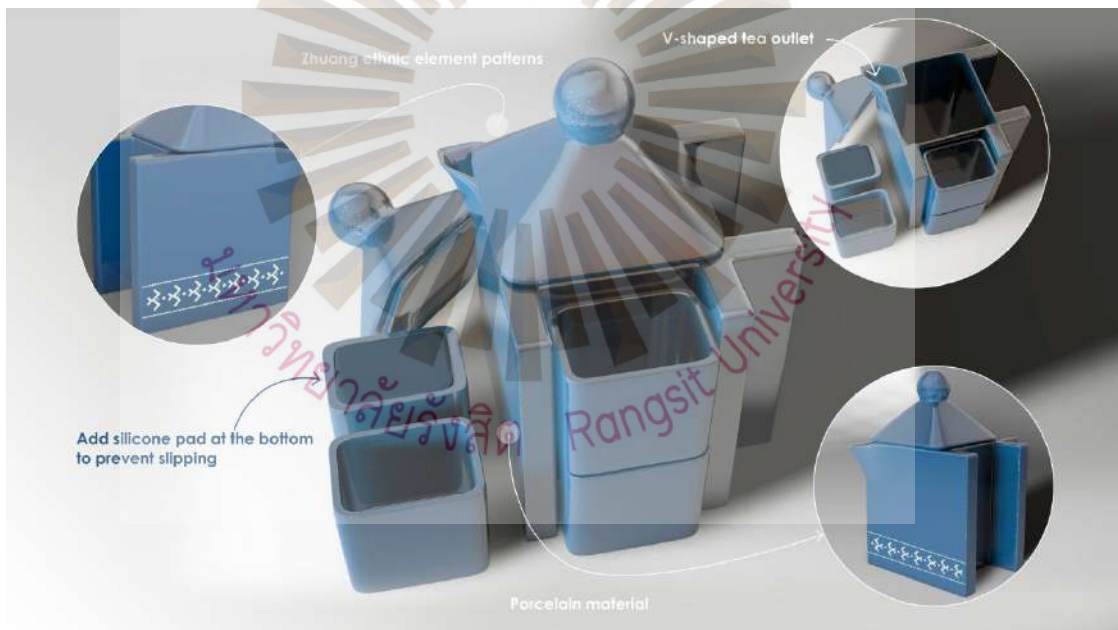


Figure 4.23 Portable tea set concept 05_porcelain

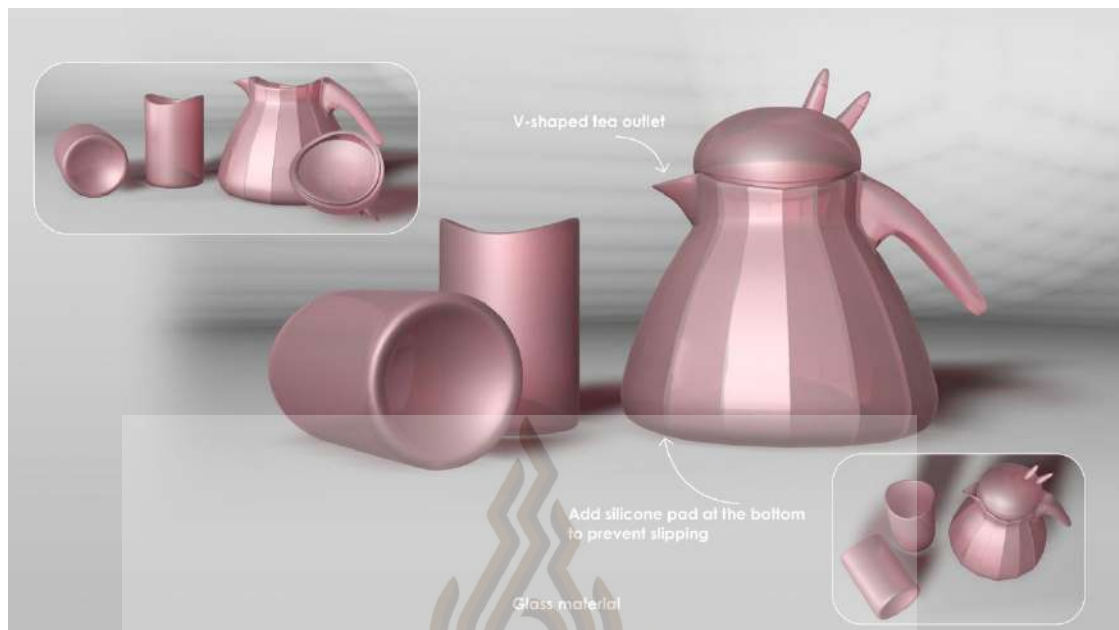


Figure 4.24 Portable tea set concept 07_glass

4.3.4 Tea towel pattern design

Based on the brand color, Zhuang elements, and the characteristics of each concept, tea towel patterns were designed for each of the 7 concepts (Figure 4.25 ~ Figure 4.31). And using embroidery craftsmanship, the designed pattern is embroidered onto a pure cotton towel with strong water absorption (Figure 4.32). The size of the towel is 28cm * 28cm.

Tea Towel__Concept 01 • Geometry_Octagan



Key words:
Geometry, Human, Happiness

Basic Zhuang Culture Elements



Figure 4.25 Tea towel concept 01

Tea Towel__Concept 02 • Sun patten



Key words:
Sun patten, Birds, Flowers, Happiness

Basic Zhuang Culture Elements



Figure 4.26 Tea towel concept 02

Tea Towel__Concept 03 • Flowers



Figure 4.27 Tea towel concept 03

Tea Towel__Concept 04 • Flowers



Figure 4.28 Tea towel concept 04

Tea Towel__Concept 05

• Birds

Brand Colors



Brand Logo

Teatime

Key words:

Birds, Geometry, Happiness

Basic Zhuang Culture Elements

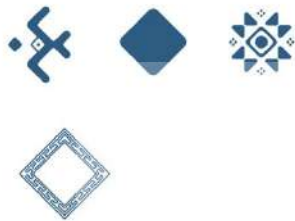


Figure 4.29 Tea towel concept 05

Tea Towel__Concept 06

• Birds

Brand Colors



Brand Logo

Teatime

Key words:

Birds, Geometry, Happiness

Basic Zhuang Culture Elements



Figure 4.30 Tea towel concept 06

Tea Towel_Concept 07 • Human

Brand Colors



Brand Logo

Teatime

Key words:

Human, Sun patterns, Geometry, Happiness

Basic Zhuang Culture Elements



Figure 4.31 Tea towel concept 07



Figure 4.32 Tea towel concept 05_real sample

4.3.5 Portable tea set bag pattern design

Using the same design principles as before, the design of the portable tea set bag for concept 02(Figure 4.33) / 03(Figure 4.34) / 05(Figure 4.35) / 07(Figure 4.36) was carried out by incorporating brand color, logo, Zhuang elements, and the characteristics of each concept. Embroidery craftsmanship is also used. Embroider the pattern onto the fabric of the portable tea set bags(Figure 4.37).



Figure 4.33 Pattern design for portable tea set bags_concept 02



Figure 4.34 Pattern design for portable tea set bags_concept 03

Pattern Design For Portable Tea set bags _Concept 05

Brand Colors



Brand Logo

Teatime

Key words:
Birds, Geometry, Happiness

Basic Chinese Culture Elements

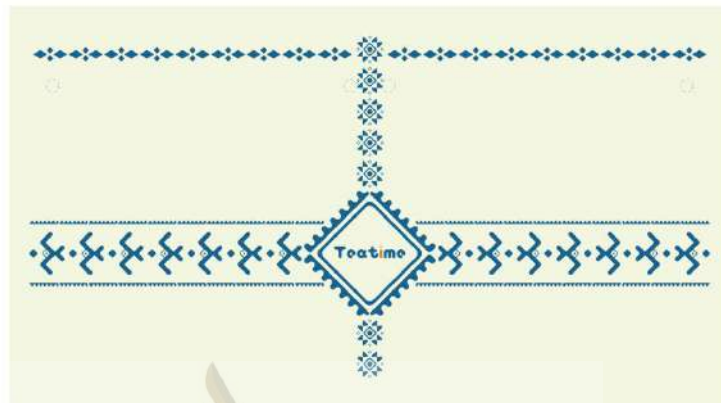


Figure 4.35 Pattern design for portable tea set bags_concept 05

Pattern Design For Portable Tea set bags _Concept 07

Brand Colors
Brand Logo
Teatime
Key words:
Human, Sun, patients, Geometry, Happiness
Basic Chinese Culture Elements

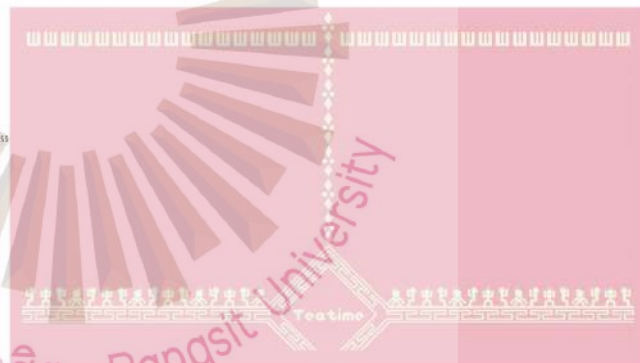


Figure 4.36 Pattern design for portable tea set bags_concept 07



Figure 4.37 Pattern design for portable tea set bags_concept 05_real sample

The portable tea set bag is made of two layers of cotton fabric inside and outside, with soft cotton sandwiched in the middle. This can protect the tea set well. The portable tea set bag has long shoulder straps on both sides that can be adjusted in length, making it easy to carry when going out. The sealing design adopts drawstrings that can be tightened on both sides, making it more convenient, fast and personalized.



Figure 4.38 Pattern design for portable tea set bags_concept 05

Figure 4.38 is the overall physical image of concept 05. Includes one teapot, four tea cups, one tea set, and a portable tea set bag. You can store the tea set on both sides and put it in the tea set bag. It can be carried to the office or outdoor use. Enjoy this wonderful leisure tea drinking time with friends. Release all the pressures. Because true wealth is the smile on your face.



Chapter 5

Conclusion and Recommendations

5.1 Conclusion

After in-depth research and exploration of Chinese tea culture and Zhuang culture, I have come to understand that Chinese culture is vast and profound, and we need the younger generation to inherit it and let more people understand Chinese culture. It is also possible to design products that meet both national cultural characteristics and modern needs based on daily necessities, making it easier for young people to inherit and understand.

As a designer, there are many things to learn and research. If we want to do a good job in product design, we should not only start from the product's shape, but also study user needs, materials, analysis of competitors, brand effects, and so on. Do a comprehensive product design to make your design more outstanding.

Of course, the process of designing a product is relatively simple, but even more difficult is to make the product. When I go to make a prototype, I need to have the skills of sewing and making clay. During these production processes, I have gained a better understanding of the challenges faced by craftsmen, and there are still many areas where I need to improve myself. I will continue to work hard.

5.2 Recommendations

In the final presentation on April 24, 2024, executive committees provided the following suggestions: 1) The shoulder straps of portable tea set bags can be made of materials with handcrafted characteristics, just like embroidery, without the need for hardware. 2) The material used for the drawstring at the opening of the portable tea set

bag is not good enough, and it can be considered to use the same fabric as the cloth bag instead. 3) The tea cup of Concept 05 is square shaped and may not be easy to use. It can be designed with an outer square and inner circle.

Thank you the recommendations provided by three experts, Assoc. Prof. Dr. Sant Suwatcharapinun, Asst. Prof. Prakaikavin, and T-ra Chantasawasdee, in the "MFA thesis Master Processing". Assoc. Prof. Dr. Sant Suwatcharapinun said that the representative significance of the brand logo "Teatime" can be amplified as brand promotion. Asst. Prof. Prakaikavin said that reflect the problems that have been solved in the design display, especially in addressing the current issues with portable tea sets. Ajarn T-ra Chantasawasdee said that tea towels can consider using jacquard or textile methods to create patterns, which are easier to machine wash and less prone to shrinkage and deformation.



References

- Acacuss. (2022). *23 Things to Know About Tea Sets: A Comprehensive Guide*. Retrieved from <https://acacuss.com/blogs/news/23-things-to-know-about-tea-sets-a-comprehensive-guide>
- Amboro, J. L. (2022). The characteristics of teapots made of plastic and clay: what are their designs, functions, and impacts on the environment? *IOP Conference Series: Earth and Environmental Science*. Retrieved from <https://iopscience.iop.org/article/10.1088/1755-1315/1114/1/012110/pdf>
- Chen, Q. (2005). *The Historic Information of Chinese Ancient Tea Sets*. Retrieved from <https://www.cglhub.com/auto/db/detail.aspx?db=950008&rid=643367&agfi=0&cls=0&uni=False&cid=0&showgp=False&prec=False&md=93&pd=6&msd=93&psd=6&mdd=93&pdd=6&count=10&reds=formation%3Bartistic%3Bcolours%3Bof>
- Cherry, K. (2022). *Color Psychology: Does It Affect How You Feel?* Retrieved from <https://www.verywellmind.com/color-psychology-2795824>
- Chinadaily. (2015, December 23). Elegant Chinese ancient tea sets. *China Daily*. Retrieved from http://en.chinaculture.org/2015-12/23/content_639391.htm
- China News Network. (2023, April 18). 中国六大茶类分类体系国际标准发布 (Publication of International Standards for the Classification System of Six Major Tea Categories in China). *Chinanews*. Retrieved from <https://www.chinanews.com.cn/cj/2023/04-18/9992249.shtml>
- China Tea Spirit. (2022). *6 Types of Chinese Tea*. Retrieved from <https://www.cnteaspirit.com/six-types-of-chinese-tea/>
- Daoya Ceramics. (2018). 便携式旅行茶具的设计(*Design of Portable Travel Tea Set*). Retrieved from <https://www.yadao8.com/chajuzhishi/3843.html>
- Faster Capital. (2023). *Tea set: Tea for Two: Unveiling the Beauty of Traditional Tea Sets*. Retrieved from <https://fastercapital.com/content/Tea-set--Tea-for-Two--Unveiling-the-Beauty-of-Traditional-Tea-Sets.html>

References (Continued)

- Guo, H., & Li, J. (2020). *Chinese traditional colors: The Aesthetics of Color in the Forbidden City*. Beijing: CITIC Publishing Group.
- Ho, D. (2021). *The Evolution of Chinese Tea Culture*. Retrieved from <https://www.sothebys.com/en/articles/the-evolution-of-chinese-tea-culture>
- iiMedia Research. (2023). 2022-2023 年中国茶叶产业发展及消费者洞察行业报告 (*Industry Report on the Development and Consumer Insight of China's Tea Industry from 2022 to 2023*). Retrieved from <https://report.iimedia.cn/repo7-0/43262.html>
- Kalia, S., & Avérous, L. (2016). *Biodegradable and Biobased Polymers for Environmental and Biomedical Applications*. Retrieved from https://books.google.co.th/books?hl=sl&lr=&id=cP2OCwAAQBAJ&oi=fnd&pg=PA171&dq=Characteristics+of+PLA&ots=O_awJWW5IK&sig=1uXE30qDJ7YMsAbOVQz5rtBdSec&redir_esc=y#v=onepage&q=Characteristics%20of%20PLA&f=false
- Li, H. (2022). 中国古代茶具发展史浅谈 (*A Brief Discussion on the Development History of Ancient Chinese Tea Set*). Retrieved from Research on Zhuanlan website: <https://zhuanlan.zhihu.com/p/488539673>
- Losifyan, M. (2019). Emotions associated with different textures during touch. *ScienceDirect*, 71, 79-85. doi:10.1016/j.concog.2019.03.012
- Oliver, R. (2020). *The Power Of Touch: How Do Textures Affect Our Emotions?* Retrieved from <https://trulyexperiences.com/blog/textures-emotions/>
- People Data. (2022). 《现代都市人生活与健康方式研究报告》 (*Research Report on the Lifestyle and Health of Modern Urban People*). Retrieved from http://health.china.com.cn/2022-12/15/content_42205747.html
- Richardson, B. A., Vardar, Y., Wallraven, C., & Kuchenbecker, K. J., (2022). Learning to Feel Textures: Predicting Perceptual Similarities From Unconstrained Finger-Surface Interactions. *Ieee Transactions On Haptics*, 15(4), Retrieved from <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9913733&isnumber=9991904>

References (Continued)

- Rogers, K. (2023). *Melamine*. Retrieved from <https://www.britannica.com/science/melamine>
- Romm, C. (2016). *The People Who Store Their Emotions in Their Fingertips*. Retrieved from Research on Poverty Alleviation website: <https://www.thecut.com/2016/05/the-people-who-store-their-emotions-in-their-fingertips.html>
- Stanton, K. (2023). *Colors and emotions: how colors make you feel*. Retrieved from <https://99designs.com/blog/tips/how-color-impacts-emotions-and-behaviors/>
- Soho. (2022). 2021 年喝茶习惯调研分析: 真正的高频消费? 超 53.1% 的用户每天都在喝茶(2021 Tea Drinking Habit Survey and Analysis: Real High Frequency Consumption? More than 53.1% of users drink tea every day). Retrieved from https://www.sohu.com/a/529734502_120205287
- Tsai, R. , & Jones, S.R. (2010). 中英文茶学术语 *Chinese-English Tea Studies Terminology*. Retrieved from https://drive.google.com/file/d/1q_BQrmiOwE2JZ1CA_onMRW2hsT30vXxD/view
- Wang, L.(2005). *Tea and Chinese Culture*. Retrieved from https://books.google.fr/books?id=y6ODcqMEUTcC&lpg=PP15&ots=bexbSnZrK_&dq=chinese+tea+history&lr&pg=PP15&hl=zh-CN&pli=1#v=onepage&q=chinese%20tea%20history&f=false
- Wickham, R. (2023). *Types of Chinese Tea*. Retrieved from <https://www.chinaeducationaltours.com/guide/culture-chinese-tea-types.htm>
- Xie, R. (2023). *Frothy Song Dynasty art of whisking tea*. Retrieved from <http://en.people.cn/n3/2023/0607/c90000-20028820.html>
- Xu, X. (2017). 《茶艺从入门到精通》(*Tea Art from Beginner to Proficient*). China: The Chinese Overseas Publishing House
- Yuyanchashi. (2021). 中国人喝茶的 4 大理由, 生活习惯排第二, 年轻人真不喜欢喝茶吗? (*The top four reasons why Chinese people drink tea are their lifestyle habits. Do young people really dislike drinking tea?*). Retrieved from <https://zhuanlan.zhihu.com/p/361626705>

References (Continued)

Ztgjmy. (2021). 中国古代茶具的历史：由单一功能到多重功能的演变(*The History of Ancient Chinese Tea Set: Evolution from Single Function to Multiple Functions*). Retrieved from <http://www.ztgjmy.cn/?c=index&a=show&id=461>



The logo of Rangsit University is a large, faint watermark in the background. It features a stylized flame or sunburst design at the top, with a circular arrangement of radiating lines below it. The text "มหาวิทยาลัยรังสิต" (Mahavithayalai Rangsit) is written in Thai script along the bottom arc, and "Rangsit University" is written in English along the bottom arc.

Appendix

Chinese Tea and Tea Set Market Demand Questionnaire Survey



Chinese Tea and Tea Set Market Demand Questionnaire Survey

Latest update date: 2023-11-30 07:52

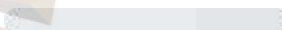

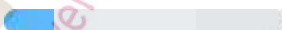
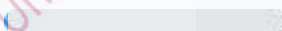
Total number of answers: 62

Inquirer: Guixiang Mo


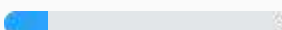
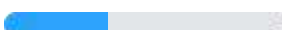
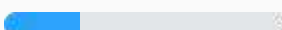
1. May I ask your gender? [Single Choice]

Options	Subtotal	Ratio
Male	28	 45.16%
Female	34	 54.84%
Number of valid person times filled in	62	

2. May I ask your age? [Single Choice]

Options	Subtotal	Ratio
18-22 years old	0	 0%
23-45 years old	50	 80.65%
46-65 years old	11	 17.74%
Over 66 years old	1	 1.61%
Number of valid person times filled in	62	

3. Do you often drink tea (such as black tea, green tea, black tea, and other traditional Chinese teas)? [Single Choice]

Options	Subtotal	Ratio
Drinking almost every day	12	 19.35%
3-5 times a week	10	 16.13%
1-3 times a week	23	 37.1%
Not drinking	17	 27.42%

Number of valid person times filled in	62	
--	----	--

4. The reasons why you drink tea are: [Multiple choice]

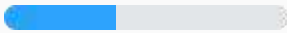
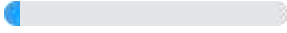
Options	Subtotal	Ratio
Likes drinking	22	44%
Health care	20	40%
Refreshing	14	28%
Relax	25	50%
Other	8	16%
Number of valid person times filled in	50	

5. May I ask what is the approximate monthly cost for purchasing tea and tea utensils in Chinese yuan? [Multiple choice]

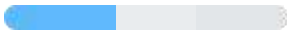


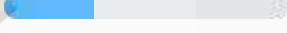
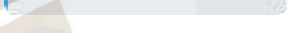
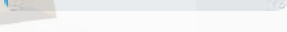
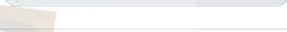

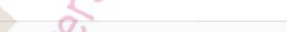
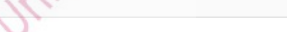
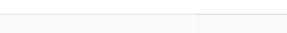
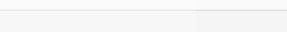
Options	Subtotal	Ratio
Less than 100	34	68%
101-200	8	16%
201-300	7	14%
More than 300	1	2%
Number of valid person times filled in	50	

6. May I ask what tool you like to use to make tea? [Multiple choice]

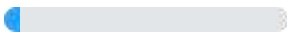
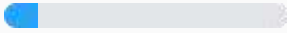
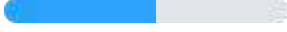
Options	Subtotal	Ratio
Kong Fu Tea set	16	32%
Portable tea set	14	28%
A large teapot	11	22%

Thermos	20	 40%
Other	3	 6%
Number of valid person times filled in	50	

7. May I ask what material of tea set do you prefer to use? [Multiple choice]

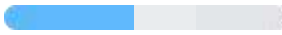
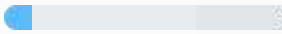
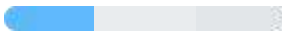
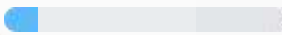
Options	Subtotal	Ratio
Pottery	20	 40%
Porcelain	22	 44%
Purple clay teapot	15	 30%
glass	16	 32%
Bamboo and wood	1	 2%
Enamel	1	 2%
Muyu jade	0	 0%
Lacquerware	1	 2%
Stainless steel	6	 12%
PP	0	 0%
silicon	1	 2%
Other	0	 0%
Number of valid person times filled in	50	

8. How many times do you travel long distances each year? [Single Choice]

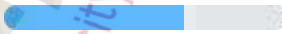
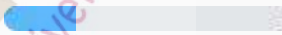
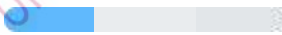
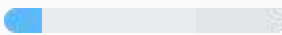
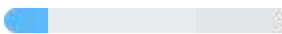
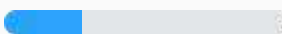
Options	Subtotal	Ratio
More than 10 times	3	 6%
5-9 times	6	 12%
1-4 times	27	 54%

Almost no long-distance travel	14	 28%
Number of valid person times filled in	50	

9. May I ask if you often travel short distances? For example: Commuting [Single Choice]

Options	Subtotal	Ratio
Traveling almost every day	23	 46%
Traveling 3-5 times a week	5	 10%
Traveling 1-2times a week	16	 32%
Almost no travel	6	 12%
Number of valid person times filled in	50	

10. May I ask what is the usual purpose of your trip? [Multiple choice]

Options	Subtotal	Ratio
Go to work	32	 64%
Business trip	13	 26%
Go to the park	16	 32%
Go camping	7	 14%
Travel	8	 16%
Other	14	 28%
Number of valid person times filled in	50	

11. What is your opinion on the prospects of the tea set market? [Fill in the blanks]

Interviewee 1: The market is very large.

Interviewee 2: Nowadays, people tend to prefer drinking tea to talk about their careers, rather than sitting at the table. So drinking tea and accessories are quite promising.

Interviewee 3: The tea set market needs to be promoted in conjunction with tea culture! The true way to drink tea is to taste it, not to drink tea in a water style! In the past decade or so, northerners have gradually developed a habit of drinking tea, especially Kung Fu tea, which has entered countless cities and shops! One of the easy ways to receive! Portable tea is more popular in the market and will also bring fierce market competition! Unique, fun, high-quality, and low-priced are the best ways to cater to the market!

Interviewee 4: Against the backdrop of the prevalence of new Chinese style and health preservation, I believe that traditional Chinese culture is receiving increasing attention, especially Chinese tea, which is popular among young people (such as boiling tea in a furnace). Tea sets play a very important role in it. Tea sets with high aesthetics and creativity can add a sense of ceremony to tea lovers, and the tea set market has broad prospects.

Interviewee 5: The prospect is broad and bright. If the boss persists, he will definitely make a lot of money. Suggest categorizing products well, which can be divided into personality categories and tool categories. Personality categories such as zodiac signs, surnames, etc. Tools such as training standards and beginners. Collaborate with upstream and downstream industries to customize commemorative funds.

Biography

Name	Guixiang Mo
Date of birth	September 20, 1985
Place of birth	Guangxi/Guilin China
Education background	Guangxi University, China Bachelor of Engineering, 2008 Rangsit University, Thailand Master of Fine Art in Design, 2024

