

**A Design Guideline for Applying Aesthetics in Chinese Traditional Novel to
Modern Tableware Design**

by

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Abstract

As designers, we not only consider the user's physical and technological needs but we also are aware of the user's social and emotional needs. The consumer will appreciate a product reflecting his/her own culture. Therefore, it was suggested that design should be recognized in a specific cultural development strategy.

This thesis is to study how to apply the traditional aesthetics of classical Chinese literature to the modern design of tableware.

Research is conducted to analyze the elements reflecting the cuisine culture in a certain literature context and then the aesthetic elements are identified to apply to the tableware design, which is consistent with modern consumers' aesthetics.

After the research, a set of guidelines is developed to design the modern tableware. The tableware's shape, proportion, texture, color, pattern, balance, repetition and materials are considered in the context of the culture of the classic Chinese novel *Dream in the Red Chamber*.

A sample work is built to show the efficiency of the guidelines of designing the tableware. The deliverable of designing a set of sample tableware will include sketches and final physical models.

The future of design in China hinges on creating winning innovations with a unique cultural influence. To balance the desire of cultural cohesion and the realities of the global market, designers make objects and places that are very often attuned to the modest rituals of daily life.

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Chapter 1

Introduction

1.1 Problem Statement

There is no doubt that design plays an important role in cultural identity as designers gradually realize that global design is not good as it was before [1].

One important trend that has become more important in the last decades is Western designers' increasing interest in Eastern cultures. Thanks to globalization, Eastern designers are more familiar with Western design knowledge and they apply these design styles into their products. For the Western designers, the Oriental cultures seem quite mysterious. With the emerging oriental market expanding, more consumers need to be considered. One caveat: No product exists as a global one. Even Coca-Cola utilizes more than 80 formulas in the world market. Therefore, each product design needs local development. In high potential emerging markets, the products need to be adapted and localized to the needs and wants of local consumers. It is especially true as colors, symbols and values have quite different meanings in the foreign markets.

Compared to the Eastern designers, the designers in the Western countries have little knowledge of how to apply these oriental elements to their products. The culture of China is one of the world's oldest and most complex cultures. The problem is how to find an effective means to learn and understand Chinese culture. Furthermore, designers must decide how to design products that attune the modern Western rituals of daily life and coincide with Chinese aesthetics. There are many different means to learn a specific culture, which include music, architecture, literature, arts and religion. Compared to the other aspects of culture, some famous novels have been translated into different languages so that even foreigners in

Western countries can learn the culture through reading. With more cultural knowledge, the Western designer can also incorporate the oriental cultural element in the product design.

1.2 Need for Study

According to Erskine Children, a director of the United Nations Development Program in the UN, “The designer has a far more pivotal role than is generally realized. The design profession provides the essential social link in the chain.” Culture has been all encompassing. “This is how our ancestors in all civilizations everywhere understood culture. They didn’t separate culture from the rest of life and human endeavour. Creativity and productivity were mutually reinforcing.” [1] Nowadays designers have begun to understand the role of design in culture and to develop the method and process such as ethnography, user-observation, scenario-based design, and the like for applying culture factors on design. Besides the trend that cultural elements are integrated into the product design, design is also an effective means for the company’s image promotion, or even a country’s. For example, *rigor* for German, *flair* for Italian, *compactness and cuteness* for Japanese, and *tail fins* for American. Design becomes an effective method for companies and even for countries to survive the fiercer global competition.

Against this background, designers realize the significance of the dialogue between Eastern and Western stylistic elements. Particularly, Asian culture plays an influential role as design has deliberately been removed from the pop culture. Designers currently gain more inspiration from the traditional Asian arts and crafts for the main living room accessories design.

The characteristics of humanity in a certain historic background are reflected in the product since the products are created and designed by the human beings to express the information of a specific culture. Aspiration for cultural cohesion and the facts of the global market are balanced in the way that products are designed to attune to the modern rituals of daily life [2].

1.3 Literature Review

The review of literature examines issues associated with and relevant to understanding the current state of cultural design and tableware design.

Understanding the relationship between culture and design, the definition of tableware and the significance of tableware design will help place the research into perspective.

1.3.1 Culture

Culture has several different meanings. Alfred Kroeber and Clyde Kluckhohn listed 164 definitions of culture [3]. Nowadays, three basic definitions of culture are commonly used:

- Excellence of taste in the fine arts and humanities.
- An integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for symbolic thought and social learning.
- The set of shared attitudes, values, goals, and practices that characterizes an institution, organization or group.

In anthropology culture has two meanings:

- The evolved human capacity to classify and represent experiences with symbols, and to act imaginatively and creatively.
- The distinct ways that people living in different parts of the world classified and represented their experiences, and acted creatively.

Aesthetic preferences are different for the individual and society as a whole.

Hofstede and Robison build models about culture *filters*. If social and cultural factors give particular meaning and value to sensory experience, it is helpful to develop a clear understanding of the concept of culture. According to Hofstede, culture is,

“The collective programming of the mind which distinguishes the members of one group or category of people from another. Culture is learned, not inherited. It derives from one’s social environment, not from one’s genes. Culture should be distinguished from human nature on the one side, and from an individual’s personality on the other” [4].

Hofstede’s model suggested three layers: Those values specific to an individual; those specific to a group or category; and those which are universal, i.e. part of our human nature. He also discussed how cultural differences represent in different ways, from a symbol implying the most superficial way to values manifesting the deepest meaning of culture. He described values as broad tendencies to prefer certain states of affairs over others. Sensory perceptions are given particular significance through social and cultural values [5]. Within the overall discipline of psychology, social psychology is unique in that it deals with several different domains of analysis: The individual or intrapersonal, the interpersonal, the group and societal levels. Societal explanations are concerned with interactions between individuals and how these are influenced or constrained by cultural expectations or ideologies [1].

Since aesthetics are a relative value determined by the understanding or context, visual symbolism is not universal. Perception, recognition and acceptance of an object are determined by the context in which it is used and by the natural and cultural conditioning of the user. From the view of industrial design, this study focuses on the second and third level that concern the specific values to a group and part of human nature, from the superficial symbols to the deepest value.

1.3.2 Culture and Design

1.3.2.1 Culture and Design

The characteristics of humanity in a certain historic background reflect in the product since products are created and designed by human beings and they present a special culture. The culture aspects of products reflect the different social aspects, from politics, economy,

technology, arts, religion and culture [6]. However, in the research of culture, it is true that special meanings are accurate in the everyday experience.

Designers need to consider the consumers' social and emotional needs as well as the physical and technological requirements. With the development of global markets, product designers must be more sensitive to the users' social and emotional needs. People in different cultures respond to different signals since people have their own visual code, aspirations and values. According to James Woodhuysen of the Henley Centre for Forecasting, "We must research users, watch them, listen to them, understand them... this is going to be very important for the future of design".[6]

1.3.2.2 Chinese Culture and Design

The Western world has been strongly influenced by Oriental Design since the Italian Renaissance. Throughout the former historic periods, Oriental design continued influencing the Western world and this trend is still going strong. Oriental Design has timeless appeal for its highly artistic hand craftsmanship and works of art. Now Westerners often select the accessories, patterns and accents that have the Oriental feeling. For example, the large-scale frames of imperial Chinese beds are topped with crown cornices, on which pagoda-like shapes are fantastically carved. Inspired by these beds, European and American formal interiors incorporated the long draperies surrounding Chinese beds.

With the rapid development of the globalization, China is losing its special culture characteristics. Within an increasingly globalized system of design, production and consumption, the research, design and engineering of products are mainly controlled by the outside forces, and for outside markets. For the domestic market, the product design is merely the low-value imitation of existing products. Now the local design is playing an imitative role. The final consequence is not originality in design, but a culture of the copy [7]. For instance, in the mobile phone market, the buyers can find the unmistakably familiar cell phone, which has sleek lines, touch-screen keyboard and even the logo on the back. At the first glance, it will

be recognized as an Apple iPhone, but upon closer inspection, it turns out to be a Hi-Phone. Other cheap look-alikes, the counterfeit Nokia, Motorola and Samsung phones, which make no bones about being knockoffs, can also be found nearby.

Chinese designers are gradually realizing the importance of the uniqueness of product design and are developing a graphic language that can both maintain China's traditions and incorporate international influences. This search for a distinct graphic language has been undertaken thanks to the distinctive qualities of Chinese cultural traditions.

1.3.2.3 The Application of Chinese Culture to Product Design

The culture of China is one of the world's oldest and most complex cultures, which includes language, mythology and spirituality, literature, music, arts, martial arts, architecture, cuisine and leisure. Nowadays, designers try to gain more inspiration from Chinese traditional culture elements into their product design.

From the arts view, Chinese traditional decorations first appeared in the mind of Chinese designers. For instance, designers modernize the traditional decoration forms such as Dragon, Monkey Sun, the character in Journey to the West, Chinese calligraphy and the Peking Opera Mask. They incorporate these traditional decorations into sports shoes design [8] (Figure 1.1).

From the view of spirituality, Confucianism is one of many Chinese ethical and philosophical systems, which is a complex system of moral, social, political, philosophical, and quasi-religious thought [9]. Some designers try to make use of the old concept of Confucianism for domestic electrical appliance designs [10]. Confucianism states the whole society consists of families, instead of individuals. Therefore, the design style of domestic electrical appliances reflects diversity, dynamics and complexity of social structure.

Yiyou Design Company, for example, defines five elements that are most representative in Chinese culture, refinement, glory, nation, folk custom and Buddhism. By analyzing the traditional Chinese artworks that embody the spirit of Chinese culture, designers obtain the



Figure 1.1: **New Balance sports shoes with Peking Opera mask design**

essential elements for the product form, function, color arrangement and material selection [15].

From the view of craftsmanship that plays an important role in the traditional culture of each country, modern designers try to build a craft-based method for modern design. The Scandinavians' design had focused on a socially oriented, democratic approach toward design, linked to their longstanding craft traditions. Sweden's craft-based approach toward design had developed through the first half of the twentieth century. Danish design combines the country's existing craft traditions with a new, international-oriented marketing approach and an architectural attitude toward furniture design[12]. In China, furniture designers also try to combine the excellent craft tradition and ancient simple style with the Chinese modern furniture design (Figure 1.2)[13].

Designs from the Orient can enrich and add charm and mystique to today's product design. The oriental cultural elements give depth to the product design. This novel, exquisite craftsmanship and beauty give the products a high-status acceptance [11].



Figure 1.2: **Lying chair designed by Daren Hong**

1.3.3 Tableware

Consumers in different cultures may have a different response to specific product types. This sensitivity has a relationship with the consumers' age, gender and the cultural significance of the product category. Compared with the recent high-tech digital products, furniture and cooking utensils have more culturally specific meanings. The scope of research narrows down the relationship between cooking utensils and culture.

1.3.3.1 The Definition of Tableware

Cuisine includes a series of cooking traditions and practices, which are associated with a specific culture. Regional cuisine is often named after the place where its culture began. The ingredients presented in the food primarily influence the regional cuisine, which are available locally or through trade. Regional cooking laws also have a strong influence on the cuisine. A traditional cuisine is a coherent tradition of practices accumulated from daily life over a long period of time in a specific cultural region [14].

Tableware includes the dishes, glassware, and cutlery (knives, forks, spoons, chopsticks and so on) used to set a table for eating a meal. The nature, variety, and number of objects vary from culture to culture, and may vary from meal to meal.

Especially, ceramic tableware is cataloged into daily-use and traditional tableware. The daily use dinnerware is usually inexpensive and commonly used and the traditional dinnerware is usually porcelain, hand-painted, and highly decorated.

1.3.3.2 The Significance of Tableware Design

The way we eat and the tableware we use on the tables reflect the most fundamental cultural rituals. Table manners and tableware tell a story about us, the cultures we belong to, the economic status we have and the sense of our style. For instance, sushi, a Japanese dish, consists of cooked vinegar rice topped with seafood ingredients. To keep with the aesthetic and taste qualities of this cuisine, sushi is traditionally served on minimalist Japanese-style, geometric, mono- or duo-tone wood or lacquer plates. Tableware design also reveals the technology and the industrial processes of an age and the material in vogue [14].

In the modern world, basic items such as cutlery and glassware are needed in every home. For this reason, many great architects and designers, artists and sculptors are attracted by the challenge of designing tableware.

The medium offers the designers more opportunities to explore creative expression, material technology and cultural change. In addition to the great designers and architects who are interested in tableware design, there are some enlightened and regressive industrial companies that are engaged in the continual refinement of production techniques to balance the function and aesthetics of tableware design.

Several manufacturers have enjoyed success in the story of twentieth-century tableware for their versatility and patronage of leading designers. Their names are well-known for the good design and will be familiar to anyone interested in good design for the home: Alessi of Italy, Arabia of Finland, Orrefors of Sweden, Rosenthal of Germany, Wedgwood of Britain and Georg Jensen of Denmark.

These companies' products are unique for the sense of national identity and the quality, which differentiates them from their competitors. They all made influential contributions to the evolution of design and the progress of modern manufacturing [14].

1.3.4 Chinese Culture and Tableware

So far, from the literature review of other scholars' working, it is found that the research area of the relationship between Chinese literature and modern design is yet to be developed. Therefore, the research of this thesis will explore the method of how to apply the aesthetics in traditional Chinese literature to modern tableware design.

1.3.4.1 The Relationship Between Cuisine and Ceramic Tableware

Chinese ceramic tableware is an art form that is defined as fine compact pottery. Chinese porcelain is famous for its variety, beauty and the wonderful skill of the Chinese craftsmen, which has arisen from centuries of tradition. It is also distinctive for its decorative genius and its natural color sense. The merits and beauty of porcelain have always been recognized in its jade-like appearance, its musical ring, and its lightness and refinement [16].



Figure 1.3: Ju Ware Bowl in the Shape of a Lotus

There are two views to consider during the design of ceramic tableware. One is the relationship between food and tableware. The beauty of ceramic tableware lies in the form, which represents the features of food. Beautiful tableware not only has a specific aesthetic appearance, but it is also complementary to the food. The other is from the relationship between culture and tableware. For instance, materials are selected which have particular meaning in this special cultural region; the features of local architecture may be integrated into the design of tableware. The consumer psychology in one culture, which is quite different from the others, should be studied so that the tableware satisfies the psychological need of consumers [16].

Inspiration comes from looking at the world with a new perspective. Diverse methods can be employed to create and collect ideas, including photography, drawing, listening, painting and writing. Then designers should broadly understand the collected source materials[17]. Compared to the other inspiration sources, writing is a distinctive approach which visualizes the words on the paper. Through reading a novel, different designers could gain different inspiration and imagination from the same novel.

1.3.4.2 The Application of Chinese Traditional Literature to Modern Tableware

Chinese literature spans thousands of years, from the earliest recorded dynastic court archives to the mature fictional novel that arose during the Ming Dynasty to entertain the masses of literate Chinese.

The Four Great Classical Novels are the four novels commonly counted by scholars to be the greatest and most influential of classical Chinese fiction. The Four Great Classical Novels are considered to be the pinnacle of Chinese achievement in classical novels, influencing the creation of many stories, plays, movies, games, and other forms of entertainment. In chronological order, they are: *Romance of the Three Kingdoms* (San guo yan yi), *Water Margin* (Shui hu zhuan), *Journey to the West* (Si you ji) and *Dream of the Red Chamber* (Hong lou meng).

As one of the Four Great Classical Novels in Chinese literature, *Dream of the Red Chamber* displays the grandeur and exquisiteness of its artistic structure. Literary scholar Dr. Kam-ming Wong has described the novel as “So rich and complex in its depiction of traditional Chinese society and culture that more than one scholar has characterized it as an encyclopaedia of Chinese civilization ” [20]. The research of this paper assumes that this novel is a microcosm of the world of its time. Therefore, this novel provides precise and detailed observations of the life of 18th-century Chinese aristocracy so that the designers can gain precise and detailed information of aesthetic elements in Chinese traditional culture. For instance, *Dream of the Red Chamber* is remarkable not only for its huge cast of characters and psychological scope, but also for its precise and detailed observation of the life and social structures typical of 18th-century Chinese aristocracy. So it is not surprising that the reader could find many descriptions about Chinese traditional cuisine and tableware in the novel.

Therefore, it is assumed that designers will be inspired from studying and analyzing the traditional aesthetics in the classical novels of Chinese literature. Balancing the desire for cultural cohesion and the realities of the global market, designers make products that are very often attuned to the modern rituals of daily life.

Therefore, the research focuses on how to apply the traditional aesthetics in the classical novels of Chinese literature to the modern design of tableware, which is consistent with the rituals of Chinese daily life and the aesthetics of modern China.

1.4 Objectives of Study

The objective of this thesis is to provide the designer with a framework to identify the aesthetic elements in *Dream of the Red Chamber* and further apply these findings to current daily-use tableware design. The following is a summary of what this research study will entail:

- Define the methodology to identify the aesthetic elements in *Dream of the Red Chamber*, which inspires modern design of daily-use tableware.

- Identify the aesthetic elements of daily-use tableware in *Dream of the Red Chamber* from the shapes, colors, decorations to the proportion.
- Develop design guidelines based on the aesthetic analysis and ergonomic and manufacturing considerations.
- Execute the design implementation to show validation of the design framework and whether the design fits the consumers' aesthetic appreciation.

1.5 Definition of Terms

Aesthetics - a branch of philosophy dealing with the nature of beauty, art, and taste, and with the creation and appreciation of beauty.

Culture - The patterns, traits, and products which exemplify the expression of a particular period, class, community, or population

Ding Ware - A white-bodied porcellanous ware usually covered with an ivory glaze and sometimes adorned with carved or molded designs. Its name derives from the Dingzhou kilns in Heibei province.

Eastern - the various cultures or social structures and philosophical systems of “the East”, or geographically, the Eastern Culture.

Famille rose - An overglaze enamel palette employed on Chinese porcelains from the first quarter of the eighteenth century and characterized by the use of pink enamel derived from colloidal gold.

Famille verte - An overglaze enamel palette employed on Chinese porcelains from the late seventeenth century and characterized by the use of transparent greens and iron red.

Glaze - A coating of colored, opaque, or transparent material applied to ceramics before firing.

Guan Ware - An official ware of celadon type made during the Southern Song dynasty at kilns in Hangzhou and imitated at the Longquan kilns. Guan also describes a round-shouldered jar with a wide mouth used as a wine container.

Modern design - Modern design is part of the larger movement of modernism, the deliberate departure from tradition and the use of innovative forms of expression that distinguish many styles in the arts of the 20th century.

Porcelain - A white, hard, vitrified, and translucent ceramic, which is high-fired (+12800 degree) and usually contains a mixture of kaolin (china clay) and petuntse (china stone).

Proportion - A relationship between things or parts of things with respect to comparative magnitude, quantity, or degree

Ru Ware - A fine rare stoneware with a blue-grey glaze made for the court at the beginning of the twelfth century at Qingliangsi, Henan province.

Saggar - A fire-clay container in which fine ceramics are placed during firing. The saggar ensures a consistent atmosphere and offers protection from kiln debris and direct flames.

Tableware - Tableware includes dishes, glassware, and cutlery (knives, forks, spoons, chopsticks and so on) used to set a table for eating a meal.

Western - the various cultures or social structures and philosophical systems of “the West”, or geographically the Western nations, including the Americas, Europe, Australia, New Zealand, and South Africa.

1.6 Assumptions

First, consumers’ response to specific product types varies among cultures. This sensitivity tends to be related to the age and cultural significance of the product category. Furniture and cooking utensils are far more culturally specific than more recent high-tech sectors. The scope of research is narrowed down to the relationship between cooking utensils

and culture. Unlike other consumer products, especially the digital products, which have been strongly influenced by Western design style, the functions and styles of the tableware in different cultures still keep their unique characteristics in the aspects of both functions and forms.

Secondly, it is assumed that the target users of the guidelines include both designers in China and designers in Western countries who are interested in the oriental culture and could also follow the guidelines to design modern daily-use tableware in the context of Chinese literature.

Third, oriental style has long cast a spell over the Western world with its air of elegant exoticism and mystery. Elements of oriental design style have been incorporated into Western style techniques for centuries. For Western people, this centuries-old theme continues to captivate from classic to contemporary design[18].

1.7 Scope and Limits

The scope of this research is aimed at designing modern daily-use tableware in the context of *Dream of the Red Chamber*. The methodology developed in this thesis does not limit itself to a specific novel, so that the designers could also design other modern products inspired by other traditional novels in a specific cultural literature. The primary research is limited to the specific novel *Dream of the Red Chamber*.

The methodology developed from this thesis, however, is not limited to modern daily-use tableware design. The research is merely an example to demonstrate how modern product design can be inspired by traditional literature as long as the function and styles of the product itself can still keep unique characteristics in the distinct cultural areas.

The scope of individuals targeted by the methodology developed includes all the designers who are interested in the oriental culture.

1.8 Procedure of Study

The following procedures and methods were used to conduct the study:

Step 1. Literature Review

- Research what other scholars have done in this area
- Identify the area of my research
- Study the methodology that other scholars have used to solve similar problems
- Identify the methodology that could be applied in my research

Step 2. Analyze the aesthetic elements in a novel

- Library & internet research
- Study the convention of writing analysis of the novel
- Identify the convention of writing analysis
- Read the novel
- Collect all the cultural aesthetic elements presented in the novel

Step 3. Based on the description of the daily-use tableware in the novel, analyze the aesthetic features of the tableware

- Shape
- Proportion
- Texture
- Color
- Pattern

- Balance
- Repetition

Step 4. Based on the research data, develop the framework to design the modern tableware

- Study the functions of the tableware
- Study the ergonomic factors of the tableware
- Study the texture, materials and manufacturing technology of tableware
- Study the form, proportion, colors and ornaments of tableware

Step 5. Apply the design guideline to the sample work

- Design tableware based on the design guideline to construct a set of tableware as an example

Step 6. Conclusion

1.9 Summary

Many issues relevant to the design guidelines of cultural tableware design, such as understanding the culture and cultural designs, the definition of tableware, and the relationship between Chinese culture and tableware, have been documented. The literary review supports the direction for an investigation into cultural aesthetic elements from *Dream of Red Chamber* integrated in tableware design.

Chapter 2

Identification of the Aesthetic Elements from *Dream of the Red Chamber*

2.1 Introduction to *Dream of the Red Chamber*

Two hundred years have passed since its first appearance, and yet *Dream of the Red Chamber* is still a hot topic of conversation among Chinese people, and criticism and research concerning it have crystallized into a specialized branch of study, whimsically referred to as “Redology”. *Dream of the Red Chamber* is rich in ideas and concepts. It is a multi-faceted world of art into which the more one delves the more one finds [19].

The author of *Dream of the Red Chamber* is Cao Xueqin (1715?-1763?). For three successive generations, a period of some 60 years, his ancestors had held the post of Textile Commissioner in Jiangning. His paternal great grandmother, surnamed Sun, had been nursemaid to the infant who was later to become the Kangxi emperor. His grandfather, Cao Yin, had been the future emperor’s study companion and close attendant, accompanying him when he came to the throne on four of his six inspection tours of the south, which was a singular honor. After the death of Cao Yin, the family, under the leadership of Cao Xueqin’s father, Cao Fu, continued to enjoy the emperor’s favour, but when the Yongzheng emperor ascended the throne, Cao Fu was removed from his office and punished on charges of financial mismanagement and incompetence in the management of courier stations. The family property was confiscated, and the Cao’s halcyon days came to an end.

Dream of the Red Chamber charts the course of prosperity and decline of an aristocratic family. It is a tragedy of love and marriage. The literary merit of *Dream of the Red Chamber* is also displayed in the grandness and exquisiteness of its artistic structure. The novel is a microcosm of the world of its time. *Dream of the Red Chamber* is an encyclopaedia novel [19]. Centered on an aristocratic family, it unrolls a panorama of social history. Every grade and

station of Chinese society of that time, from an imperial consort to peddlers and messenger boys, are presented in a true-to-life fashion.

The novel also provides a wealth of details concerning aristocratic households in those days, garden architecture, the equipage of carriages, clothing and ornaments, customs and etiquette, food and drink, medicines, etc. Indeed, the cultural reference content of *Dream of the Red Chamber* is of a kind rarely seen in the history of world literature.

2.2 Procedure of Analysis

The inspiration is not necessarily straightforward. Often, time is needed to seek inspiration and disparate sources are widely searched. Inspiration comes in many different forms, from many areas such as architecture, clothes, ornament, the possibilities are endless.

The first step is to explore the areas, when reading the novel, which will help you to move forward. This is just the beginning so you should not commit to a particular source of inspiration. Before arriving at the final form, a number of different subjects should be considered. It is better to have varied source material as long as the study is in-depth and useful.

After reading the whole novel, the descriptions about daily household items are categorized into several groups, including clothes, ornaments, tableware, food, furniture, daily-use items, decor items and architecture.

There are 151 descriptions of clothes, 36 about ornaments, 55 about tableware, 59 about food, 13 about furniture, 9 about daily-use items, 24 about decor items and 6 about architecture. The descriptions related to clothes, ornament, tableware, food, furniture, daily-use item, decor item and architecture are separately listed from Table 2.1 through Table 2.8.

Table 2.1: **Clothes description**

Category	Sub-category	Description
Clothes	Jacket	Her close-fitting red satin jacket was embroidered with gold butterflies and flowers.
		A honey-colored padded jacket.
		The pale grey silk padded jacket.
		A dark green jacket.
		A bright pink silk jacket.
		A silver-red jacket.
		A pale-white embroidered fur-lined jacket.
		A scarlet linen jacket.
		A scarlet jacket.
		A red crepe inner jacket.
		A deep green satin jacket lined with sheepskin.
		The scarlet jacket.
		The warm sable jacket.
		A pale blue satin jacket.
		A cerise padded jacket.
		A red crepe inner jacket.
		An ermine-lined peach-red silk tapestry jacket inset with a hundred-bead design.
		A dark green satin jacket lined with sheepskin.
		A padded red silk jacket.
		A short lined satin jacket a patchwork of dark purple, blue and jade-colored squares.

Continued on next page

Table 2.1 – continued from previous page

Category	Sub-category	Description
Clothes	Jacket	A dark green satin jacket.
		A red archer’s jacket, embroidered with golden butterflies and flowers.
		A yellowish green archer’s jacket embroidered with serpents and lined with white fox-fur.
		A fox-fur archer’s jacket.
		An archer’s jacket embroidered with white serpents.
		A red archer’s jacket embroidered with golden dragons and lined with fox-fur.
		A black satin sleeveless jacket with silk borders.
		A blue satin sleeveless jacket with silk borders.
		A long, sleeveless checked jacketed with dark silk borders.
		A sleeveless black satin jacket.
		A lined blue silk sleeveless jacket.
		A black satin sleeveless jacket.
	A rose-red sleeveless jacket lined with brown and snow-weasel fur.	
	Tunic	A pale grey plain silk tunic.
		A narrow-sleeved, none to new yellowish green satin tunic lined with white squirrel, with fur-lined cuffs and collar, which was embroidered with dragons in gold thread and colored silks.
A blue crepe tunic lined with a curly sheepskin.		
Gown	The purple velvet gown lined with fox-fur.	
Continued on next page		

Table 2.1 – continued from previous page

Category	Sub-category	Description	
Clothes	Gown	A bright green gown lined with white squirrel.	
		A purple woolen gown.	
		A French blue gown lined with white squirrel.	
		A new lilac blue linen gown.	
		A gown of blue velvet buttoned down the middle.	
	Coat	An ermine coat lined with grey squirrel.	
		An otter waist coat.	
		A black satin coat lined with squirrel.	
		A the fox-fur-lined coat of turquoise silk tapestry inset with eight circular designs.	
		The black fox-fur coat.	
		His brown velvet archer’s coat lined with fox fur, a scarlet felt jacket embroidered with gold thread. Its turquoise satin border was fringed with tassels.	
		A turquoise fringed coat of Japanese satin with a raised pattern of flowers in eight bunches.	
		A fringed turquoise sable coat.	
	Stomacher	A white silk stomacher lined with red, which she was embroidering with mandarin ducks at play among some lotus. The lotus flowers were pink, the leaves green, and the ducks a medley of colors.	
	Underclothes	The green linen underclothes.	
		The red silk underclothes.	
	Shirt	A silver-red linen shirt.	
	Continued on next page		

Table 2.1 – continued from previous page

Category	Sub-category	Description
Clothes	Cloak	A crimson camlet cloak which buttoned in front.
	Cape	Her turquoise cape, lined with white squirrel, was inset with designs in colored silk.
		A turquoise cape lined with grey squirrel, inset with designs.
		The black satin cape.
		A fine coir cape.
		A scarlet woolen cape.
		A hooded scarlet woolen cape.
		A crimson silk cape lined with white fox-fur.
		A red cape of wool or satin.
		A red cape of satin.
		A pale purple woolen cape embroidered with flower design.
	Robe	A white robe embroidered with zigzag wave patterns and five-clawed dragons.
	Hood	The dark sable hood.
		The crimson hood.
		A big cape with a grey squirrel-fur hood.
A scarlet woolen hood with a gosling-yellow applique of cloud designs and a golden lining.		
Collar	A big sable collar.	
Continued on next page		

Table 2.1 – continued from previous page

Category	Sub-category	Description
Clothes	Bodice	She had on a tight-fitting bodice with a bold border and rows of long buttons and loops in front, over which she had tied a node to a new dark green sash.
	Trousers	The glimpsed dark green glowered satin trousers with a flower pattern.
		The glossy dark green silk trousers embroidered with flowers.
		The flowered green silk lined-trousers.
		The green black-dotted satin trousers.
		The bright pink trousers with a floral design.
		The green trousers.
		A pair of blood-red trousers.
		The pomegranate-red trousers with floral designs.
	Pants	The red pants.
	Breeches	Her bright pink satin breeches were lined with fox fur.
	Skirt	Her skirt of verdancy crepe was patterned with flowers.
		A skirt of crimson foreign crepe lined with snow-weasel fur.
		A skirt of leek-yellow silk.
		A white silk damask skirt.
		A white silk skirt.
		A leek-green padded skirt embroidered with colored silk and gold thread.
A pale green skirt.		
Continued on next page		

Table 2.1 – continued from previous page

Category	Sub-category	Description
Clothes	Skirt	A white silk skirt.
		A red skirt.
		A pink embroidered silk padded skirt of the kind worn by lady Yang.
		A sapphire blue embroidered padded skirt.
		A white skirt with dark designs.
		A sapphire blue embroidered padded skirt.
	Boot	The court boots were of black satin with white soles.
		The red boots lined with lambskin and inset with a gold-thread cloud-design applique.
		Her boots were of green leather.
		The small tiger-head battle boots decorated with multi-colored curling clouds.
		The white socks and thick-soled boots.
		The turquoise boots.
	Shoes	The thick-soled scarlet shoes.
	Slippers	The slippers with butterfly and flower designs.
		The red slippers.
		The red slippers.
		Her new embroidered red slippers.
	Socks	The black-dotted socks with brocade borders.
		The white socks.
		The green socks.
		The cotton socks embroidered with gold thread.
Continued on next page		

Table 2.1 – continued from previous page

Category	Sub-category	Description
Clothes	Hat	A snow-hat.
		A rattan hat.
	Cap	A princely silver-winged cap with white tassels.
		A sable cap in the shape of a crouching hare.
	Sash	A white silk sash.
		A willow-green sash.
		She had on a tight-fitting bodice with a bold border and rows of long buttons and loops in front, over which she had tied a node to a new dark green sash.
		“You’ve nothing to do anyway, dear sister, so do make them for me.” “You’re asking the impossible,” protested Xiren with a smile, “let her first do a couple of the kind you need most.” “And which are those?” asked Yinger. “Nets to hold fans, scented pouches, or sashes?” “Yes,” said Baoyu. “One for a sash would be nice”. “For what color sash?” asked Yinger. “Scarlet,” said Baoyu. “A black or turquoise net would make a good contrast, then”. “What would match a dark green one?” “That would go well with peach-pink”. “All right. Do me one also in peach-pink and another in leek-green”. “What design would you like?” “How many do you know?” “ <i>Incense-stick, ladder, lozenge, double squares, chains, plum-blossom and willow-catkins.</i> ”
		A yellowish green silk sash.
Continued on next page		

Table 2.1 – continued from previous page

Category	Sub-category	Description
Clothes	Sash	A colored tasseled palace sash with clusters of designs.
		A sash embroidered with many-colored butterflies.
	Girdle	A green girdle.
	Tassel	“Of course, cousin!” Bauyu clapped his hands in approval. “I’d forgotten that. But what color would be best?” “Nothing too nondescript would do,” said Baochai. “But crimson would clash, yellow wouldn’t stand out well enough, and black would be too drab. I suggest you get some golden thread and plait it with black-beaded thread to make a net. That would look handsome”.
		The pea-green tassels attached to her skirt.
	Cord	A silk cord of five colors.
	Belt	A green and gold plaited belt with double rings.
		A long-tasseled colored butterfly belt.
		A red leather belt studded with green jade.
		A silver belt set with pearls.
Her knots of clove and her hibiscus belt.		
Accessories	Antimacassar	The black-dotted antimacassars.
		Below the kang facing the west wall were four armchairs, their covers of bright red dotted with pink flowers.
	Bolster	The red silk back-rests and bolsters embroidered with <i>Dragons in the Clouds</i> designs and the character <i>Longevity</i> .
Continued on next page		

Table 2.1 – continued from previous page

Category	Sub-category	Description	
Accessories	Bolster	A back-rest and bolster of brocade with chain designs.	
		In the middle were red back-rests and turquoise bolsters, both with dragon-design medallions.	
	Mattress	A glossy satin mattress with a golden center.	
		A bamboo mat woven in a lotus pattern.	
		A long greenish yellow mattress also with dragon medallions.	
	Rug	The large Kang by the window was covered with a scarlet foreign rug.	
	Portiere	Two hundred blinds were delivered yesterday. Beside these, there are two hundred portieres of crimson felt, two hundred of red lacquered bamboo with gold flecks, two hundred of black lacquered bamboo, and two hundred woven with colored silks. Half of each kind is ready, the rest will be finished by the end of autumn. Then there are chair-covers, table-drapes, valances and stool-covers - one thousand two hundred of each - which we already have.	
		The soft flowered portiere.	
		A leek-green flowered portiere.	
		A red portiere embroidered in gold flowers.	
	Continued on next page		

Table 2.1 – continued from previous page

Category	Sub-category	Description
Accessories	Tapestry	Twelve red tapestry scenes from the opera <i>Every Son</i> a high Minister on one side and one the other gilded depictions of the character <i>Longevity</i> in various styles of calligraphy.
Bedding	Quilt	An apricot-red silk quilt.
		A peach-red silk-padded quilt.
	Pillow	A jade-colored gauze pillow filled with all sorts of fresh rose and peony petals.
		An agate pillow.
Material	Satin	Of the one hundred and twenty satin curtains embroidered with serpents and large and small black-dotted brocade hangings inset with different designs and colors, eighty were ready yesterday and forty are still to come.
		Forty rolls of red flowered satin; forty rolls of satin with serpent designs; a hundred rolls of Imperial gauze of different colors; four gold necklaces.
		Twelve rolls of first-grade Imperial brocade with the serpent design. Twelve rolls of different colors for the Imperial use. Twelve rolls of Imperial gauze in different colors. Twelve rolls of Imperial silk. Twenty-four rolls of satin, gauze and silk in different colors for official use.
	Silk	The pomegranate-red silk.
		A red silk sutra wrapper with serpent design.
		The raw silk.
		Continued on next page

Table 2.1 – continued from previous page

Category	Sub-category	Description
Material	Silk	Two lengths of phoenix-tail silk.
		This soft-mist silk comes in four colors only: Light blue, yellowish green, dark-green and silver-red. Used for bed-curtains or window gauze, from a distance it looks like smoke or mist, that’s how it got its name.
	Gauze	The blue gauze.
		The pale blue gauze.
		The wrapper was of black-dotted silk gauze, lined with bright pink silk.
		The several rolls of silver-red cicada - wing gauze in one of the chests. There are several different designs - sprays of blossom, floating clouds and bats, butterflies and flowers - the colors so vivid and the gauze so soft.
		“I’m learning that too from Nanny Liu,” said Qiaojie. “Applique work, chain-stitch and so on. I’m not much good at it, but I’m learning some different stitches”.

Table 2.2: Ornament description

Category	Sub-category	Description
Jewelry	Tiara	Her gold-filigree tiara was set with jewels and pearls.
		A gold filigree phoenix tiara inlaid with pearls.
	Coronet	A golden coronet studded with jewels.
Continued on next page		

Table 2.2 – continued from previous page

Category	Sub-category	Description
Jewelry	Coronet	A golden filigree coronet studded with gems.
	Chaplet	A golden chaplet in the form of two dragons fighting for a pearl.
		A gold chaplet in the form of two dragons fighting for a pearl.
		A silver chaplet in the form of two dragons rising from the sea.
	Band	A pearl-studded band.
	Hair-clasps	Her hair-clasps, in the form of five phoenixes facing the sun, had pendants of pearls.
	Pompon	The crimson velvet pompon, the size of a walnut.
	Pin	A flat gold pin.
	Flower	Biyun held out a large emerald plate in the form of a lotus leaf, on which were chrysanthemums of different kinds. The lady Dowager selected a red one and pinned it in her hair.
	Stick	Then sticks of four-o'clock-seed powder.
	Necklet	Her necklet, of red gold, was in the form of a coiled dragon studded with gems.
	Torque	A gold filigree necklet studded with pearls as large as lotus seeds; in the other, a jeweled green enamel necklet.
	Ring	A couple of crimson cornelian rings.
	String	Two strings of red beads scented with musk.
Pendant	The rose-red jade pendants in the form of double-flatfish.	
Continued on next page		

Table 2.2 – continued from previous page

Category	Sub-category	Description
Jewelry	Pendant	The golden pendants in the form of the eight precious things.
		A Han-Dynasty jade pendant carved with nine dragons.
		A ruby-ear-ring set in gold the size of a gingko nut.
		A gold unicorn decorated with turquoise enamel.
	Trinket	Four pairs of jeweled trinkets set in gold.
	Amulet	The amulets of gold and jade engraved with the inscriptions.

Table 2.3: Tableware description

Category	Sub-category	Description
Tableware	Cup	A small covered cup on a little lacquered tray.
		A tiny red soapstone cup shaped like a palm leaf.
		Variegated cloisonne cup.
		The set of ten cups carved out of bamboo root.
		Teacups made in a previous reign; and gay little teapots filled with the finest tea on a small tray of Western lacquer ware. Set out too was a crimson gauze screen in a carved purple-sandalwood frame embroidered with flowers and calligraphy.
		Three pairs of glided cups.
		Thirty-six silver cups.
		Continued on next page

Table 2.3 – continued from previous page

Category	Sub-category	Description
Tableware	Cup	The amber cups.
		On either side were two tables set out with teacups and vases of flowers.
		One laid with cups, chopsticks and wine pots, the other with a tea-service.
		Amazement because all ten fitted into each other, the largest being the size of a small basin and even the smallest as big as the cup in her hand. Admiration at the fine landscapes, trees and figures carved on them, as well as the seals and inscriptions.
	Beaker	The green jade beaker.
	Goblet	A huge goblet carved out of a whole bamboo root which was covered with knots and whorls.
	Wine vessel	This was flanked by a bronze wine vessel inlaid with gold.
		glass vessel.
	Tray	A carved lacquer tea-tray in the shape of crab-apple blossom, gilded with a golden design of the <i>cloud dragon offering longevity</i> .
		A small carved, double-circle foreign lacquer tray.
	Pot	A tarnished silver pot with a plum-blossom design.
		A wine pot apiece.
		Everyone also had a tarnished silver sine-pot with engraved designs.
		The whole dark blue porcelain pot.
Continued on next page		

Table 2.3 – continued from previous page

Category	Sub-category	Description	
Tableware	Pot	A silver pot.	
		Four gilded pots.	
		A silver pot of freshly-heated wine.	
	Saucer	Seventy-six silver saucers.	
	Dish	The forty white Ding ware dishes, no bigger than saucers.	
		A big dish of Guan-ware porcelain.	
	Plate	The gold and silver plate.	
		A white agate plate with spiral designs.	
		A large emerald plate in the form of a lotus leaf.	
		Two pale gold plates.	
		Twenty silver plates.	
		Ru-ware plate.	
	Chopsticks	The ebony chopsticks inlaid with silver.	
		An old-fashioned pair of square-edged ivory chopsticks inlaid with gold.	
		The ivory chopsticks.	
		An ebony pair inlaid with silver.	
		Two pairs of ivory chopsticks inlaid with gold.	
	Bowl	A crystal bowl.	
		A covered bowl of tea on a small tray.	
		A covered gilded polychrome bowl made in the Cheng Hua period.	
		Two pairs of gold bowls.	
		Two gilded bowls.	
	Continued on next page		

Table 2.3 – continued from previous page

Category	Sub-category	Description
Tableware	Bowl	Eighty big silver bowls.
		A crystal bowl.
		Melon-green covered bowls with raised golden designs of new Imperial kiln porcelain.
		Shaped like a small alms-bowl, bore the name in the curly seal script: <i>Rhinoceros Cup</i> .
	Spoons	Forty gold spoons.
	Napkin	A cambric napkin.
	Box	Ten-compartment box of tidbits.
	Hamper	Multicolored lacquered hampers inlaid with gilt designs.
		Two small woven bamboo hampers.
		Small hamper.
	Bottle	They were tiny glass bottles barely three inches high, with silver caps which screwed on, and yellow labels. On one was written <i>Pure Osmanthus Juice</i> , on the other <i>Pure Rose Juice</i> .
	Mold	The casket containing the four silver molds. More than a foot long and about one inch across, they were inset with more than thirty delicately fashioned shapes no larger than peas - chrysanthemum, plum-blossom, lotus flower, caltrop and the like.

Table 2.4: Food description

Category	Sub-category	Description
Drinking	Tea	Maple-dew tea.
		Puer tea.
		Nuer tea.
	Wine	This wine is made from the stamens of a hundred flowers and the sap of ten thousand trees mixed with the marrow of unicorns and fermented with phoenix milk.
		Hui Fountain wine.
		A pot of spirits in which acacia flowers had been steeped.
		New Year wine.
Staple food	Powder	Powered green beans scented with chrysanthemum leaves.
	Taros	A dish of steamed taros.
	Noddle	A hundred bundles of silver-silk noodles of the kind used in the Palace.
	Rice	A big bowl of hot green rice.
	Dumpling	A plate of beancurd dumplings.
		Tiny fried dumpling no more than one inch long.
	Soup	A bowl of cabbage soup with ham and dried shrimps, as well as some bamboo shoots and laver in it.
		One bowl of chicken skin soup with shrimp balls.
		The quail soup.
		The happy-reunion soup.
		A bowl of ham-and-fresh-bamboo-shoot soup.
Continued on next page		

Table 2.4 – continued from previous page

Category	Sub-category	Description
Staple food	Broth	The broth made with small lotus leaves and lotus seeds.
		The lotus-seed and date broth.
	Porridge	Half a bowl of green-rice porridge.
	Congee	Some milk and sweetened rice congee.
		Duck congee.
		Date congee.
	Gruel	Almond gruel.
		Bird's nest gruel.
Main meal	Main meal	A bowl of fresh pork stewed with ham.
		A lamb embryo steamed in milk.
		One bowl of steamed duck with wine sauce.
		One of salted goose.
		Fried egg-plant.
		Some fried wolfberry sprouts.
		Bamboo-shoots with chicken marrow.
		A bowl of bamboo-shoots and a dish of salted raccoon.
Snack	Snack	The goose feet and duck tongues.
		Deep-fry some quails.
		He steeped a bowl of rice in hot tea, added some diced pheasant and hastily swallowed this down.
		Chicken-fat rolls.
		Pine-kernel and goose-fat rolls.
		Pigeon's eggs.
		A piece of crystallized ginger from the plate Sheyue.
Continued on next page		

Table 2.4 – continued from previous page

Category	Sub-category	Description	
Snack	Snack	Salted turnips.	
		Five-spice pickles with sesame oil and vinegar.	
		The fried bones.	
Dessert	Cake	The yam cakes stuffed with dates.	
		Some caltrop cakes.	
		Powered chestnut cake sweetened with osmanthus.	
		Cakes made of ground lotus-foot flavoured with fragrant osmanthus.	
		Wish-fulfillment cakes.	
		A hundred longevity cakes in the shape of peaches.	
		Melon-seed oil mooncakes stuffed with pine-kernels from the Palace.	
	Pastry	Small colored pastries fried with cream.	
		Granny Liu was struck by the daintiness and variety of the small pastries. Selecting one shaped like a peony she said:“ The cleverest girls in our village couldn’t make scissor cuts as good as this”.	
		Puff	Another of four pine-kernel cream puffs.
		Junket	Sweetened junket arrived from the Imperial Consort.
		Candy	Candied rose petals.
		Sugar	A packaging of fine plum-petal snow-white sugar from Alpinia Park.
Fruit	Fruit	Lucky fruit.	
		A bowl of pear juice and dried-longan syrup.	

Table 2.5: **Furniture description**

Category	Sub-category	Description
Furniture	Chair	A row of sixteen cedar-wood armchairs.
		Below the kang facing the west wall were four armchairs.
		Twelve carved lacquer chairs covered with grey squirrel-skins.
	Couch	The wicker couch.
		To their east stood a carved openwork dragon-screen, with below it a low couch spread with cushions, pillows and furs.
		She sent her maid for an embroidered cushion and sat by the balustrade angling for fish.
		By now Xifeng and her helpers had everything in perfect order. There were two couches on the north side, left and right, spread with brocade cushions and velvet coverlets in a lotus pattern. In front of each couch stood two carved lacquer teapots of different shapes with pyrus-blossom, plum-blossom, lotus and sun flower designs, some square, some round, one of which held an incense-burner, a vase and a box of various sweatments.
		With four footstools beneath them.
	Table	At each side stood a low table of foreign lacquer in the shape of plum-blossom.
		The large red sandalwood table carved with dragons.
Continued on next page		

Table 2.5 – continued from previous page

Category	Sub-category	Description
Furniture	Table	Beside the pillows, an elegant low table of foreign lacquer with tilt designs was set out with a teapot, cups, rinse-bowls and towels as well as a spectacle-case.
		Upon reaching the pavilion they saw on the balcony two bamboo tables.
	Shelf	There were only partitions formed of shelves for books, bronze tripods, stationery, flower vases and miniature gardens, some round, some square, some shaped like sun-flowers, plantain leaves or intersecting arcs. They were beautifully carved with the motifs <i>clouds and a hundred bats</i> of the <i>three companions of winter</i> - pine, plum and bamboo - as well as landscapes and figures, birds and flowers, scrollwork, imitation curios and symbols of good fortune or long life. All executed by the finest craftsmen, they were brilliantly colored and inlaid with gold or precious stones. The effect was splendid, the workmanship exquisite.

Table 2.6: Daily-use items description

Category	Sub-category	Description
Daily Items	Incense	Two slabs of perfumed incense shaped like plum-blossom from her pouch.
Continued on next page		

Table 2.6 – continued from previous page

Category	Sub-category	Description
Daily Items	Incense-box	Incense-boxes carved out of bamboo roots.
	Stove	Tiny clay stoves.
	Toy	Toy tumblers weighted with quicksilver.
	Basket	Little willow baskets.
	Casket	A porcelain casket made in the xuan De period.
	Case	A small flat, golden-starred glass case with gilt double-catches.
Vehicle	Carriage	A blue lacquered carriage with verdancy curtains.
		The carriage shared by Baochai and Diayu was gay with a verdancy awning, pearl-tassels and designs of the <i>Eight Precious Things</i> .

Table 2.7: Decor items description

Category	Sub-category	Description
Decor	Scepter	A sandalwood Ruyi scepter.
	Spittoon	A silver spittoon.
	Sword	She looked at the dragon and serpent designs on the sheath which was studded with bright pearls and jewels, then drew out the two swords, identical in size, one engraved with the word <i>duck</i> , the other <i>drake</i> .
	Vase	A pair of vases.
Continued on next page		

Table 2.7 – continued from previous page

Category	Sub-category	Description
Decor	Vase	On the right one, a slender-waisted porcelain vase from the Ruzhou Kiln containing flowers then in season, as well as tea-bowls and a spittoon.
		On either side were two tables set out with teacups and vases of flowers.
		Ru ware vase the size of a peck measure was filled with chrysanthemums white as crystal balls.
		A rough crackleware vase.
	Jar	That evening when Daiyu went into the inner room to get ready for bed, the sight of the jar of litchi reminded her of the old woman's maundering.
	Tripod	An old bronze tripod, green with patina, stood about three feet high.
		On the left-hand table were a tripod, spoons, chopsticks and an incense container.
		Put the tripod with dragon designs on the table.
		The dark steatite tripod.
		Ancient bronze tripods and libation cups green with patina.
		The tripod with dragon designs.
	Brazier	A large gilded cloisonne brazier, its three legs in the form of elephant trucks.
	Continued on next page	

Table 2.7 – continued from previous page

Category	Sub-category	Description
Decor	Music stone	To its right, suspended on a lacquer frame, was a white jade musical stone in the form of double-flatfish, with a small hammer next to it.
	Chandelier	From the great beams on either side hung crystal, hibiscus-shaped chandeliers with colored tassels. In front of each table was a candelabrum of Western enamel with a lacquer shade in the shape of an inverted lotus leaf; and this could be turned outwards to shade the colored candles' light from the feasters and illumine the stage more brightly. The lattices of feasters and illumine the seat more brightly. The lattices of the windows and doors had been removed and in their place hung gaily-tasseled Palace lanterns. From the eaves of the house, as well as the covered walks on either side, hung lanterns made of horn, glass, gauze, cut-glass or silk and paper with embroidered or painted, raised or incised designs.
	Drawing	On the wall hung a large scroll-picture of black dragons riding the waves.
	Placard	Before the porch hung a placard gilded with the nine-dragon design, and the inscription <i>Stars Shine on the Assistant</i> , which had been written by the late Emperor himself.
	Paper	Baoyu chose a sheet of pink paper with a gilded border and floral design on one of the top and bottom corners.
Continued on next page		

Table 2.7 – continued from previous page

Category	Sub-category	Description
Decor	Paper	Baoyu saw a newly written couplet on purple paper with gilded cloud-dragon designs.
	Candle	On both sides below the steps, tall vermilion candles blazed like golden dragons.
	Lantern	earthen ware lantern.

Table 2.8: Architecture description

Category	Sub-category	Description
Architecture	Wall	The walls were of polished bricks of a uniform color, and the white marble steps were carved with passion-flowers.
	building	From there they went on some way until ahead of them loomed towering pavilions enclosed by magnificent buildings, all of them connected by winding passageways. Green pines brushed the eaves, white balustrades skirted the steps, the animal designs glittered like gold and the dragon-heads blazed with color.
	Arch	They were now at the foot of a marble arch finely carved with rampant dragons and coiling serpents.
	Tablet	Two inscriptions inlaid in mother-of-pearl on the black lacquer tablets hanging on the pillars.
Continued on next page		

Table 2.8 – continued from previous page

Category	Sub-category	Description
Architecture	Tablet	The tablet over the entrance to the main hall was engraved with frolicking dragons, and bore the intagliated motto in blue: <i>Venerate the Departed, Continue Their Sacrifices.</i>
	Panel	Above these hung two panels of ebony with the following couplet gilded in silver.

The description about the tableware and vessels for tea and wine give me the most inspiration; therefore, these three categories are further studied.

First, the materials for tableware and vessels are grouped into lacquer, wood, metal, jade, glass and ceramics. Lacquer is mainly used for the lunch boxes and wood is mainly for the cups and chopsticks. Among the rest of the four categories, ceramics are the most mentioned for the tableware and vessels. Out of the categories of materials, ceramics are selected as the further research topic.

Ceramics are also named china, which can represent the history, spirit and technology of China. China has the longest history of advanced ceramic production. Chinese ceramic ware as an art form has been developing since the dynastic periods [32]. The skill of Chinese potters and the high degree of organisation had ensured China’s constant position as the world’s foremost producer of ceramic artifacts [28].

The potter’s art in China is peculiarly absorbing and attractive for its antiquity, variety, beauty and the wonderful skill of the Chinese potters, accumulated from the traditions of centuries. The Chinese ceramic wares are well known for the brilliant decoration and natural color sense. The specimens in pure Chinese taste, and particularly the Court wares,

are unsurpassed in quality and finish. Chinese poets make frequent reference to its dainty qualities, its jade-like appearance, its musical ring, and its lightness and refinement [34].

Dream of the Red Chamber includes meticulous descriptions of life in a grand eighteenth-century house and mentions Guan, Ru, Ding and enamelled wares. The features of these four wares will be introduced in the following sections.

China has one of the longest histories of production of world ceramics tradition. The documentation of the Chinese historical ceramic trade demonstrated that it has had a remarkable impact on other cultures, especially, Europe. There are some descriptions about Chinese ceramics from which we can evaluate the impact on all aspects of life in different cultures. For instance, if we read the literature in English, Chinese porcelain was regarded as a pure, clean substance for eating and drinking, especially dessert and tea. At the same time, the decoration and design was viewed as fashionably 'Oriental'. Certainly in Europe, Chinese porcelain was the primary influence on the development of chinoiserie, a design category and style in the eighteenth century [32].

Aside from the features of the wares mentioned in this novel, the tableware has two more special features.

Firstly, the tableware mentioned in this novel is made for the emperor, which reflects the status of a great family and also relates to the author's family background in honor of the emperor.

Second, in this novel, besides the major male character, Jia Baoyu, the author described twelve young girls in details. We know little about the process of the novel's creation. In the *Author's Preface*, "but no matter how unforgivable my crimes, I must not let all the lovely girls I have known pass into oblivion through my wickedness or my desire to hide my shortcomings... Though I have little learning or literary talent, what does it matter if I tell a tale in rustic language to leave a record of all those lovely girls. This should divert readers too and help distract them from their cares". That is why in this novel, besides the major male character, Jia Baoyu, the author described twelve lovely girls in amazing detail.

Therefore, the house hold utensils, including the tableware, used by these girls should look more feminine than some other novels.

2.3 Finding of Implications of Analysis

The most notable feature of Chinese civilization is its long continuity, which has extended over five thousand years. This continuity is demonstrated in the art history and especially in ceramics development. From the 10 BC down to the present time, the ceramics development is fairly clear, and there is not a single century in this long period into which a considerable number of ceramic objects can be fitted [24]. Thus a partial history of Chinese ceramics can be studied. The following is a timeline of the history of China from the Song Dynasty to the Qing Dynasty.

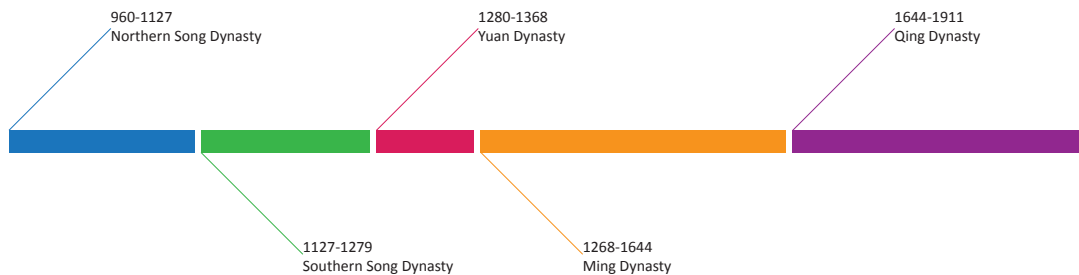


Figure 2.1: Chinese history timeline from Song to Qing Dynasty

2.3.1 Ding Ware

2.3.1.1 Introduction of Ding Ware

Ding ware is a quite specialized Northern Song ceramic. It seems that Ding ware was one of the first wares to emerge as an influential form among the Chinese kilns flourishing at the end of the tenth century. Ding ware in the Song dynasty is the culmination of tradition of white wares from other tenth-century kilns. Ding ware made good use of local raw materials and techniques to develop the hard, fine, ivory-white stoneware that has some of the characteristics of porcelain.

Ding ware was located in present-day Jiancicun in Quyang county, Hebei province. In the Song dynasty, this area was in Ding prefecture (as distinct from Ding County, also in Hebei). The kilns began to produce white wares during the eighth century, in the mid to the late Tang dynasty, and continued to manufacture them until the thirteenth or fourteenth century. The Song wares undoubtedly reached the peak of their quality in the six-hundred-year period.

Ding ware intentionally emphasized the quality variation among the different types of wares. With the special features of ivory-white wares, Ding ware led the head of a great tradition that they continued to carry forward in the Song dynasty.

Ding ware presents mastery of materials and firing technology. The high quality of Ding wares got the favour of emperors, officials and scholars in the Song dynasty, whose taste to some extent in turn influenced the popularity of Ding ware.

2.3.1.2 Techniques of Ding Ware

The introduction of a new firing technique was prompted by the great demand for the fine white wares and the difficulties that resulted from their thinness. Ding ware was fired in a saggar with stepped sides rather than each piece being fired in its own saggar, the bow protecting the pot from direct flames.

The upside-down firing technique (Fu Shao) became common in the late Northern Song. This upside-down firing seemed to be first adapted for Ding ware for both technical and economic reasons. It resulted in stacked firing whereby a stack of several pots could be fired in one saggar, which saved space and reduced the kiln costs (Figure 2.2).

Thinly potted open wares were made at the kilns, and these tended to warp when fired on their foot rims. The rims of the bowls and dishes were placed down on the steps in order to spread weight more evenly and guard against distortion of their thin bodies in the kiln.

The technology required the wide-rimmed bowls to be placed upside down, which could be stacked in stepped firing saggars, thus making good use of the firing capacity. The rims

of the objects had to be free of glaze to avoid sticking to the saggar during firing. Fu Shao technology increased the quality of bowls production and thus was considered the method to improve mass production.

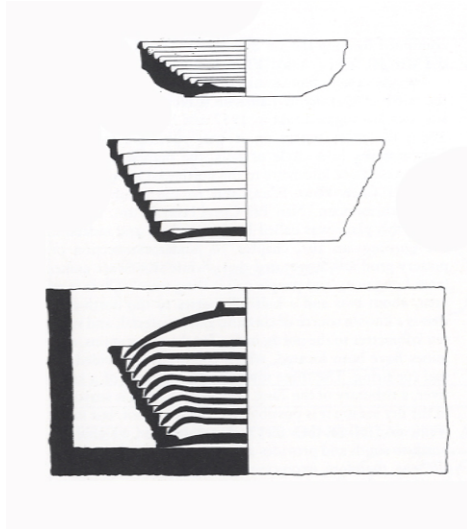


Figure 2.2: **Stepped saggars showing the method of packing**

One disadvantage of this firing method was the unglazed rim that was called rough mouth (Mang kou) of Ding ware. The Ding potters solved this problem by covering the rim with beaten silver or, more usually, copper bands (Figure 2.3). Since the early Tang dynasty, gold rims had been used on precious jade and occasionally ceramic cups. Since a few Ding pieces have gilded decoration, the metal band on many more Ding wares became a mark of esteem. Other less obvious results were the near elimination of the foot-ring, which was reduced to a tiny strip, and the whole foot and base were coated with glaze.

One characteristic element of color on many Ding wares was not the color of glaze but rather the colored metal band that was applied after firing around the rim. This band had both a functional and aesthetic purpose. The function of the metal band related to the firing method and the malleability. The metal band could also protect one of the most delicate parts of the pot, its unglazed lip. The binding of rims was considered an embellishment of Ding ware, which complemented the ivory glaze.



Figure 2.3: Dish 1

The Fu Shao technology, along with the invention of the fast wheel, decoration molding and shape, made major progress in advancing industrial ceramic techniques.

2.3.1.3 Glaze of Ding Ware

Ding ware produced a smooth ware, not readily translucent. The glaze of Ding wares were primarily colorless but with a distinct ivory tinge and smooth, glossy texture that gave them a luminous quality (Figure 2.4). As a characteristic of porcelain, in transmitted light, the body of Ding wares could show a warm glow.

The ivory-toned, glossy magnesia glaze on Ding wares was characteristic in the Song period, but it was in fact a deliberate design that made use of the properties of coal-fuelled firings that were more conducive to oxidizing atmospheres. The warmer tone colors of the glazes are the result of the atmospheres.

Ding ware is famous for its ivory-white tone and transparent glaze. A few, rare examples of Ding ware, however, have black, green and brown glazes or brown-painted and incised decorations. The very best dark-glazed type has a glossy, deep-black glaze that resembles



Figure 2.4: **Ding ware basin. Song Dynasty, 11-12 century. Diameter: 24.5cm**

lacquer, while another valued style is known as 'purple Ding' because of its aubergine-brown glaze (Figure 2.5).

2.3.1.4 Shapes of Ding Ware

In the Northern Song dynasty, the predominating potting method for mass production was wheel-throwing that produced the elegant carved designs with a thin-wall, a finely finished lip and an elegantly fashioned foot-ring. Great quantities of bowls and dishes survived in the Song dynasty, which were made in different styles, colors and materials. Ding wares combine a refinement in materials and potting, and at their best, are among the most elegant examples of this style.



Figure 2.5: **Henan black ware tea bowl. Northern Song/Jin dynasty, 11-12th century. Diameter 9cm, height 4.4cm.**

The large examples of bowls that have been used for eating had the conical shape with a narrow foot (Figure 2.6). Serving vessels with a wide mouth in the white wares may reflect an aesthetics taste that related to the food [21].

In the Song dynasty, the high-quality Ding wares were typically deep foliated bowls that were very similar to the tenth-century bowls but had more refinement. In the early Song dynasty, no new shape seemed to be produced. The bowls with a thin trailing line of slip up the inside imitate the foliation shape that later was formed by simple V-shaped cut in the lip. The central medallion in the well of the bowl remained plain.

Various shapes of better quality wares became popular. The flower-shaped bowl at first had straight lips and a profile like a buttercup. Later, the lip became flared and even with a flange. A more elegant bowl with straight sides was introduced. The straight sides that flared from a tiny foot made a wonderful surface for the decoration. The saucer with a completely flat base but without a foot was also particularly elegant in Ding ware for its color and delicacy.

The dish (Figure 2.7) has a flat, slightly recessed base and eight-lobed cavetto. The rim is lobed and flattened, but the edge of the rim is slightly raised.

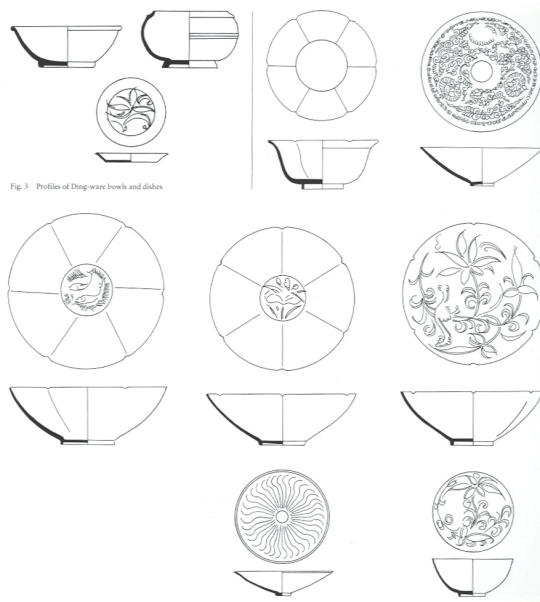


Figure 2.6: Profiles and drawing of decoration on Ding ware



Figure 2.7: Ding ware trilobate dish. Northern Song dynasty, 10th century. Diameter 13.4cm, height 2.9cm

The slightly lobed rim gives this dish the appearance of being made up of three petals. The petals are defined by fine trails of slip running from the inside of the rim to the base of the dish. Faint incised lines indicate the lobing on the outside of the well.

2.3.1.5 Decoration of Ding Ware

Ding ware was an official ware, whose one feature is its especially pronounced decoration. Ding ware is admired for its detailed ornaments through various decoration techniques, including carved and incised rather than painted designs, which were all used to great effect.

During the first twenty-five years of the Song dynasty, the incised technique was used on Ding ware for either a floral motif, fish in waves or ducks. The incised decoration may derive from traditional green wares in Zhejiang in the tenth century. The incised technique of cutting a sloping, incised line into the leather-hard body was quite popular to many kilns in the Song dynasty.

The potters lightly drew a series of lines, with a broad, sweeping, sloping cut that were strengthened by one or more fine lines running parallel.

For instance, the prunus vase (Figure 2.8) has a tall, elegant shape. This vase, with a fine white body and a thin ivory glaze, was thrown in three sections; neck, shoulder and body that are glued together by joints.

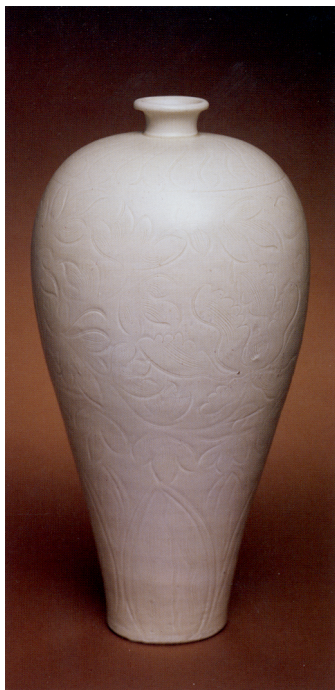


Figure 2.8: Ding ware prunus vase. Northern Song dynasty, 11-12th century. Diameter 18.4cm, height 36.5cm

The decoration on the vase was carved under the glaze. There are three different decoration zones on the vase body. On the shoulder, above a carved circle, is a slanting S-form overlapping petal design. A bold, freely disposed peony scroll was applied on the main body section, and a band of large overlapping petals or leaves was applied on the foot of the vase. The incised decoration was cut at an angle, and typically, a number of the outlines were enforced by additional parallel lines.

Ding ware was famous for the feature of its decoration. The trend of mimicking precious materials, such as gold and silver, started the mass-production through molds.

Compared to the more labor-intensive individually carved method, molded decoration introduced at the turn of the eleventh century, was an opposite approach to design apparent on wares for the mass production. The use of molds meant not only that designs could be produced more quickly by semi-skilled laborers, but also that pieces of a standard size could be made more easily. The development is also tied to the adoption of metalwork shapes in the ceramic wares of this period.

Molds were made of clay with the same compact, fine texture as the body of the vessels. They were fired at a lower temperature so that they would remain slightly porous, a condition that aided crisper casting.

In the molding approach, the bowl was made by the thrown wheel as usual and then, when it was dry enough to handle, it was placed face down over a ceramic mold on which a deeply incised design had been applied. The bowl was pressed firmly over a bowl-shaped mold already carved with ornamentation at the same time the thickness of the wall of the piece was reduced through turning on a lathe. After the bowl was removed and fired, the mold could be used again. Since the complication of the decoration process had been eliminated by the molding technique, the production could be increased enormously. After the bowl was removed from the mold, it was glazed and fired in a saggar in the usual way. The aesthetics of molded decoration were quite distinct from the incised decoration. The decorations through molding on Ding wares were more formal and elaborate than the decoration by the incised

technique. The styles of the incised and impressed methods were quite different from each other.

The impressed decoration was always applied on the inside of the dish or bowl. The main decoration zone was enclosed by one of many borders, among which the most popular border was squared spiral in a narrow band placed below the rim of the bowl.

The main field motifs form a wreath around the center, frequently without any central feature. The absence of central decoration related to the casualness of the placement of incised decoration.

The design was applied on the inside of a bowl or dish, which seemed insensitive to the profile of the piece itself, for identical decorations were placed on a deep bowl or a shallow dish. The molded decoration may flatten out the form of the bowl rather than strengthen it. The whole design is carried out in an almost embossed style, which stands up in positive, giving an over-all effect of considerable richness and extravagance in the later pieces from the twelfth and thirteenth centuries in which birds and flower motifs are combined.

A very different visual impression appeared in this new technique, which made the twelfth- and thirteenth-century Ding wares a more static design but also a more intricate and dense pattern. However, the molded ornament on Ding ware could only be placed on the inside of the objects so that the outside surface was still incised by hand for some time. This is demonstrated by the bowl and dishes illustrated in Figure 2.9.

The molded design of fish on the left bowl derived from the metal pattern. The dish on the right bears an intricate molded scene of two deer among clouds and flowers. The two words *deer* and *good fortune* have the same pronunciation in Chinese.

The motifs may derive from the textile pattern of the Song dynasty and the crowded design perhaps came from the earlier styles of relief decoration of the Tang dynasty. The decoration motifs included all sorts of flowers, plants and animals, among which birds and flowers were the most popular pattern.



Figure 2.9: Ding ware bowl and dish. Jin dynasty, 12-13th century. Diameters 20.2cm, height 21.3 cm.

By introducing the molding technique, some new motifs were applied - children and Phoenixes, for instance. The ornament became more crowded so that such figures appeared amidst banks of foliage.

The decoration on Ding ware suggests religious associations. Lotus was a particular favorite pattern in the Song dynasty, for not only was it a popular bloom for garden pools, but it also was associated with Buddhism [28].

Some magnificent pieces were produced at this time, such as the large bowl with carved lotus-petal outside, and incised lotus scrolls inside (Figure 2.10); a similarly impressive vessel is the large jar with incised lotus-scroll decoration (Figure 2.11).



Figure 2.10: Ding ware large bowl. Northern Song dynasty, 11th-12th century. Diameter 28.6 cm, height 14.5 cm.

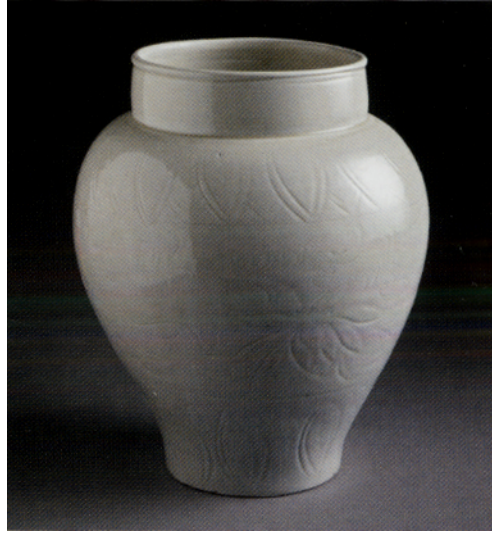


Figure 2.11: Ding ware large jar. Northern Song dynasty, 11-12th century. Height 28.5 cm.

2.3.2 Ru Ware

2.3.2.1 Introduction of Ru Ware

The terminology of *imperial* and *non-imperial* wares is one that has special status in the field of Chinese ceramics, including those of the Song dynasty. Government officials would travel to the kilns to inspect and select pieces. The best ceramics from the imperial ware were used at court for ceremonial and domestic purpose.

Ru ware replaced Ding ware as the imperial ware sponsored and inspected by the Northern Song court. In the early Southern Song period, Ye Zhi stated in *Miscellaneous studies*, “in this dynasty, the white wares from Ding Zhou being flawed by awns [meaning unclear], the court deemed them unfit for use, and orders were handed down for green wares to be fired at Ru prefecture.” Writing in the same period, Lu You stated in *Anecdotes of historical personalities*, “in the old capital Ding wares were forbidden, only Ru wares were used”. Ru ware was specifically an imperial ware, and Zhou Hui in *Literary and artistic journal* appears almost wistful in observing.

The imperial Ru ware is very rare today since it was made in much smaller quantities for the Northern Song court in a short period of time, and even by the end of the Southern Song

dynasty it was regarded as rare. Another Southern Song remark about Ru ware is that of Zhou Hui who wrote: “Ru ware was fired for the palace; the glaze contains agate. Only those items rejected by the court could be taken away and sold; recently they are exceptionally difficult to obtain” [22]. The production of official Ru ware came to an end when the court was forced to flee south in 1126. In AD 1151 Zhou Mi wrote in the *Wu lin Jiu Shu* a list of Ru wares presented to the Emperor: one pair of wine bottles, one basin, one incense burner, one box, one incense sphere, four cups, two jars, one pair of incense holders, and one large and one small cylindrical censer sixteen items altogether. This is the largest number of Ru wares recorded together, and is a clear indication of the range of shapes produced. Until recently there were fewer than forty extant examples, more than half of them in Britain [23].

The mystery around Ru wares, extolled in literature for a long time, also is esteemed as one of the most famous of Northern wares. Ru wares have long been regarded as the peak of the Song ceramics. The predilection for imperial wares is partly due to the value established several hundred years ago. Chinese collectors and connoisseurs highly esteemed Ru ware for its beauty, rarity and market value from the Southern Song onwards [23].

Ru ware, the significant stoneware in the Song dynasty, was designated for a particular market: the court. During the period of 1086-1107, the fine vessels were created in the kilns at Qing Liangsi by commission of the Northern Song court, which is known as Ru ware. Ru ware are highly specialized products created with Northern Song technologies and local raw materials. The beauty of Ru ware lies in its range of elegant shapes, restrained decorations and subtle blue-grey glaze [24].

The incised, carved and impressed designs were also applied on Ru ware in a very conservative way that was appropriate for the court taste. The simple undecorated forms, never more than 30cm high, are most praised for the even grey-blue glaze. The style of Ru ware reflects the epitome of court taste. Those aristocratic wares for a period of only about forty years apparently accorded well with the taste of Emperor Huizong (AD 1100-1125). Huizong was a fastidious aesthete who had powerful influence on the taste of his period and

especially on his court. It is quite understandable that the exquisite green ware tradition occurred during this reign. It is a rare example that individual patronage directed a ceramic style. Since the pottery was produced to use, even the most highly prized ware did not have the same status as silk, lacquer, jade, gold or silver. Due to the imperial patronage, Ru ware holds its position not only for its rarity but also for its exceptional beauty.

2.3.2.2 Techniques of Ru Ware

Most Ru ware was fully glazed so they were fired upright in a sagger on three or five-spur setters that left small, sesame-seed-shaped spur trademarks on the base. The color of the dense body was varied from near white to a mid-buff-grey called *the color of incense ash* in Chinese. The most remarkable feature of the body was its high refractoriness for its low levels of alkalis so that the large open forms were permitted to be fired on multiple spurs without distortion.

Ru ware was usually fired between 1220 and 1240 degree. The overall glaze on the body prevented the re-oxidation of body at the end of the firing cycle, which gave a reddish tone to the exposed part, typically on the unglazed foot ring. The reoxidation situation was purposely limited as they pursued the cool, bluish tones of the glaze.

2.3.2.3. Glaze of Ru Ware

The glaze on Ru ware is regarded as the most beautiful of all glazes in the Song dynasty [21]. The glaze of Ru ware is opaque but very fine and densely crackle. The tone of glaze color on Ru ware ranged from azure *sky blue* to a milky *egg blue*. The color of grey-blue glaze resulted from iron fired in reduction. The various degree of reduction left the body either buff or grey.

Another characteristic feature of Ru ware is its shallow and irregular crackle, which is known as *crab-claw markings* or *ice crackle*. The crackles came from several layers of glaze. As a technique, crackle in the glaze was quite in vogue in twelfth-century China. At first,

the crackles were created unintentionally, but later a much wider and deeper crackling of the glaze was designed purposely and resulted from an incompatibility, the expansion and contraction between the body and glaze when firing. The light-catching flaws in the glaze due to the crackle are quite similar to that in jade. Just as the flaw in the jade accentuates its depth, the crackle in the glaze makes the Ru ware three-dimensional. *Fish scale* is the finer grade of crackle which catches the light and reflects it back. The glitter and sheen looks like live fish-scales.

The glaze on the cupstand (Figure 2.12) is a marvellous example of *ice crackle*, with fine white lines contained within deeper cracks. The connoisseurs often commented on the difficulty of collecting specimens and the exact color and texture of glaze on Ru ware. The connoisseurial author Cao Zhao stated in 1388 that: “Ru ware was also made in the North ... pieces with *crab-claw* markings are genuine, but those lacking the markings are extremely fine. Its body is unctuous, and very thin, and examples are very difficult to obtain” [25].



Figure 2.12: Ru ware cupstand. Northern Song dynasty, about 1086-1106. Diameter 16.5 cm, height 5.8 cm.

The thick unctuous glaze texture as another feature of Ru ware that was described as *like lard dissolving but not flowing*. This description was due to the most favorite jade in China, which looks like mutton fat. Therefore the Chinese esteemed the glazes resembling jade.

2.3.2.4 Shapes of Ru Ware

Ru ware is characterized by the simple elegant form which is consistent with the refined tastes of the Northern Song emperor, Huizhong, for whom they were produced. Ru ware was usually produced in small, elegant and domestic shapes, such as bowl, cup stand, ewer, plate and dish. The appearance of Ru ware is very simple and restrained.

Typically, the foot ring of the objects flared outwards, resembling the foot ring of Song lacquer. Ru ware usually had foliated, gently curving lips and simply curved sides [21].

The bowl (Figure 2.13) has the smoothly rounded sides and the everted lip. The foot ring, covered with the glaze, is curved and splayed.



Figure 2.13: Ru ware bowl. Northern Song dynasty, early 12th century. Diameter 17cm, height 7cm.

The sides of the upper section of the bowl-stand (Figure 2.14). are curved and the rim mouth is straight. The flange of the lower section imitates the shape of a five-pedalled flower and the rim in the shape of the lobe is slightly raised at the edge. The foot ring is also curved and splayed.



Figure 2.14: Ding ware prunus vaseRu ware bowl-stand. Northern Song dynasty, early 12th century. Diameter 17cm, height 6.5cm.

2.3.3 Guan Ware

2.3.3.1 Introduction of Guan Ware

After Jurchen Tartars invaded north China, Ru ware became part of history. The Northern Song court had to abandon the old capital at Kai Feng in 1126 and move to the south to reestablish a new capital Hangzhou in 1138. The physical hardship resulting from war and relocation caused a longing for the old capital to run beneath the pleasant veneer of life in the south. Since the bronze and jade ritual utilizations for the court use had been abandoned when the court fled south, the court needed the new supply of ritual and everyday ceramics for court use.

Kilns were built near Hangzhou and were under the direct control of the imperial palace. The imperfect pieces were smashed and the waster shreds were carefully gathered and buried in two spots since the court strictly controlled the disposal of imperial wares.

Records state that two imperial kilns had been established at the capital at Hangzhou, called Guan ware (literally, 'official ware'). Gu Wenjian of the Southern Song dynasty stated: "During the Zhenhe reign period a porcelain kiln was set up by officials in the capital. It was named Guan kiln. After the new government was established in the south, Shao

Chengzhang managed the imperial rear gardens. He carried on the system of the old government and set up a kiln in Xiu Neisi, which was called Nei kiln, and specially produced green ware. The product was exquisite, with well-refined clay and a lustrous, clear glaze. It became a new treasure of the world. Later another new kiln, also named Guan kiln, was set up in Jiao Tianxia. Its product was quite pale compared to the Nei porcelains” [26].

The natural wish of Guan ware seemed to have been to try to reproduce the Ru ware, even in the manner of firing. It is said that potters of Ru ware move with the court to Hangzhou to continue supplying the fine ceramics to the court. Therefore, Guan ware showed a clear derivation from Northern Ru ware and a most beautiful transition to the Southern ware. Although similar to the Northern Ru ware in style and glaze, they have definite Southern characteristics of shape and technique.

2.3.3.2 Technique of Guan Ware

Guan ware was made of two different types of clay. One is greyish white, fine-grained clay and the other is blackish, rather sandy clay with high iron content. The greyish white clay is slightly scorched with traces of light red and the blackish clay has a blackish brown finish. Guan ware was fired in reduction, and the characteristic dark brown or black color on the unglazed rim and foot was caused by the high iron content of the body clay.

Guan ware has the special visual effects on the appearance called ‘purple mouth and iron foot’, an interesting effect at foot and mouth due to the trace of the dark body. The vessel’s mouth is placed upwards and the glaze flows downwards so that the glaze at the mouth is thinner than on the rest of the body. The purple mouth is due to the fact that the color of the clay is disclosed at the mouth. The iron foot is the raw edge of the clay appearing at the foot rim [24]. These features can be seen on the vase (Figure 2.15), which thins to reveal dark body tones at mouth and foot.

At first Guan ware was fired on small round spurs and some of the kiln equipment was quite similar to Ru ware. Since the glaze of Guan ware is much thicker than Ru ware, the

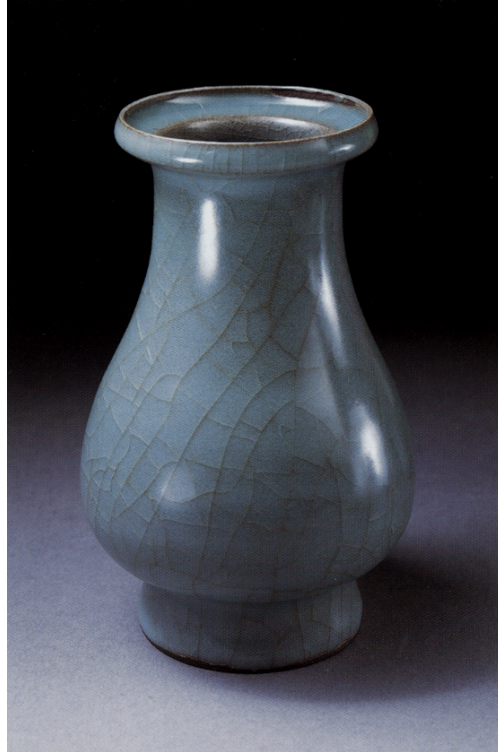


Figure 2.15: Guan ware vase. Late Southern Song early Yuan dynasty, about 1250-1300. Diameter 8.6cm, height 13.4cm.

small spurs could stick. Later the glaze of the larger objects was wiped from the foot ring and objects were fired on pads.

2.3.3.3 Glaze of Guan Ware

In *Tao Lu*, the author stated that the Guan ware was made of fine unctuous glaze with a thin body. The quality of glaze on Guan ware is equivalent to the highest grade of Ru ware [27]. The opaque glaze and the greyish white clay were well suited to each other for the glaze coated on the clay shows very little crazing. The glaze creates subtle variations of gloss and color, while the black clay body deepens the glaze color to a dark and sombre tone. The color of glaze on Guan ware is blue or green with a tinge of pale red and a varying depth of tone. For the glaze color, the pale qing (blue or green) pieces are the best, the pale white is second, while those with ash-colored glaze are very inferior.

There were ten specimens of Guan ware, five of which are explained as *fen qing* (pale blue or green). Of the rest one is *pale qing, clear and lustrous like a sapphire blue jewel*, evidently with a decidedly blue tinge; another is *king-fisher, blue as the clear blue sky*, recalling the *Chai blue of the sky after rain*; another is *sky blue*; another *onion green*, the color of onion sprouts; and another is *luan qing* (egg green), which recalls and perhaps explains the *luan bai* (egg white) of the Ru ware.

Glaze quality varied, but the high-quality wares had thin bodies over which the glaze was opaque, had bubbles and was often crackled. The glaze was thickly applied in several layers.

Due to the different contraction rates, the glaze on the blackish clay ware is patterned with large and small crackles. The thick glaze coating causes tiny irregular cracks at acute angles. Due to the diffusion of light, the cracks create subtle variations of gloss and tone.

The glaze of the jar (Figure 2.16) is subtle and opaque. The glaze has a milky grey tone, showing a bold black crackle. The thickness of the glaze layers was 0.5 to 2 millimetres, formed in three to four applied layers by dipping, pouring, brushing on, or being blown on in a fine spray. The jar was glazed and fired several times to make the feeling that the translucent glazes were similar to the color and texture of jade.



Figure 2.16: Guan ware jar. Late Southern Song early Yuan dynasty, about 1250-1300. Diameter 12.5cm, height 9.9cm.

The lobed dish (Figure 2.17) has a fine, dark stoneware body and a clear, blue-grey, crackled glaze, which is thick and translucent. The dish is covered with fine crackles, called *golden treads and iron wires*.



Figure 2.17: Guan ware lobed dish. Southern Song dynasty, 13th century. Diameter 16.8cm, height 3.9cm.

The body of the incense burner (Figure 2.18) is made of dark grey clay. The glaze on it is thick, ash grey, with a fine even crackling. Some of the crackle appears to be stained from the outside, indicating that charcoal ash was applied after firing.

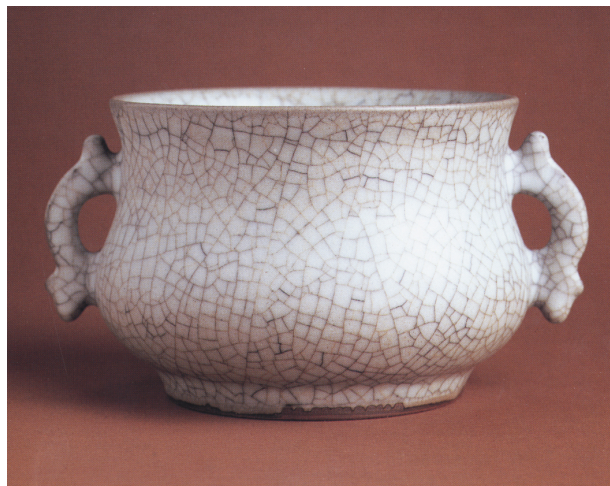


Figure 2.18: Guan ware incense burner. Southern Song dynasty, 13 century. Diameter 16.5cm, height 9cm.

2.3.3.4 Shapes of Guan Ware

The body and the shapes are the best criteria to judge the high-quality Guan ware. The body of ware was very thin and there were a great variety of shapes of Guan ware [21]. Guan ware included various utensils from daily use to the specialized; some even imitated the ancient bronze vessels.

One group included bowls, vases, dishes which had the foliated form, squat leys jars (utensils for the dregs of wine or tea) and spittoons. All these had elegant proportions and smooth profiles [30].

The bowl (Figure 2.19) had a foliated shape at the mouth which was one of the popular forms in Ding ware. For another example, the elegant jar (Figure 2.16) also with foliated rim was dark stoneware with thick, crackled glaze applied in many layers to a thickness that forms welts under the base and inside.

The lobed dish (Figure 2.17) has an eight-pedalled flower form, regarded as the simple elegance of the wares admired by the Southern Song court. This form was described as *chestnut flower*, derived from the lacquer ware.



Figure 2.19: **Guan ware bowl. Yuan dynasty. Diameter 17.8cm, height 16.3cm.**

The other groups were derived from ancient bronze vessels, including a dignified and sombre ware. The foot was a little splayed and very elegant.

The incense burner has a wide body. Before flaring out to an everted rim, the body contracts inward. The burner stands on a low foot that slants inward. The handles on either side are derived from dragon or fish form. The original shape came from ancient bronze vessels called Gui (Figure 2.20) in the Western Zhou dynasty. The publication of volumes in *Xuanhe bogu tulu* indicated that antiquarianism of ritual bronze vessels had considerable influence on the ceramic forms of the Song period [31].



Figure 2.20: **Archaic bronze gui vessels. Western Zhou dynasty.**

Moreover, the thick glaze covering the entire body except for the rim masked the profile and softened the outline of the ware. In the Southern Song dynasty, the softened outline was one of the main characteristics of Guan ware.

2.3.4 Enameled Ware

Qing enameled porcelains are particularly noteworthy for their extremely faithful and skillful productions that present some of the most difficult problems of attribution in ceramic scholarship [36]. Ceramics produced in three reigns of Kangxi era, Yongzheng era and Qianlong era of the Qing Dynasty scored great achievements and reached its culmination. The following is a timeline of the Qing Dynasty from Kangxi Dynasty to Qianlong Dynasty (Figure 2.21).

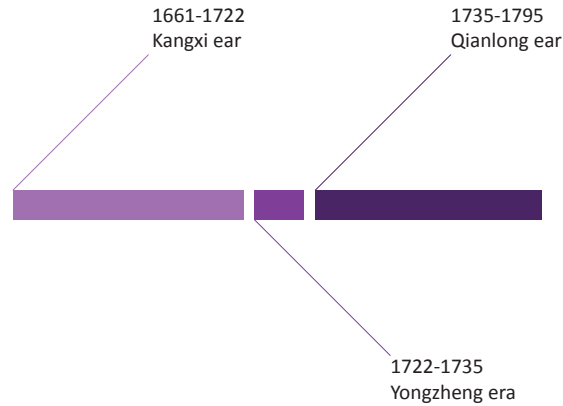


Figure 2.21: Part of history timeline in the Qing Dynasty

2.3.4.1 Introduction of Enameled Ware

French cloisonne, European paint enamels on gold and copper, was imported to China in the Qing dynasty. The enamelled wares style was derived from the new taste for European technology and potteries and attempted to apply this new technology to porcelain rather than metal. There is no doubt that Western artistic style strongly influenced painting on the enamelled ware in the Qing period. Also there is equally little doubt that Chinese famille rose techniques are quite distinct from European.

In the west, enamelled wares in the Qing period have been classified into two types, famille verte (wu cai) and famille rose (fen cai), which were based on the dominate colors in design, green and rose [32].

Famille verte ware became popular in the Kangxi era and the most excellent examples of famille verte were created in the Kangxi era. However, famille rose, tracing back to the final years of the Kangxi era, gradually replaced famille verte in the mainstream of official enamelled wares. Famille rose, as a revolutionary new type of enamelled ware resulted from the adoption of European cloisonne techniques, and the most delicate enamelled wares were produced in the Yongzheng era. Famille rose included a pink color as well as opaque white, which was mixed with other colors to make a wider range of shades and tones than was possible before.

Guyue ware, specially made for the emperor, is regarded as the finest famille rose ware due to its splendid quality and rarity. The name of Guyue probably came from the name of a specific storehouse in the imperial palace. Guyue ware is characteristic for the porcelain body, the shape, the overglaze, the color enamels and the motifs all combined in superb harmony. The imperial stoneware experimented to develop the new decorative techniques that were used widely at Jing Dezheng later. After the porcelain wares were fired in the official kilns in Jing Dezheng, they were carefully carried to the imperial palace in Beijing. The elaborate motifs were painted by the eminent painters from the Painting Academy School. Guyue ware has an elegant painting style in Chinese taste with European figures since the style of this ware was influenced by Europe. The drawing was represented by the light, shade and perspective.

2.3.4.2 Glaze of Enameled Ware

One noteworthy feature of enamelled ware is its brilliant, translucent white, gemlike quality[33].

The clay body of enamelled ware is a pure white with an overglaze coating. The glaze was composed of *thirteen bowls of white glaze to which a bowl of liquefied fern ash has been added*. The glaze on the enamelled ware had two major features. One is the very high melting point which is especially suitable for porcelains, and the other is an opaque quality which will allow the underglaze motif to show through only indistinctly [33].

Famille rose is a ware with colored enamels painted on a pure white porcelain body, which is actually coated with an opaque white glaze, but the transparent glaze has the vitreous quality which creates a blue tinge. According to Pere d'Entrecolles, "Though porcelain is naturally white, and the glaze applied to it serves to argument this white even more, yet there are certain designs in favour of which one applies a particular white substance on the porcelain, which is then painted in different colors"[33]. That's why the translucent, opaque white overglaze was more suitable for the enamelled wares. A lustreless white powder, the

special white substance, served to create an absorbent surface that facilitated the painting of finely shaded areas of the motifs. It is a special type of glaze base applied on famille rose ware.

As the finest enamelled ware, Guyue ware had a pure and warm opaque white glaze that could be immediately felt when it is compared with other official wares. Guyue enamelled ware utilized extremely fine-quality clay and overglaze. In the high temperature of the kiln, the body and overglaze fuse together into one material since they are composed of the same substance. Therefore, the ware appears like a jewel, the glaze indistinguishable from the body.

2.3.4.3 Colors of Enameled Ware

Compared with other wares in the Qing dynasty, famille rose has more effeminate beauty mainly due to its color [34].

The famille rose palette includes delicate yellows, pale greens, blues and many shades of lilac varied with black, gold and iron-red.

There are two features of the famille rose palette of opaque enamels, which differs from previous overglaze polychrome enamels. First, the range of rose pink color tone became wider, from the palest blush of pink to a deep ruby. The opaque colors could be mixed with other pigments to create new colors so that the range of color value enormously increased for the first time. White was the most useful enamel because it creates subtleties of shades on the famille rose ware in much the same way as the oil painter does, since a wide range of subtle variations of tone could be obtained by simply changing the ratio of colored enamels to white enamel. The increased range of subtle variations of tone refined the details of painting on famille ware. Additionally, a diversity of mixed tint were created by combining colors. Sometimes harsh iron-red was mixed with the gentle hues of famille rose and the result of the combination could be surprisingly effective.

Famille rose wares in the Yongzheng era, one of the most exquisite Chinese porcelains, were prized for the delicately painted ornament on a superbly clear white ground.

Motifs, such as fruit and flowers, painted on the ware required subtle shading and gradation of tone. For instance, for the peach motifs (Figure 2.20), show a gradation of color tone ranging from a faint, cream white, to a cream yellow, to orange, and finally to a deep red tone.

This dish is made of pure white porcelain. The dish has the slightly uneven surface called *chicken skin* like many overglaze enamel wares in that period [35]. The dish is painted with famille rose enamels with the design of bats, peach, tree peony, and prunus flowers. The decoration extends from the top of the foot ring on the outside of the dish to the inside. The interior and exterior design is regarded as a whole. For instance, there are two bats in iron red painted inside and three outside. Five bats were also a popular symbol on Chinese decorative arts because its name suggests five blessings. The branches of the peach and tree peony are painted with grey enamel and the prunus is rendered in red brown. The peaches, painted in pinks and green enamel, are symbols of longevity. Stippling technique indicates the texture of the peach surface. The prunus flowers are painted with rose pink enamel and the tree-peony with great delicacy are depicted with pale green and the blended enamel of white and pink. The stamens of the flowers look like tiny relief dots of yellow.



Figure 2.22: Large dish. Qing dynasty, Yongzheng reign mark and period (1723-35). Diameter 50.8cm, height 8.9cm.

2.3.4.4 Shapes of Enameled Ware

Famille rose ware was prized in 'Tao Lu' for its extreme refinement and elegance. This statement is fully justified by the porcelain itself no less than by its decoration. The porcelain shows marvelous skills and the forms display vigour.

The ordinary wares in the Yongzheng reign differs but little from that of previous reign. However, a noticeable change is the base rim of vases and bowls. The rounded or angular finish replaced the bevelling edge and the foot rim became almost V-shaped (Figure 2.23).



Figure 2.23: Vase. 1930s. Diameter 8.8cm, height 14.7cm.

2.3.4.5 Decoration of Enameled Ware

The exquisite beauty of the decoration on the enamelled ware is especially astonishing. The style applied on famille rose is consistent with European style, without outlines and with a sense of perspective.

Famille rose underwent a great improvement of refinement from the Yongzheng reign to the Qianlong reign since they were produced in the official kilns. The general character of

enameled decoration in the Yongzheng era is the epitome of delicacy and restraint in painting. The decoration on the later Qianlong famille rose is over-elaborate and overcrowded while this feature is not observable at the Yongzheng period. On the contrary, the ornaments were elegant and restrained effects and plenty of space is left for the fine quality of the white background. The restraint of decoration makes the porcelain quiet and the blank areas enhance the motifs on famille rose ware. The fineness of the decoration is nicely balanced with the elegant finish of the porcelain itself, which is the singular distinction and charm of the Yongzheng enameled wares [36].

The body material of this teapot and cup (Figure 2.24) is pure white porcelain and the glaze has a smooth and glossy surface. They are painted with a design of lotus blossoms and leaves in famille rose enamels in Guyue style. The knob of the teapot bears a stylized shou (longevity) character. The lotus flowers are a popular motif on Chinese decorative arts because it symbolizes the summer and purity and relates to Buddhism.

The delicate painting of leaves and flowers on the teapot and cups are treated in two different styles. The leaves were shaded with different tones of transparent green enamel in discrete areas and tiny black dots and lines are added to indicate the texture of the leaves. The flowers are depicted with the blended colors of white and pink. The petals of white blossoms are outlined in dark enamel, while a narrow area around the petal without the enamel indicates the edges of the pink blossoms.

The same poetic inscription is written in black enamel on both the teapot and the cup, which can be translated, *Pure as the virtue of the superior man, / Elegant as the maquillage of a great beauty.*

Most famille rose porcelains in the early Qianlong era still followed the court taste in the Yongzheng era, exhibiting the same elegance and refinement of the imperial wares as prior examples. Since the Western principle of drawing techniques were imported into the Chinese court and learned by the Chinese artists. A new three-dimensional effect became



Figure 2.24: Teapot and cup. Qing dynasty, Yongzheng reign mark and period (1723-35).

the particular and interesting characteristics in the painting of figures and objects on the Qianlong famille rose porcelains.

Toward the later Qianlong era, a different feature was taken on the famille rose wares. The free and fresh style of painting had been changed to the labored and pedantic style. The over-decorated trend smothered the porcelain with the painting, which occupied more and more white *breathing space*. The bowl (Figure 2.25) is an impressive and fine model to show the tendency towards excessive ornamentation of late eighteenth-century porcelain [36].



Figure 2.25: Pink lotus bowl with floral brocade. Qing dynasty, Qianlong reign(1736-1795). Diameter 15.9cm, height 7.6cm.

The common motifs on famille ware include birds and flowers, grasses and insects, and trees and rocks. Bird and flowers were obviously regarded as the most popular motifs for the famille rose enameled technique. The connoisseur of famille rose in the Qing period stated with admiration: "... the flower motifs painted on the Yongzheng ware should be regarded as being in the style of Yun School. The exquisiteness of the painting without outlines should be likened to that of Xu Xi. The grasses and insect motifs are most finely executed. Their startling reality is such that one tries to brush away the files on a vessel before realizing that they are only painted on." The existing examples show that this description is not exaggerated [33].

For Guyue ware, the decoration motifs are the same as those found on the ordinary famille rose ware. The motifs of landscapes and scenes with human figures are rare. However, the motifs of Western people in European costume are outstanding for their exotic eccentricity.

Another popular style of famille rose motifs are surrounded by a background filled by the regular enamels, such as purplish red, light blue, yellow-green, and emerald-green enamels.

In addition to the polychrome motifs, mocaï ware is a special type of peculiar motif painted in monochrome enamels. Landscape scenes in several shades of black enamel are painted on enameled ware with the effect of an ink painting on a scroll. The monochrome enamels are various from indigo blue to purplish red with the same tone gradation.

In addition to the decoration motifs on famille rose ware, the poetic inscription suitable to the motif was painted on many Guyue ware. The poetic verses are usually couplets of five or seven characters executed in the elegant, semicursive style. The poetic inscriptions usually combine with seals.

The immaculate bowl (Figure 2.26) has a particular style. The painting begins from the exterior surface of the bowl, continues over the edge and ends at the inside of the bowl showing the mocaï style. The bowl is made of pure white porcelain. A smooth, glossy glaze with sepia enamel decorates the bowl. Imitating the ink paintings, the style painted with

sepia enamel is called mocaï style. The design of the flowering prunus branch rises from just above the foot ring on the outside of the bowl and continues over the edge of the mouth rim to the inside. The prunus is associated with beauty (mei) and regarded as a harbinger of spring. The other side of the bowl bears a poetic inscription written in black enamel, which can be translated, *By the moonlight the shadows / Of the plum blossom flutter; / The ink slab sends forth / A subtle fragrance.*



Figure 2.26: Bowl. Qing dynasty, Yongzheng reign mark and period (1725-35). Diameter 12.7cm, height 6.3cm.

Chapter 3

The design Guidelines of Cultural Aesthetic Elements Integrated in Tableware Design

Inspiration comes from in-depth study of the source material *Dream of the Red Chamber* from many different perspectives. The source material in various categories, such as clothing, ornaments and furniture, is delved deeply and studied under different conditions. The material collected in Chapter 2 is explored in a varied way form, proportion, texture, color, pattern, balance and repetition. This chapter will summarize the consideration of each of these areas to develop the design guidelines of cultural aesthetic elements integrated in tableware design.

3.1 Form

In ceramics design, shape is generally described as a two-dimensional idea. Shape designing is an important step of the process. The shapes can be understood by drawing on paper to show the minor adjustments and alterations to the profile and detail.

The profile is referred to as the most essential design line. The profile is the line that shows the outside shape, the view from the side [17]. The profile can be taut, elegant or soft. A small alteration will cause a profound effect on the overall appearance of the object.

Table 3.1 lists the shape of items mentioned in *Dream of Red Chamber*.

Table 3.1: **Shape description**

Category	Sub-category	Description
Continued on next page		

Table 3.1 – continued from previous page

Category	Sub-category	Description
Natural	Peony	Granny Liu was struck by the daintiness and variety of the small pastries. Selecting one shaped like a peony she said: “The cleverest girls in our village couldn’t make scissor cuts as good as this”.
	Plum	A packaging of fine plum-petal snow-white sugar from Alpinia Park.
		Two slabs of perfumed incense shaped like plum-blossom from her pouch.
		At each side stood a low table of foreign lacquer in the shape of plum-blossom.
Chrysanthemum	The casket containing the four silver molds. More than a foot long and about one inch across, they were inset with more than thirty delicately fashioned shapes no larger than peas - chrysanthemum, plum-blossom, lotus flower, caltrop and the like.	
Continued on next page		

Table 3.1 – continued from previous page

Category	Sub-category	Description
Natural	Palm leaves	There were only partitions formed of shelves for books, bronze tripods, stationery, flower vases and miniature gardens, some round, some square, some shaped like sunflowers, palm leaves or intersecting arcs.
		A tiny red soapstone cup shaped like a palm leaf.
	Lotus	In front of each table was a candelabrum of Western enamel with a lacquer shade in the shape of an inverted lotus leaf.
		A large emerald plate in the form of a lotus leaf.
		The casket containing the four silver molds. More than a foot long and about one inch across, they were inset with more than thirty delicately fashioned shapes no larger than peas chrysanthemum, plum-blossom, lotus flower, caltrop and the like.
	Sunflower	There were only partitions formed of shelves for books, bronze tripods, stationery, flower vases and miniature gardens, some round, some square, some shaped like sunflowers, plantain leaves or intersecting arcs.
	Clove	Her knots of clove and her hibiscus belt.
Continued on next page		

Table 3.1 – continued from previous page

Category	Sub-category	Description
Natural	Crab-apple blossom	A carved lacquer tea-tray in the shape of crab-apple blossom, inlaid with a golden design of the cloud dragon offering longevity.
	Caltrop	The casket containing the four silver molds. More than a foot long and about one inch across, they were inset with more than thirty delicately fashioned shapes no larger than peas - chrysanthemum, plum-blossom, lotus flower, caltrop and the like.
	Cluster	A colored tasseled palace sash with clusters of designs.
Animal	Dragon	From there they went on some way until ahead of them loomed towering pavilions enclosed by magnificent buildings, all of them connected by winding passageways. Green pines brushed the eaves, white balustrades skirted the steps, the animal designs glittered like gold and the coiled dragon-heads blazed with color.
		Her necklet, of red gold, was in the form of a coiled dragon studded with gems.
		A golden torque in the likeness of a coiled dragon.
	Phoenix	Her hair-clasps, in the form of five phoenixes facing the sun, had pendants of pearls.
Continued on next page		

Table 3.1 – continued from previous page

Category	Sub-category	Description
Animal	Phoenix	A gold filigree phoenix tiara inlaid with pearls.
	Unicorn	A gold unicorn decorated with turquoise enamel.
	Fish	Rose-red jade pendants in the form of double-flatfish.
		To its right, suspended on a lacquer frame, was a white jade musical stone in the form of double-flatfish, with a small hammer next to it.
Geometrical	Round	There were only partitions formed of shelves for books, bronze tripods, stationery, flower vases and miniature gardens, some round, some square, some shaped like sunflowers, plantain leaves or intersecting arcs.
	The eight precious things	Golden pendants in the form of the eight precious things.
		The carriage shared by Baochai and Diayu was gay with a verdancy awning, pearl-tassels and designs of the eight precious things.

The percentage in the figure 3.1 is based on the number of descriptions for each item cited in Dream of the Red Chamber. For instance, there are 27 descriptions relevant to shape, 16 descriptions of natural shape (59%), 8 of animal shape (29%), 3 of geometrical shape (12%). Based on the percentage of each category, the pie chart in Figure 3.1 is drawn.

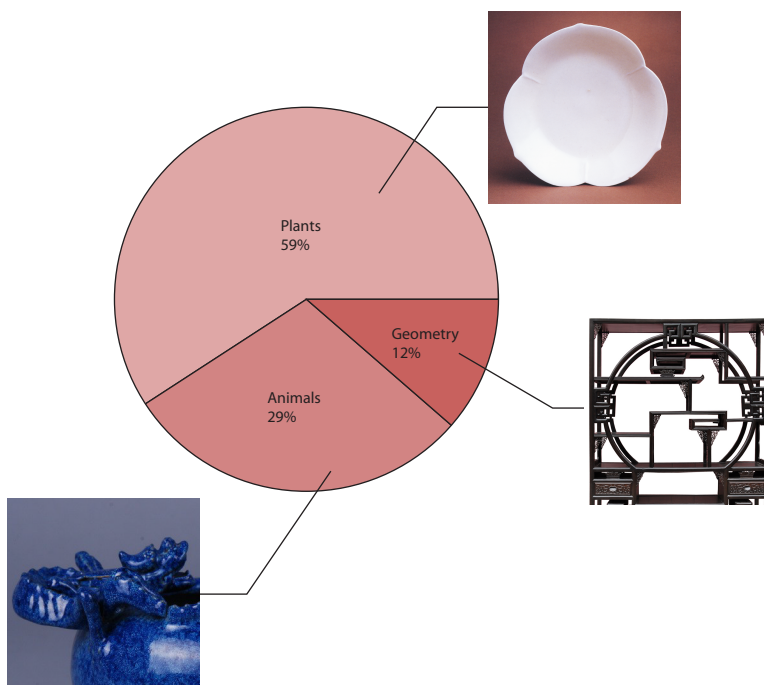


Figure 3.1: **Shape analysis**

Table 3.1 and Figure 3.1 illustrate that the floral form is predominant in the novel, from peony, plum, chrysanthemum, lotus, sunflower, clove and crab-apple blossom.

From the study of these four wares, the features of the shape are summarized below.

The shapes of tableware sought to imitate flower and foliage forms. The plates imitate the foliage shape by the simple V-shaped cuts in the lip (Figure3.2).

A series of shapes became popular for wares of better quality: wares in flower shapes with petal design, at first with straight lips and a profile similar to a buttercup, later with a more flared lip and even a flange (Figure 3.3).

In conclusion, the shapes of tableware have a tendency of imitating floral forms.

3.2 Proportion

When a shape is designed, a form is created. Form has a particular quality and proportion, which is determined by the initial shape design.

Table 3.2 lists the description related to proportion in *Dream of Red Chamber*.



Figure 3.2: Profiles of the plates



Figure 3.3: Profiles of the saucers

Table 3.2: Proportion description

Category	Sub-category	Description
Proportion	Wider	Ru ware vase the size of a peck measure was filled with chrysanthemums white as crystal balls.
Continued on next page		

Table 3.2 – continued from previous page

Category	Sub-category	Description
Proportion	Wider	That evening when Daiyu went into the inner room to get ready for bed, the sight of the jar of licheers reminded her of the old woman's maundering.(The form of jar is similar to the form of licheers)
		A large gilded cloisonne brazier, its three legs in the form of elephant trucks.
		To their east stood a carved openwork dragon-screen with below it a low couch spread with cushions, pillows and furs.
Proportion	Slender	Scarlet archer's jacket, embroidered with golden butterflies and flowers.
		On the right one, a slender-waisted porcelain vase from the Ru Ware containing flowers then in season.
		Her close-fitting scarlet satin jacket was embroidered with gold butterflies and flowers.
		A narrow-sleeved, none to new yellowish green satin tunic lined with white squirrel, with fur-lined cuffs and collar, which was embroidered with dragons in gold thread and colored silks.
		A yellowish green archer's jacket embroidered with serpents and lined with white fox-fur.
		An arche's jacket embroidered with white serpents.
		A scarlet archer's jacket embroidered with golden dragons and lined with fox-fur.
Continued on next page		

Table 3.2 – continued from previous page

Category	Sub-category	Description
Proportion	Slender	A fox-fur archer's jacket.

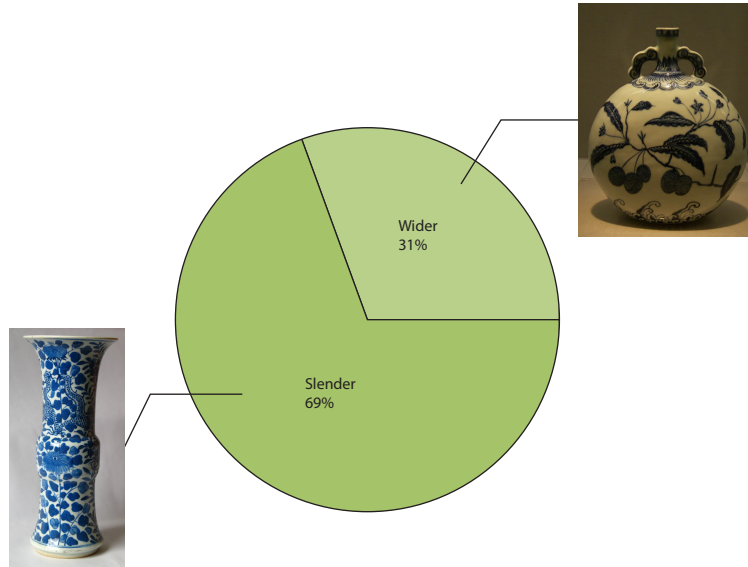


Figure 3.4: **Proportion analysis**

Table 3.2 and Figure 3.4 illustrate that the slender proportion is predominant.

3.3 Texture

Clay, an amazingly versatile medium, can be shaped into almost any form. Designers should pay attention to the surface quality of the object. The surface qualities of the material used to make the object are developed to enhance the final detail of a design.

Table 3.3 lists the descriptions related to texture on the items in *Dream of Red Chamber*.

Table 3.3: **Texture Descrip**

Category	Sub-category	Description
Impressed	Carved	<p>In front of each couch stood two carved lacquer teapots of different shapes with pyrus-blossom, plum-blossom, lotus and sun flower designs, some square, some round, one of which held an incense-burner, a vase and a box of various sweatments.</p>
		<p>To their east stood a carved openwork dragon-screen with below it a low couch spread with cushions, pillows and furs.</p>
		<p>On the large red sandalwood table carved with dragons</p>
		<p>They were now at the foot of a marble arch finely carved with rampant dragons and coiling serpents.</p>
		<p>There were only partitions formed of shelves for books, bronze tripods, stationery, flower vases and miniature gardens, some round, some square, some shaped like sun-flowers, plantain leaves or intersecting arcs. They were beautifully carved with the motifs <i>clouds and a hundred bats</i> of the <i>three companions of winter</i> - pine, plum and bamboo - as well as landscapes and figures, birds and flowers, scrollwork, imitation curios and symbols of good fortune or long life. All executed by the finest craftsmen, they were brilliantly colored and inlaid with gold or precious stones. The effect was splendid, the workmanship exquisite.</p>

Continued on next page

Table 3.3 – continued from previous page

Category	Sub-category	Description
Impressed	Carved	Twelve carved lacquer chairs covered with grey squirrel-skins.
		The tablet over the entrance to the main hall was engraved with frolicking dragons, and bore the intagliated motto in blue: <i>Venerate the Departed, Continue Their Sacrifices.</i>
		Teacups made in a previous reign; and gay little teapots filled with the finest tea on a small tray of Western lacquer ware. Set out too was a scarlet gauze screen in a carved purple-sandalwood frame embroidered with flowers and calligraphy.
		A small carved, double-circle foreign lacquer tray.
	Inset	Her turquoise cape, lined with white squirrel, was inset with designs in colored silk.
		A turquoise cape lined with grey squirrel, inset with designs.
		Of the one hundred and twenty satin curtains embroidered with serpents and large and small black-dotted brocade hangings inset with different designs and colors.
		An ermine-lined peach-red silk tapestry jacket inset with a hundred-beads design.
		The fox-fur-lined coat of turquoise silk tapestry inset with eight circular designs.
Continued on next page		

Table 3.3 – continued from previous page

Category	Sub-category	Description
Impressed	Inset	The red boots lined with lambskin and inset with a gold-thread cloud-design applique.
Embossed	Raised	A turquoise fringed coat of Japanese satin with a raised pattern of flowers in eight bunches.
		Of the one hundred and twenty satin curtains embroidered with serpents and large and small black-dotted brocade hangings inset with different designs and colors.
		Melon-green covered bowls with a raised golden designs of new Imperial kiln porcelain.
		Her skirt of verdancy crepe was patterned with flowers.
		A skirt of scarlet foreign crepe lined with snow-weasel fur.
		A blue crepe tunic lined with a curly sheepskin.
	Studded	Her necklet, of red gold, was in the form of a coiled dragon studded with gems.
Continued on next page		

Table 3.3 – continued from previous page

Category	Sub-category	Description
Embossed	Studded	<p>There were only partitions formed of shelves for books, bronze tripods, stationery, flower vases and miniature gardens, some round, some square, some shaped like sun-flowers, plantain leaves or intersecting arcs. They were beautifully carved with the motifs <i>clouds and a hundred bats</i> of the <i>three companions of winter</i> - pine, plum and bamboo - as well as landscapes and figures, birds and flowers, scrollwork, imitation curios and symbols of good fortune or long life. All executed by the finest craftsmen, they were brilliantly colored and inlaid with gold or precious stones. The effect was splendid, the workmanship exquisite.</p>
		A golden coronet studded with jewels.
		A golden filigree coronet studded with gems.
		A red leather belt studded with green jade.
		A gold filigree necklet studded with pearls as large as lotus seeds.
		A gold filigree phoenix tiara inlaid with peals.
		Two inscriptions inlaid in mother-of-pearl on the black lacquer tablets hanging on the pillars.
		Multicolored lacquered hampers inlaid with gilt designs.
		A red silk coat and a blue satin sleeveless jacket with silk borders.
		A black satin sleeveless jacket with silk borders.
Continued on next page		

Table 3.3 – continued from previous page

Category	Sub-category	Description
Painted	Black-dotted	Black-dotted antimacassars.
		Black-dotted stockings with brocade borders.
		Of the one hundred and twenty satin curtains embroidered with serpents and large and black-dotted small brocade hangings inset with different designs and colors.
		Wrapper was of black-dotted silk gauze, lined with pink silk.
		A thin padded silk tunic with black dots.
		Green black-dotted satin trousers.
		Gilded
	A ruby-ear-ring set in gold the size of a ginkgo nut.	
	A large gilded cloisonne brazier, its three legs in the form of elephant trucks.	
	By the walls were a row of sixteen cedar-wood armchairs; and above these hung two panels of ebony with the following couplet gilded in silver.	
	Everyone also had a tarnished silver sine-pot with engraved designs and variegated cloisonne cup.	
	Before the porch hung a placard gilded with the nine-dragon design, and the inscription <i>Stars Shine on the Assistant</i> , which had been written by the late Emperor himself.	
	Continued on next page	

Table 3.3 – continued from previous page

Category	Sub-category	Description
Painted	Gilded	A carved lacquer tea-tray in the shape of crab-apple blossom, gilded with a golden design of the <i>cloud dragon offering longevity</i> .
		Baoyu saw a newly written couplet on purple paper with gilded cloud-dragon designs.
		Twelve scarlet tapestry scenes from the opera <i>Every Son</i> a high Minister on one side and one the other gilded depictions of the character <i>Longevity</i> in various styles of calligraphy.

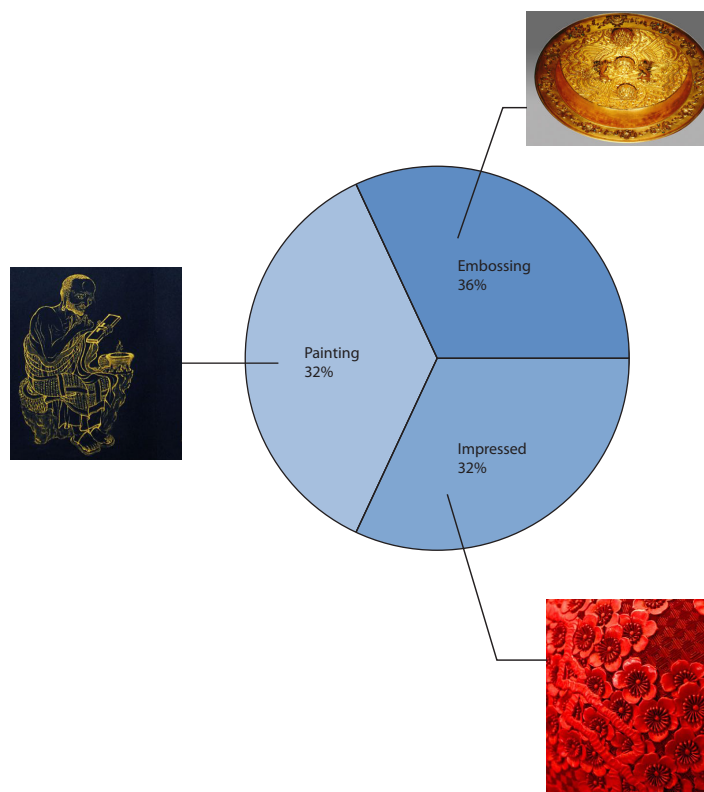


Figure 3.5: Texture analysis

Table 3.3 and Figure 3.5 illustrate that the percentages of these three texture methods is quite equal.

Additionally, the tableware from Ding ware is decorated with impressed design, which is a pattern engraved into the surface. The aesthetic underlying impressed decoration is both formal and elaborate. Intaglio creates a really interesting, ghost-like quality when the glaze is applied. The carved decoration on the surface is under the glaze, so it does not emphasize the design.

The decoration can be incised freehand on the wares when they dry to leather-hardness. The ornaments were carved by the broad, sweeping and sloping lines which were emphasized by the parallel fine lines. Decoration can also be molded and cast so that the engraved design is trapped in the cast body.

Molding decoration usually is applied to the interiors of open form, and the exteriors of wares are incised by hand.

In conclusion, the texture methods of embossing, impressing and painting can be applied on the surface of the tableware.

3.4 Color

One of clay's thrilling merits is that there are a number of different coloring techniques that can be applied to the wares like the actual clay body, the glaze, underglaze and on-glaze enamel. Different color approaches demonstrate different color qualities and depth. The color of an object can strengthen the form and surface of the design.

Table 3.4 lists the description related to items color in *Dream of Red Chamber*.

Table 3.4: **Color Description**

Category	Sub-category	Description
Red	Red	The lotus-seed and date broth.
		Date congee.
		A porcelain casket made in the Xuan De period.
		A red leather belt studded with green jade.
		Two strings of red beads scented with musk.
		Her new embroidered red slippers.
		A red silk coat and a blue satin sleeveless jacket with silk borders.
		Two hundred of red lacquered bamboo with gold flecks.
		A red silk sutra wrapper with a dragon design.
		A white silk stomacher lined with red.
		A red silk coat.
		The red boots lined with lambskin and inset with a gold-thread cloud-design applique.
		A padded red silk jacket.
		The green trousers and red slippers.
		The red silk pants and red slippers.
		The red silk chemise.
		The red pants and green socks.
		A red skirt.
Continued on next page		

Table 3.4 – continued from previous page

Category	Sub-category	Description
Red	Scarlet	Twelve scarlet tapestry scenes from the opera Every Son a high Minister on one side and one the other gilded depictions of the character <i>Longevity</i> in various styles of calligraphy.
		Biyun held out a large emerald plate in the form of a lotus leaf, on which were chrysanthemums of different kinds. The lady Dowager selected a scarlet one and pinned it in her hair.
		A scarlet crepe inner jacket.
		Her close-fitting scarlet satin jacket was embroidered with gold butterflies and flowers.
		The scarlet archer's jacket, embroidered with golden butterflies and flowers.
		The thick-soled scarlet shoes.
		A soft scarlet flowered portiere.
		A skirt of scarlet foreign crepe lined with snow-weasel fur
		Forty rolls of scarlet flowered satin.
		A scarlet camlet cloak which buttoned in front.
		A scarlet archer's tunic embroidered with golden dragons and lined with fox-fur.
		The scarlet curtains embroidered in gold.
		A scarlet tunic.
		The scarlet gauze tunic.
		A scarlet silk cape lined with white fox-fur.
Continued on next page		

Table 3.4 – continued from previous page

Category	Sub-category	Description		
Red	Scarlet	Scarlet silk back-rests and bolsters embroidered with <i>Dragons in the Clouds</i> designs and the character <i>Longevity</i> .		
		A scarlet linen jacket.		
		A scarlet jacket.		
		The scarlet jacket.		
		A pair of scarlet trousers.		
		A scarlet crepe inner jacket.		
		In the middle were scarlet back-rests and turquoise bolsters, both with dragon-design medallions.		
	Crimson	Two hundred portieres of crimson.		
		A crimson woolen cape.		
		The crimson cape of wool or satin.		
		A hooded crimson woolen cape.		
		A crimson woolen hood with a gosling-yellow applique of cloud designs and a golden lining.		
		The large Kang by the window was covered with a crimson foreign rug.		
		The crimson velvet pompon, the size of a walnut.		
		A couple of crimson cornelian rings.		
		Double rose-red jade pendants in the form of double-flatfish.		
		A rose-red sleeveless jacket lined with brown- and snow-weasel fur.		
		Continued on next page		

Table 3.4 – continued from previous page

Category	Sub-category	Description
Red	Ruby	A ruby-ear-ring set in gold the size of a ginkgo nut.
	Pomergranat-red	The pomegranate-red trousers with floral designs.
		The pomegranate-red silk.
	Silver-red	The silver-red jacket.
		The coat of a flower pattern on a silver-red ground.
		A silver-red linen shirt.
		Several rolls of silver-red cicada.
		This soft-mist silk comes in four colors only:Light blue, yellowish green, dark-green and silver-red.
		Below the kang facing the west wall were four armchairs, their covers of silver-red dotted with pink flowers.
	Peach-red	An ermine-lined peach-red silk tapestry jacket inset with a hundred-beads design.
		A peach-red flowered jacket.
		A peach-red silk-padded quilt.
		A peach-red silk shift.
	Apricot-red	An apricot-red silk quilt.
	Bright pink	A bright pink silk jacket.
		Her bright pink satin breeches were lined with fox fur.
	Bright Pink	Wrapper was of black-dotted silk gauze, line with bright pink silk.
		Bright pink trousers with a floral design.
	Cerise	A cerise padded jacket.
	Continued on next page	

Table 3.4 – continued from previous page

Category	Sub-category	Description
Red	Cerise	A pink embroidered silk padded skirt of the kind worn by lady Yang.
		Baoyu chose a sheet of pink paper with a gilded border and floral design on one of the top and bottom corners.
	Vermilion	And on both sides below the steps, tall vermilion candles blazed like golden dragons.
Green	Green	A big bowl of hot green rice.
		Half a bowl of green-rice porridge.
		A glossy green satin mattress with a golden center.
		The green linen underclothes.
		A green girdle.
		The green black-dotted satin trousers.
		The green trousers and red slippers.
		The red pants and green socks.
		The green jade beaker.
		A green and gold plaited belt with double rings.
	Viridity	An old bronze tripod, viridity with patina, stood about three feet high.
	Pea-green	Pea-green tassels attached to her skirt.
	Dark green	A dark green satin jacket lined with sheepskin.
	Dark green	She had on a tight-fitting bodice with a bold border and rows of long buttons and loops in front, over which she had tied a node to a new dark green sash.
The glimpsed dark green glowered satin trousers.		
Continued on next page		

Table 3.4 – continued from previous page

Category	Sub-category	Description
Green	Dark green	This soft-mist silk comes in four colors only:Light blue, yellowish green, dark-green and pink.
		A dark green satin jacket.
		Glossy dark green silk trousers embroidered with flowers.
	Verdancy	Her skirt of verdancy crepe was patterned with flowers.
		A blue lacquered carriage with verdancy curtains.
		The carriage shared by Baochai and Diayu was gay with a verdancy awning, pearl-tassels and designs of the eight precious things.
	Yellowish green	A yellowish green archer’s jacket embroidered with serpents and lined with white fox-fur.
		This soft-mist silk comes in four colors only:Light blue, yellowish green, dark-green and pink.
		A narrow-sleeved, none to new yellowish green satin tunic lined with white squirrel, with fur-lined cuffs and collar, which was embroidered with dragons in gold thread and colored silks.
		A yellowish green silk sash.
		A long yellowish green mattress also with dragon medallions.
	Leek-green	A leek-green flowered portiere.
		A leek-green padded skirt embroidered with colored silk and gold thread.
		A leek-green bodice.
	Continued on next page	

Table 3.4 – continued from previous page

Category	Sub-category	Description
Green	Leek-green	A leek-green silk bodice.
	Pale green	A pale green skirt.
	Jade-color	A jade-colored gauze cushion filed with all sorts of fresh rose and peony petals.
		A short lined satin jacketa patchwork of red, blue and jade-colored squares.
	Willow-green	A willow-green sash.
Blue	Sapphire blue	A sapphire blue embroidered padded skirt.
		A sapphire blue embroidered padded skirt.
	Light blue	This soft-mist silk comes in four colors only:Light blue, yellowish green, dark-green and pink.
	French blue	A French blue gown lined with white squirrel.
		A French blue gown lined with white squirrel.
	Turquoise	A turquoise fringed coat of Japanese satin with a raised pattern of flowers in eight bunches.
		A turquoise cape lined with grey squirrel, inset with design.
		Her turquoise cape, lined with white squirrel, was inset with designs in colored silk.
		A fringed turquoise sable coat.
		The fox-fur-lined coat of turquoise silk tapestry inset with eight circular designs.
	Continued on next page	

Table 3.4 – continued from previous page

Category	Sub-category	Description	
Blue	Turquoise	His brown velvet archer’s coat lined with fox fur, a scarlet felt jacket embroidered with gold thread. Its turquoise satin border was fringed with tassels.	
		In the middle were red back-rests and turquoise bolsters, both with dragon-design medallions.	
		Those trousers, with that green jacket and the turquoise boots make a vivid foil for black hair and a snow-white complexion.	
	Blue	Blue	The blue gauze.
			A red silk coat and a blue satin sleeveless jacket with silk borders.
			A blue silk tunic lined with a curly sheepskin.
			A gown of blue velvet buttoned down the middle.
			A lined blue silk sleeveless jacket.
			A blue lacquered carriage with kingfisher-blue curtains.
	Pale-blue	Pale-blue	The pale-blue gauze.
			The pale-blue satin tunic.
			A pale blue satin jacket.
	Purple	Light purple	A light purple silk tunic.
A new lilac blue linen gown.			
Purple		A purple velvet gown lined with fox-fur.	
		A purple woolen gown.	
		Baoyu saw a newly written couplet on purple paper with gilded cloud-dragon designs.	
Continued on next page			

Table 3.4 – continued from previous page

Category	Sub-category	Description
Purple	Dark purple	A short lined satin jacket - a patchwork of dark purple, blue and jade-colored squares.
	Pale purple	A pale purple woolen cape embroidered with flower design.
Yellow	Honey-color	A honey-colored padded jacket.
	Leek-yellow	A skirt of leek-yellow silk.
Black	Black	The dark steatite tripod.
		Two hundred of black lacquered bamboo.
		A black silk umbrella.
		The court boots were of black satin with white soles.
		A sleeveless black satin jacket.
		A black satin coat lined with squirrel.
		The black satin sleeveless jacket.
		A black satin sleeveless jacket with silk borders.
		The black satin cape.
		A long, sleeveless checked jacketed with dark silk borders.
White	White	A princely silver-winged cap with white tassels.
		A white robe embroidered with zigzag wave patterns and five-clawed dragons.
		An archer's jacket embroidered with white serpents.
		A white silk sash.
		The white silk damask skirt.
		A white silk stomacher lined with red.
		A white silk skirt.
Continued on next page		

Table 3.4 – continued from previous page

Category	Sub-category	Description
White	White	The white silk skirt.
		A pale-white embroidered fur-lined jacket.
		A short white squirrel tunic.
		A white skirt with dark designs.
		The pale grey silk padded jacket.
		A pale grey plain silk tunic.
		Melon-green covered bowls with a raised golden designs of new Imperial kiln porcelain.
		To its right, suspended on a lacquer frame, was a white jade musical stone in the form of double-flatfish, with a small hammer next to it.
Multi-color	Multi-color	A colored tasseled palace sash.
		A silk cord of five colors.
		A sash embroidered with many-colored butterflies.
		Her turquoise cape, lined with white squirrel, was inset with designs in colored silk.
		Two hundred woven with colored silks.
		A long-tasseled colored butterfly belt.
		Small tiger-head battle boots decorated with multi-colored curling clouds.

Table 3.4 and Figure 3.6 illustrate that the red color is predominant with 43% of the items' color.

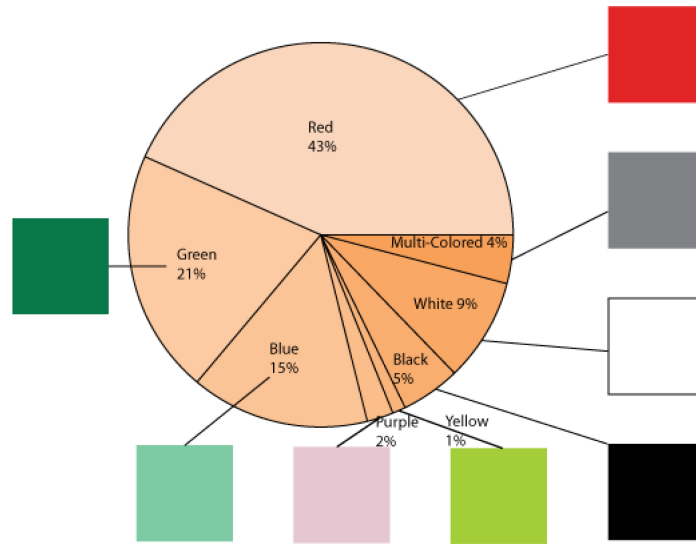


Figure 3.6: Color analysis

3.5 Pattern

Patterns can be applied to almost any form to enhance the final design. An object can be designed to appeal to different tastes by applying different styles of pattern, allowing one form to be used a number of times.

Traditionally, industrial designers have focused on either shape or pattern design. Whereas shape designers concentrate on the shape of the object, pattern designers concern themselves only with the design of patterns to be applied to the collections.

Table 3.5 lists the description related to patterns on the items in *Dream of Red Chamber*.

Table 3.5: Pattern description

Category	Sub-category	Description
Floral	Lotus	There were two couches on the north side, left and right, spread with brocade cushions and velvet coverlets in a lotus pattern.
Continued on next page		

Table 3.5 – continued from previous page

Category	Sub-category	Description
Floral	Lotus	A bamboo mat woven in a lotus pattern.
		Her knots of clove and her hibiscus belt.
		A white silk stomacher lined with red, which she was embroidering with mandarin ducks at play among some lotus. The lotus flowers were pink, the leaves green, and the ducks a medley of colors.
	Plum	A tarnished silver pot with a plum-blossom design.
	Passion-flowers	The walls were of polished bricks of a uniform color, and the white marble steps were carved with passion-flowers.
	Flowers	The pomegranate-red trousers with floral designs.
		Her skirt of verdancy crepe was patterned with flowers.
		The coat of a flower pattern on a silver-red ground.
		Glimpsed turquoise glowered satin trousers with a flower pattern.
		A soft scarlet flowered portiere.
		A peach-red flowered jacket.
		Scarlet curtains embroidered in gold flowers.
		A soft leek-green flowered portiere.
		The flowered green silk lined trousers.
		The bright pink trousers with a floral design.
The soft flowered portiere.		
Below the kang facing the west wall were four armchairs, their covers of silver-red dotted with pink flowers, and with four footstools beneath them.		
Continued on next page		

Table 3.5 – continued from previous page

Category	Sub-category	Description
Floral	Flower	A pink embroidered silk padded skirt of the kind worn by lady Yang.
		A sapphire blue embroidered padded skirt.
		Several rolls of silver-red cicada - wing gauze in one of the chests. There are several different designs - sprays of blossom, floating clouds and bats, butterflies and flowers - the colors so vivid and the gauze so soft.
		Forty rolls of scarlet flowered satin.
		A pale purple woolen cape embroidered with flower design.
		Baoyu chose a sheet of pink paper with a gilded border and floral design on one of the top and bottom corners.
Animal	Dragon	The tripod with dragon designs.
		A golden chaplet in the form of two dragons fighting for a pearl.
		A gold chaplet in the form of two dragons fighting for a pearl.
		A silver chaplet in the form of two dragons rising from the sea.
		A Han-Dynasty jade pendant carved with nine dragons.
		Before the porch hung a placard gilded with the nine-dragon design, and the inscription <i>Stars Shine on the Assistant</i> , which had been written by the late Emperor himself.
Continued on next page		

Table 3.5 – continued from previous page

Category	Sub-category	Description
Animal	Dragon	The tablet over the entrance to the main hall was engraved with frolicking dragons, and bore the intagliated motto in blue: <i>Venerate the Departed, Continue Their Sacrifices.</i>
		She looked at the dragon and serpent designs on the sheath which was studded with bright pearls and jewels, then drew out the two swords, identical in size, one engraved with the word <i>duck</i> , the other <i>drake</i> .
		To their east stood a carved openwork dragon-screen with below it a low couch spread with cushions, pillows and furs.
		They were now at the foot of a marble arch finely carved with rampant dragons and coiling serpents.
		A white robe embroidered with zigzag wave patterns and five-clawed dragons.
		A red archer's tunic embroidered with golden dragons and lined with fox-fur.
		A narrow-sleeved, none to new greenish yellow satin tunic lined with white squirrel, with fur-lined cuffs and collar, which was embroidered with dragons in gold thread and colored silks.
		Red silk back-rests and bolsters embroidered with <i>Dragons in the Clouds</i> designs and the character <i>Longevity</i> .
		On the large red sandalwood table carved with dragons.
		Continued on next page

Table 3.5 – continued from previous page

Category	Sub-category	Description
Animal	Dragon	Put the tripod with dragon designs on the table.
		Baoyu saw a newly written couplet on purple paper with gilded cloud-dragon designs.
		A carved lacquer tea-tray in the shape of crab-apple blossom, inlaid with a golden design of the <i>cloud dragon offering longevity</i> .
	Serpent	A yellowish green archer's jacket embroidered with serpents and lined with white fox-fur.
		Of the one hundred and twenty satin curtains embroidered with serpents and large and small black-dotted brocade hangings inset with different designs and colors.
		Forty rolls of satin with serpent designs.
		A red silk sutra wrapper with serpent design.
		Twelve rolls of first-grade Imperial brocade with the serpent design.
		The large Kang by the window was covered with a scarlet foreign rug. In the middle were scarlet back-rests and turquoise bolsters, both with dragon-design medallions, and a long yellowish green mattress also with dragon medallions.
Phoenix	Two lengths of phoenix-tail silk.	
Continued on next page		

Table 3.5 – continued from previous page

Category	Sub-category	Description
Animal	Duck	A white silk stomacher lined with red, which she was embroidering with mandarin ducks at play among some lotus. The lotus flowers were pink, the leaves green, and the ducks a medley of colors.
	Butterfly	A sash embroidered with many-colored butterflies.
		Her close-fitting scarlet satin jacket was embroidered with gold butterflies and flowers.
		Scarlet archer's jacket, embroidered with golden butterflies and flowers.
		Several rolls of pink cicada - wing gauze in one of the chests. There are several different designs - sprays of blossom, floating clouds and bats, butterflies and flowers - the colors so vivid and the gauze so soft.
		Slippers with butterfly and flower designs.
	A long-tasseled colored butterfly belt.	
	Bat	Several rolls of silver-red cicada - wing gauze in one of the chests. There are several different designs - sprays of blossom, floating clouds and bats, butterflies and flowers - the colors so vivid and the gauze so soft.
Continued on next page		

Table 3.5 – continued from previous page

Category	Sub-category	Description
Animal	Bat	There were only partitions formed of shelves for books, bronze tripods, stationery, flower vases and miniature gardens, some round, some square, some shaped like sunflowers, plantain leaves or intersecting arcs. They were beautifully carved with the motifs <i>clouds and a hundred bats</i> of the <i>three companions of winter</i> - pine, plum and bamboo - as well as landscapes and figures, birds and flowers, scrollwork, imitation curios and symbols of good fortune or long life.
Geometry	Eight bunches	A turquoise fringed coat of Japanese satin with a raised pattern of flowers in eight bunches.
		The fox-fur-lined coat of turquoise silk tapestry inset with eight circular designs.
	Chain	A back-rest and bolster of brocade with chain designs.
	Double ring	A green and gold plaited belt with double rings.
Other	Other	Welve scarlet tapestry scenes from the opera <i>Every Son</i> a high Minister on one side and one the other gilded depictions of the character <i>Longevity</i> in various styles of calligraphy.
		Amazement because all ten fitted into each other, the largest being the size of a small basin and even the smallest as big as the cup in her hand. Admiration at the fine landscapes, trees and figures carved on them, as well as the seals and inscriptions.
Continued on next page		

Table 3.5 – continued from previous page

Category	Sub-category	Description
Other	Other	There were only partitions formed of shelves for books, bronze tripods, stationery, flower vases and miniature gardens, some round, some square, some shaped like sunflowers, plantain leaves or intersecting arcs. They were beautifully carved with the motifs <i>clouds and a hundred bats</i> of the <i>three companions of winter</i> - pine, plum and bamboo - as well as landscapes and figures, birds and flowers, scrollwork, imitation curios and symbols of good fortune or long life.
		Red boots lined with lambskin and inset with a gold-thread cloud-design applique.
		A crimson woolen hood with a gosling-yellow applique of cloud designs and a golden lining.
		The small tiger-head battle boots decorated with multi-colored curling clouds.
		An ermine-lined peach-red silk tapestry jacket insett with a hundred-beads design.

Table 3.5 and Figure 3.7 illustrate that floral and animal motifs are predominant in the pattern design based on the high percentage.

The result of analysis of the pattern design in the novel is consistent with the research conclusion of the four wares. Birds and flowers were the most popular decoration in the four wares, and floral motifs were used as both the background and the main subject (Figure 3.8).

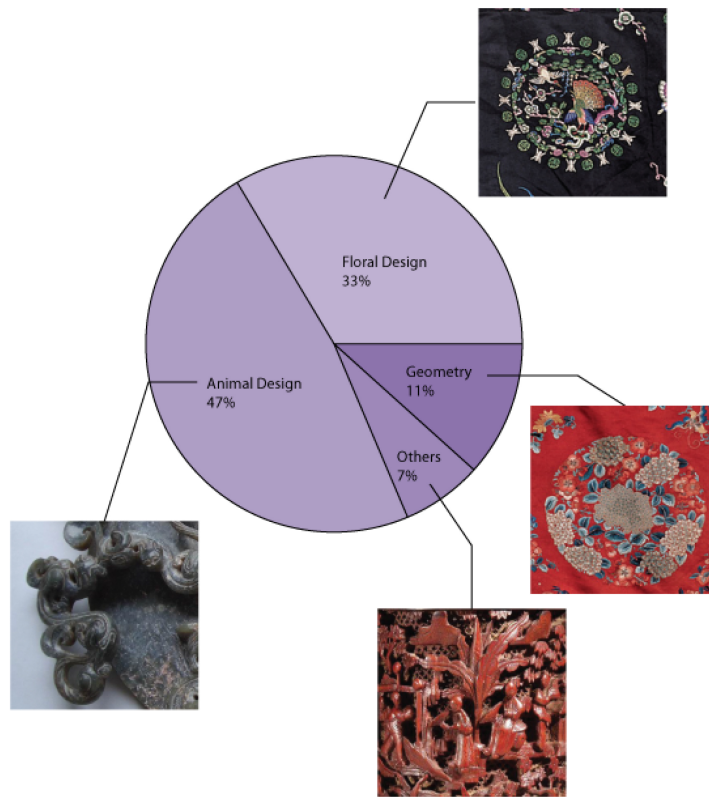


Figure 3.7: Pattern analysis



Figure 3.8: Motifs on the wares

One feature of the pattern on the wares is that the ornaments were influenced by religious associations. For instance, the lotus petals are associated with Buddhism (Figure 3.9).



Figure 3.9: **Religious motifs on the wares**

Another feature of pattern is auspice culture. Some Chinese characters are associated with ones with the same pronunciation but different tone, whose meanings were particularly loved by Chinese people. The auspice culture is expressed through these graphic ornaments. For instance, prunus was a popular motif on Chinese decorative arts since its name, mei hua, suggests beauty (mei) (Figure 3.10).



Figure 3.10: **Auspice cultural motifs on the wares**

Additionally, the main field of ornaments on the wares is enclosed by a border. The most popular border was a squared spiral used in a narrow band placed well below the lip of the bowl or plate (Figure 3.11).

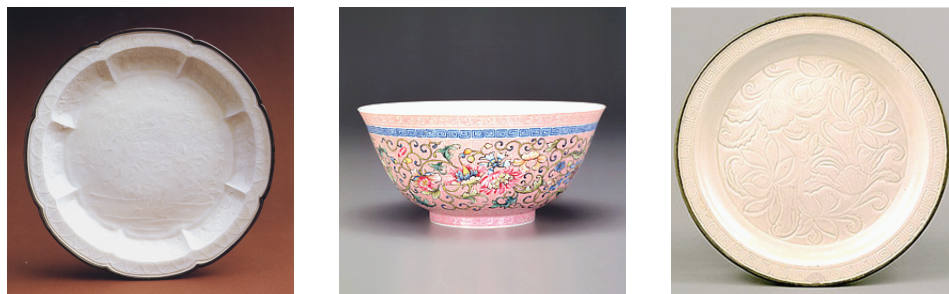


Figure 3.11: **Border decoration on the wares**

In conclusion, the floral and animal motifs, which are popular in the Chinese traditional decorative arts, can be applied on the tableware. Sometimes, the motifs are associated with religion and auspice culture and enclosed by some specific geometrical shapes.

3.6 Balance

Balance, the essential component of any work of art, is the equal distribution of visual weight in a piece of art. Visual weight is the relative visual impact or importance of art elements and their characteristics in a composition. There are three types of balance: symmetric, asymmetric and radial balance.

Symmetrical balance is the perfect balance. In a symmetrical composition, elements on each side of the central axis are perfectly equal. Radial balance employs radiating or emanating forms from a given point or area [38].

Table 3.6 lists the descriptions related to balance in *Dream of Red Chamber*.

Table 3.6: **Balance Description**

Category	Sub-category	Description
Balance	Symmetrical	A golden chaplet in the form of two dragons fighting for a pearl.
		A silver chaplet in the form of two dragons rising from the sea.
		The rose-red jade pendants in the form of double-flatfish.
		To its right, suspended on a lacquer frame, was a white jade musical stone in the form of double-flatfish, with a small hammer next to it.
		A green and gold plaited belt with double rings.
Continued on next page		

Table 3.6 – continued from previous page

Category	Sub-category	Description
Balance	Symmetrical	A pair of vases.
		Ru ware vase the size of a peck measure was filled with chrysanthemums white as crystal balls.
		That evening when Daiyu went into the inner room to get ready for bed, the sight of the jar of licheers reminded her of the old woman's maundering.
	Radial	An old bronze tripod, viridity with patina, stood about three feet high.
		The tripod with dragon designs on the table.
		The dark steatite tripod.
		The ancient bronze tripods and libation cups green with patina.
		The tripod with dragon designs.
		On both sides below the steps, tall vermilion candles blazed like golden dragons.
		A Han-Dynasty jade pendant carved with nine dragons.
		Her hair-clasps, in the form of five phoenixes facing the sun, had pendants of pearls.
		A large gilded cloisonn brazier, its three legs in the form of elephant trucks.
		From the great beams on either side hung crystal, hibiscus-shaped chandeliers with colored tassels.

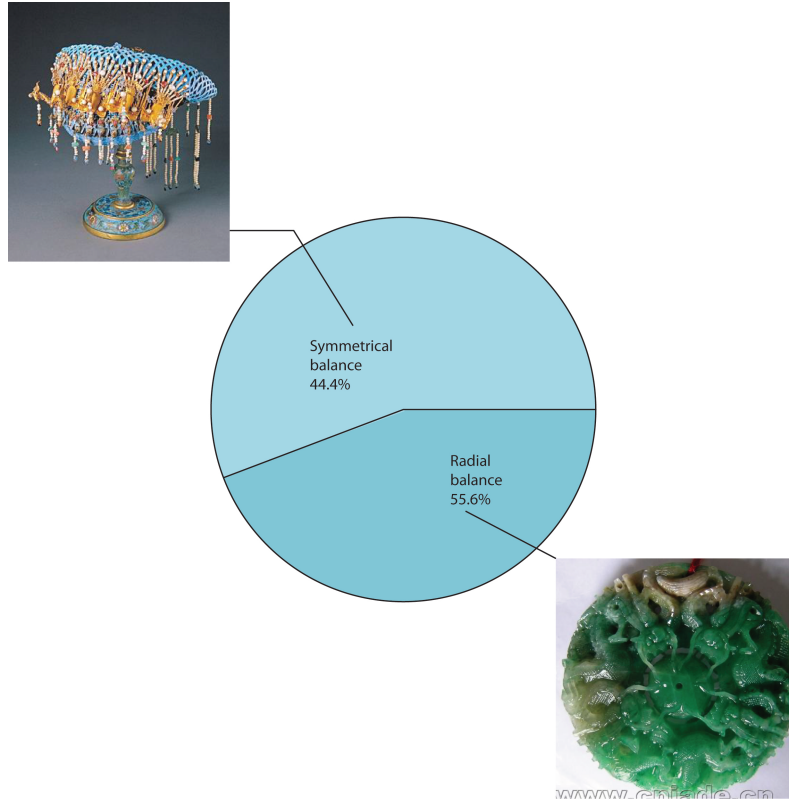


Figure 3.12: **Balance analysis**

Table 3.6 and Figure 3.12 illustrate that radial balance is predominant with 55.6% of the description related to balance.

3.7 Repetition

Repetition is the recurrence of elements within a piece: Colors, patterns, etc. The purpose of repetition is to unify and to add visual interest.

Table 3.7 lists the descriptions related to repetition in *Dream of Red Chamber*.

Table 3.7: **Repetition description**

Category	Sub-category	Description
Continued on next page		

Table 3.7 – continued from previous page

Category	Sub-category	Description
Repetition	Pattern	Before the porch hung a placard gilded with the nine-dragon design, and the inscription <i>Stars Shine on the Assistant</i> , which had been written by the late Emperor himself.
		Her close-fitting red satin jacket was embroidered with gold butterflies and flowers.
		Red silk back-rests and bolsters embroidered with <i>Dragons in the Clouds</i> designs and the character <i>Longevity</i> .
		Twelve red tapestry scenes from the opera <i>Every Son</i> a high Minister on one side and one the other gilded depictions of the character <i>Longevity</i> in various styles of calligraphy.
		A back-rest and bolster of brocade with chain designs.
		A bamboo mat woven in a lotus pattern.
		Red archer's jacket, embroidered with golden butterflies and flowers.
		An ermine-lined peach-red silk tapestry jacket inset with a hundred-beads design.
		The fox-fur-lined coat of turquoise silk tapestry inset with eight circular designs.
		A turquoise fringed coat of Japanese satin with a raised pattern of flowers in eight bunches.
A pale purple woolen cape embroidered with flower design.		
Continued on next page		

Table 3.7 – continued from previous page

Category	Sub-category	Description
Repetition	Pattern	A pale-white embroidered fur-lined jacket.
		The glimpsed dark green glowered satin trousers with a flower pattern.
		The flowered green silk lined-trousers.
		The bright pink trousers with a floral design.
		The glossy dark green silk trousers embroidered with flowers.
		The pomegranate-red trousers with floral designs.
		Below the kang facing the west wall were four armchairs, their covers of bright red dotted with pink flowers.
		A leek-green flowered portiere.
		The red portieres embroidered in gold flowers.
		The soft flowered portiere.
	Color	The slippers with butterfly and flower designs.
		The black-dotted stockings with brocade borders.
		The black-dotted antimacassars.
		The wrapper was of black-dotted silk gauze, line with bright pink silk.
		A short lined satin jacket - a patchwork of dark purple, blue and jade-colored squares.
		A narrow-sleeved, none to new yellowish green satin tunic lined with white squirrel, with fur-lined cuffs and collar, which was embroidered with dragons in gold thread and colored silks.

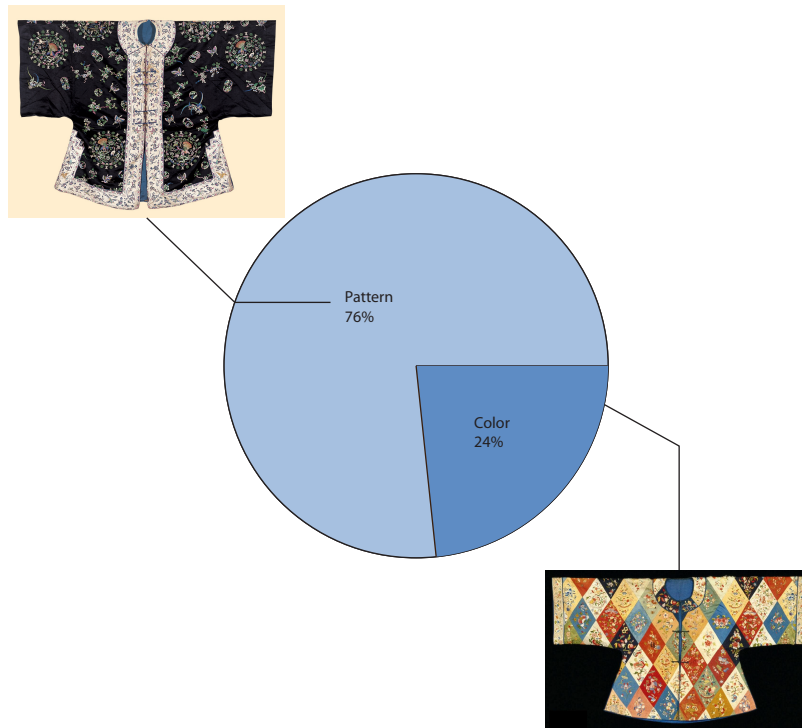


Figure 3.13: **Repetition analysis**

Table 3.7 and Figure 3.13 illustrate that the pattern repetitions are predominant based on the high percentage.

3.8 The Required Performance Criteria of Tableware Design

From analyzing, in detail, aesthetic areas for consideration, such as shape, proportion and texture, Table 3.8 lists the required performance criteria of tableware design integrating cultural aesthetic elements.

Table 3.8: **The required performance criteria of tableware design**

Factors	Parameters		Specification	Appropriation
Aesthetics	Shape	Floral	Peony	3 (Good)
			Plum	5 (Outstanding)
			Chrysanthemum	3
			Foliage	3
			Lotus	4 (Excellent)
			Sunflower	3
			Clove	3
			Crab-apple blossom	3
			Caltrop	3
			Cluster	3
	Proportion	Slender		3
	Texture	Embossing	Carved	4
			Inset	3
		Impressing	Raised	3
			Studded	4
Painting		Black-dotted	3	
		Gilded	4	
Aesthetics	Color	Red	Red	4
			Scarlet	5
			Crimson	3
			Rose-red	1 (poor)
			Ruby	1
Continued on next page				

Table 3.8 – continued from previous page

Factors	Parameters		Specificaion	Appropriation
Aesthetics	Color	Red	Pomergranat-red	1
			Silver-red	1
			Peach-red	2 (Fair)
			Apricot-red	2
			Bright pink	2
			Pink	1
			Cerise	1
			Vermillion	1
	Pattern	Floral	Lotus	3
			Plum	1
			Passion-flower	1
			Flowers	5
		Animal	Dragon	5
			Serpent	3
			Phoenix	1
			Buttery	3
			Bat	1
		Balance	Balance	Symmetrical
	Radial			5
	Repetition	Pattern		5

The appropriation in the table 3.8 is based on the number of descriptions for each item cited in *Dream of the Red Chamber*. For instance, there are 73 descriptions relevant to red

color. Table 3.9 lists the number of descriptions of different red colors and their corresponding percentages. Based on the percentage of each item, the appropriation is calculated.

Table 3.9: **The appropriation rate of red colors**

Item	Number of description	Percentage	Appropriation
Red	18	24.7%	4
Scarlet	21	28.8%	5
Crimson	10	13.7%	3
Ruby	1	1.4%	1
Pomegranate-red	2	2.7%	1
Siver-red	6	8.2%	1
Peach-red	6	8.2%	2
Apricot-red	1	1.4%	2
Bright pink	4	5.4%	2
Cerise	1	1.4%	1
Pink	2	2.7%	1
Vermilion	1	1.4%	1

Chapter 4
Design Guideline Application

4.1 Design guidelines

Based on the grading of the required performance criteria in section 3.9, the tableware design guidelines, which integrated cultural aesthetic elements, are developed as follows:

From the aesthetic consideration:

- The shapes of tableware have a tendency of imitating **floral forms**, such as lotus and plum.
- The proportion of tableware is **slender**.
- The **carved, studded or gilded texture** is applied on the surface of the tableware.
- The **scarlet** color is the main color applied on the tableware.
- The **flower motifs** are applied on the tableware.
- The form and the pattern should be the **radial balance**.
- The **pattern** is applied on the tableware repetitively.

From the technical consideration:

- The glaze applied on the tableware should be **food safe**.
- **Porcelain** is highly recommended for its beautiful surface quality and the very fine and strong body.

From the production consideration:

- **Slip casting**, a relatively simple technique, should be utilized because of the level of accuracy and the ability to repeatedly cast the object over and over again.

4.2 Design Process

The following procedures and methods were used to conduct the study (Figure 4.1):

In the research step, the design product is identified first. The applicable product should have a strong relationship with culture and social environment. Then choose a novel that is rich in ideas and concepts of a multi-faceted world in a specific cultural society. The novel should also provide a lot of authentic details concerning the daily life at that time. When reading the selected novel, explore many different areas that will bring more inspiration to designers. After reading the whole book, the inspired descriptions are categorized into a number of groups. The source material in various categories is developed further in the aesthetic perspective, such as shape, proportion and color.

Further, the required performance criteria are summarized based on statistical data, which result from calculating the predominant feature in each group.

Based on the required performance criteria, the design guidelines are developed to summarize the consideration of each aesthetic feature. Next, the design guidelines are developed and applied to the product development.

In the concept development phase, utilize the design guidelines to create the concept draft of the product. All of the concepts are evaluated by the required performance criteria. The better solution is selected for further refinement. After refining, the best possible solution is prototyped to validate the efficiency of the design guideline.

At last, the conclusion is summarized and recommendation for the further study is proposed.

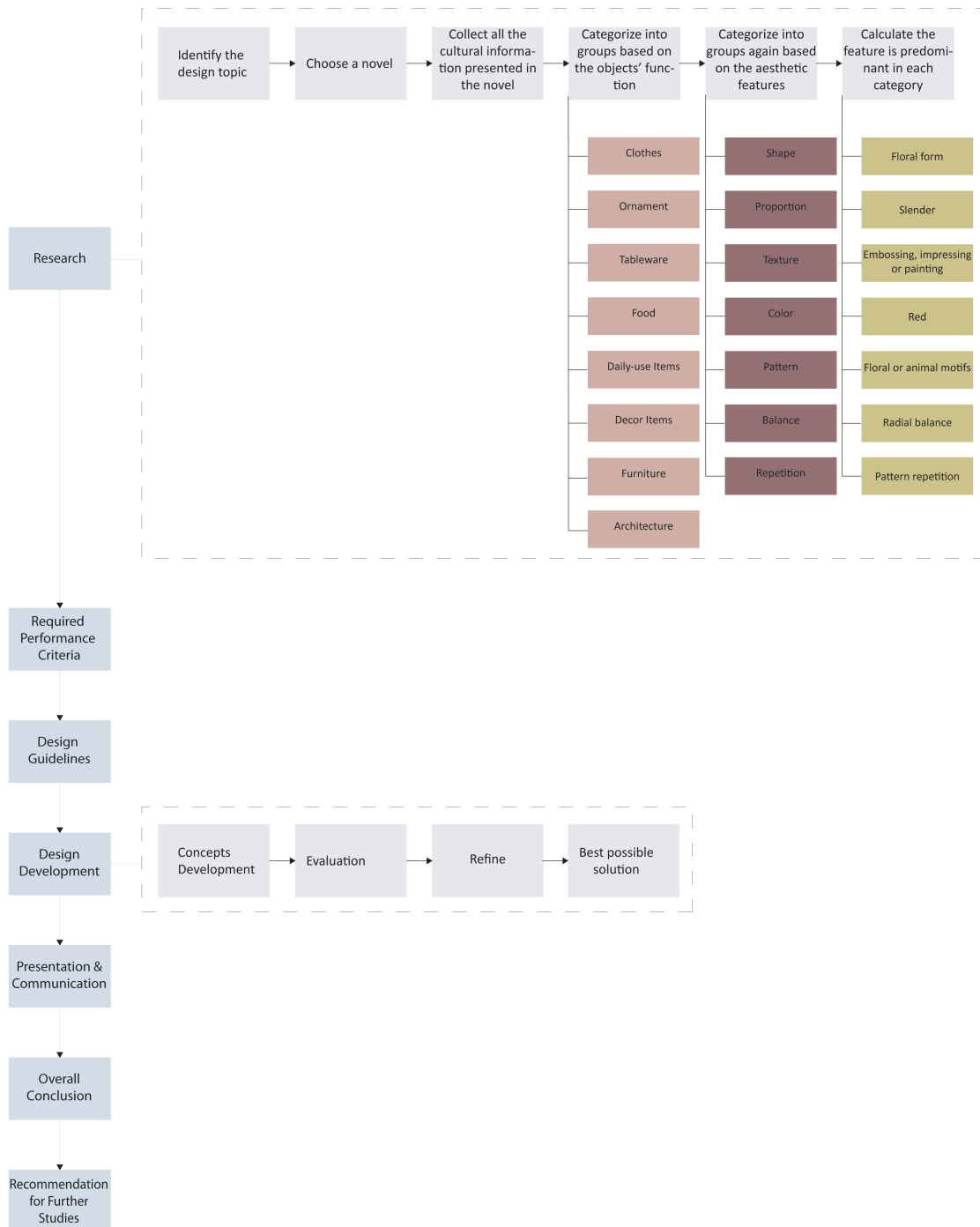


Figure 4.1: Design process

4.3 Concept ideation

The concept sketches are developed based on the design guidelines of aesthetic elements research from *Dream of the Red Chamber*.

First, the form of tableware gives floral appearance with radial balance. The initial sketches of form development are drawn below.

For instance, the multiple-petal flower form is defined by the discontinuous radial curve. The slightly lobed rim gives the dish the appearance of foliate form, with a simple V-shaped cut in the lip. Form concept development is illustrated in Figure 4.2.

Second, the flower motifs on the tableware are developed. Many designs were of course purely decorative or part of a certain fashion in design. However, meaningful or symbolic motifs were an important part of ceramic culture in China, which reflected certain important values and beliefs in Chinese society.

Flower motifs are popular on the decorative arts of China and each type of flower has its unique meanings. The lotus flower is associated with summer, Buddhism and purity. The word for lotus in Chinese (lian) also means ‘in succession’, so the wish is for the owner of the dish to have a series of sons. Prunus suggests beauty and is regarded as a harbinger of spring. Peony is known as the flower of riches and honor and is used symbolically in Chinese art. Pattern concept development is illustrated in Figure 4.3 and 4.4.

Based on the design guidelines, two form concepts and pattern designs are selected and the graphic pattern is applied on the plates radial balanced and repetitively. Concept development for plates is illustrated in Figure 4.5.

The first combination is selected for further refinement. The pattern is simplified and the number of repetition is increased to reach a better visual balance. After refining, the final solution for the plate design (Figure 4.6) is selected for prototype making.

4.4 Idea Development

4.4.1 Foam Mock-up

The three-dimensional visualization is vital to develop the design. The mock-up, a three-dimensional “sketch”, is built to realize how an idea will work. This does not have to be highly finished, or detailed, but it brings an idea to life.

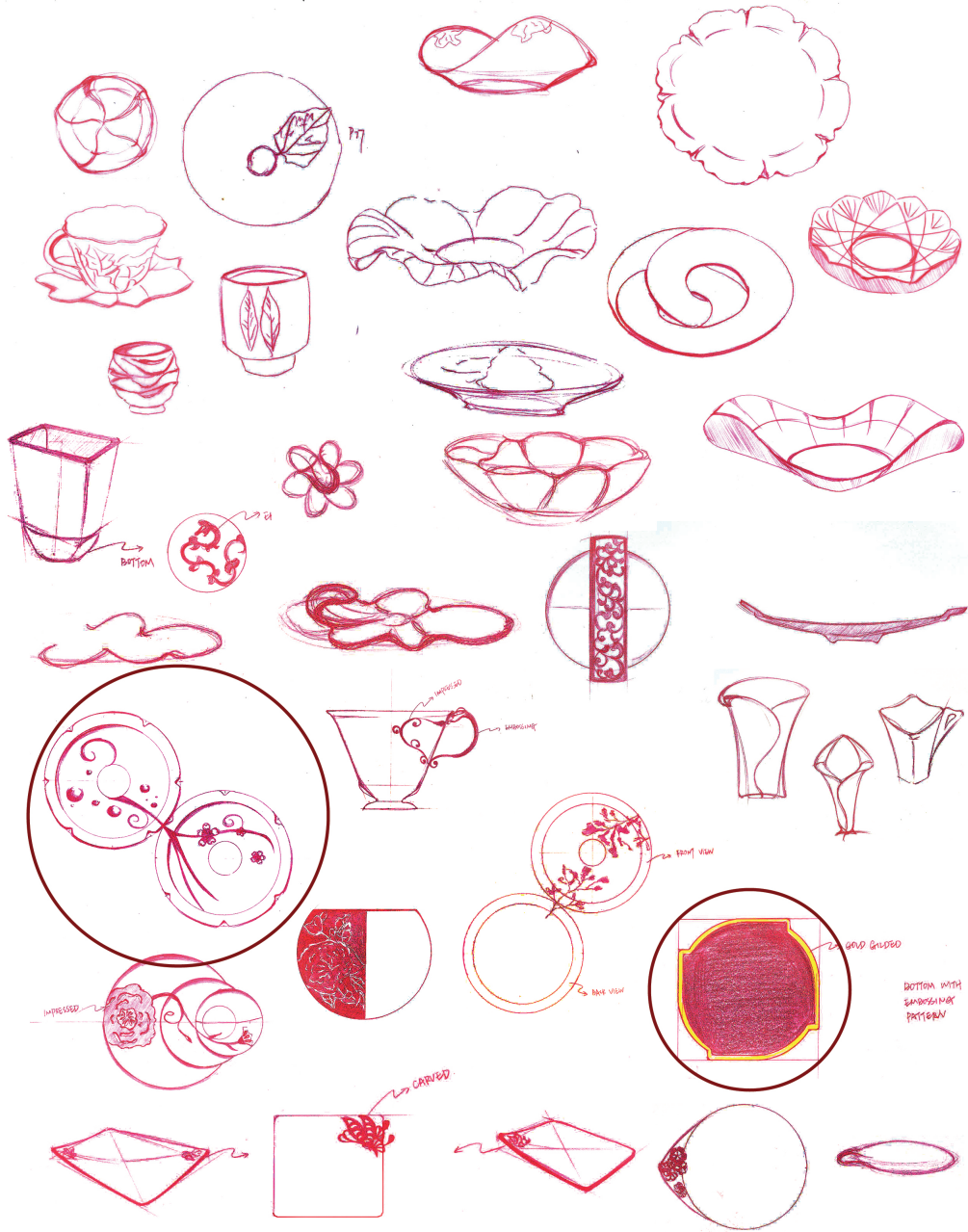


Figure 4.2: Form concept development



Figure 4.3: Floral pattern concept development

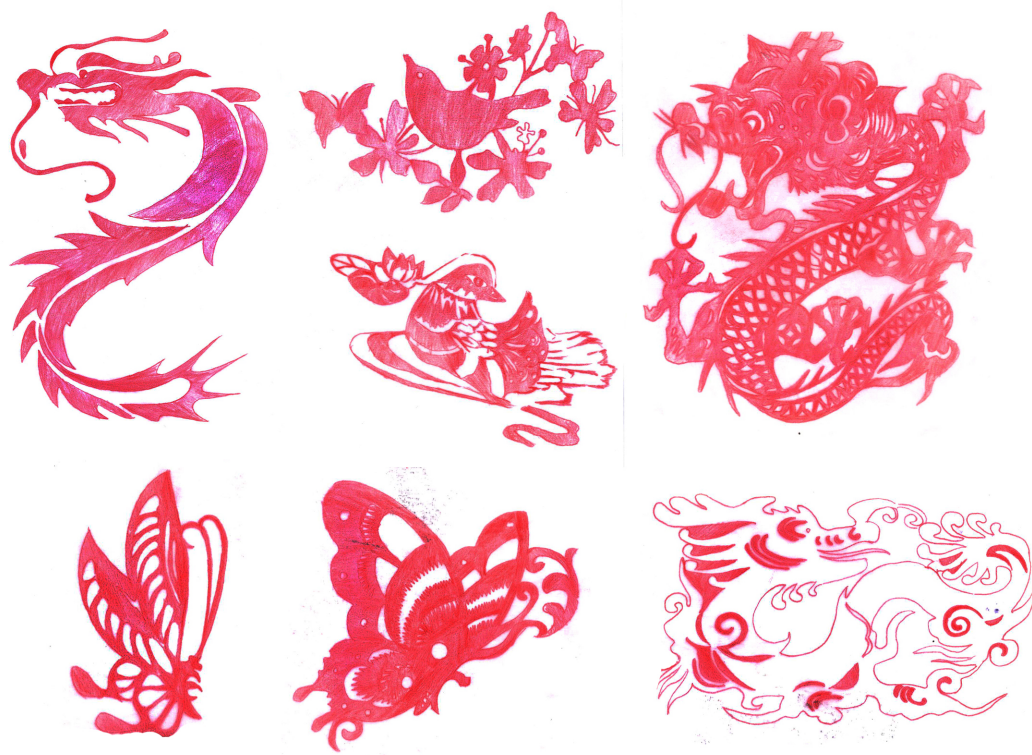


Figure 4.4: **Animal attern concept development**

The computer model of the cup is first built in understanding the idea in three dimensions (Figure 4.7).

After examining these two computer models, model 1 is chosen for its elegant shape and its style is consistent with plates.

In the next phase, the foam mock-up is further developed since it is easy to manipulate and handle. The mock-up demonstrates the real dimension and proportion of the final model (Figure 4.8).

Foam models with different heights and diameters are made, and the size of the model on the left is easy for hand holding and matches the proportion of the plates.

4.4.2 Mold making

In ceramics, a model is most likely to be made of the traditional material - plaster. Plaster is an ideal material to pick up detail, so it is used to make a mold. The plaster is

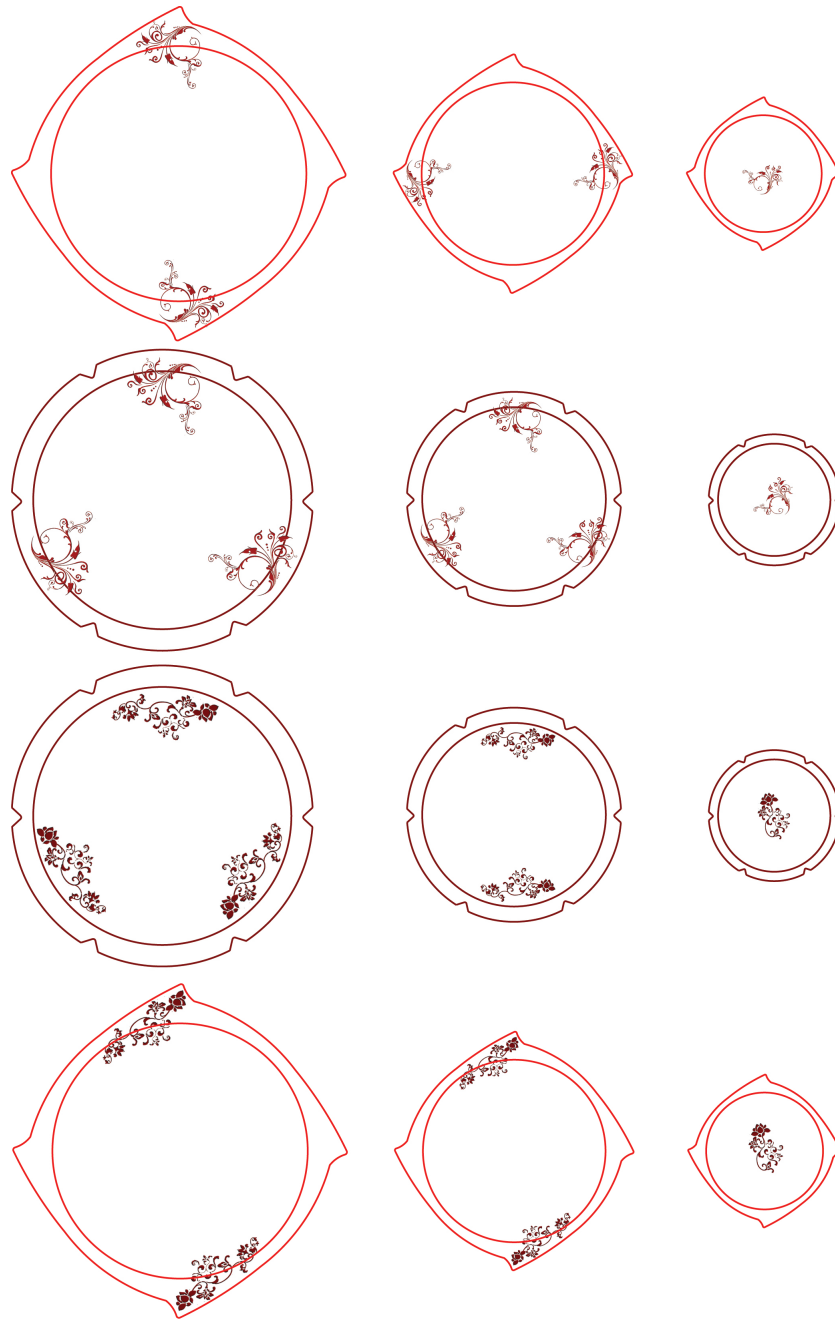


Figure 4.5: Concept development for plates

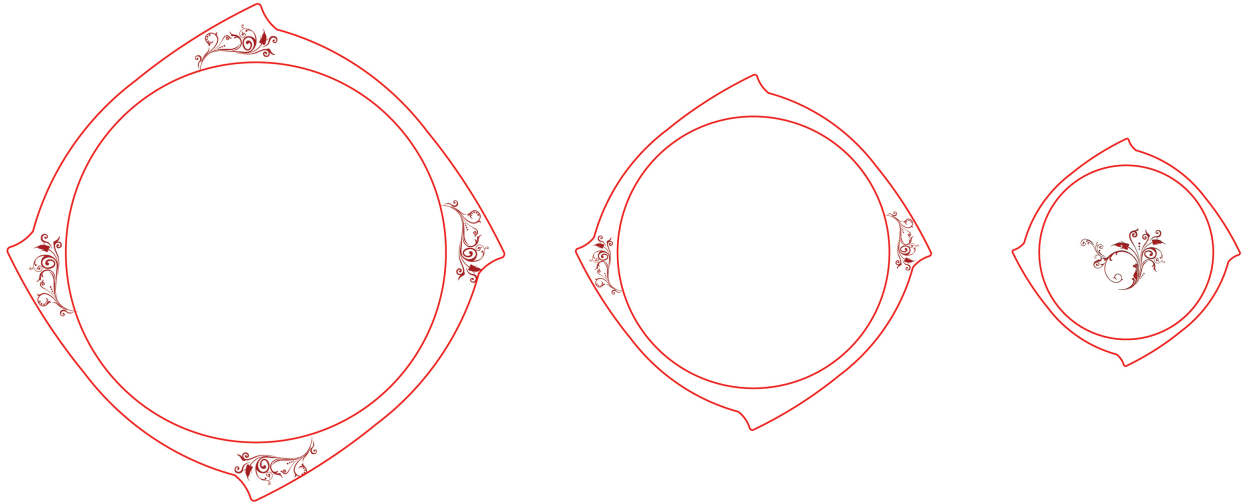


Figure 4.6: **Final solution for plate design**

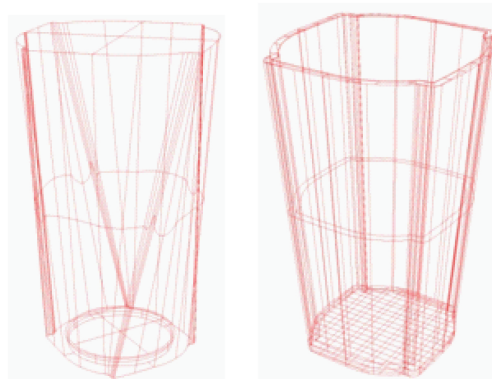


Figure 4.7: **Computer model for the cup**



Figure 4.8: **Foam mock-up for the cups**

poured over a model as a liquid and then it becomes solid. When the plaster dries, the mold is highly porous, particularly great for slip casting.

It is important to understand the form of the design and how it can be molded. If the form is hard to mold, the overall success of the design is diminished.

The plate mold (Figure 4.9) has two pieces. This two-piece split mold is simply for the design that has an undercut. Because the foot of the plate is recessed, the mold splits along its length through the rim edge.



Figure 4.9: **Plaster mold for the plate**

The cup mold (Figure 4.10) has three pieces. Because of the twisted shape of the cup, it needs to be split along the diagonal edge, so the cast piece can be released. Because of the recessed foot, it would need to incorporate a bottom to the mold. The mold then splits into three pieces.

The relief pattern on the surface of the model, also called embossing, can be molded and cast. After the mold is built, the relief pattern is carved on the plaster mold so that the embossed surface is integral to the form of the objects.



Figure 4.10: **Plaster mold for the cup**



Figure 4.11: **Carved pattern on the plaster mold**

4.4.3 Slip casting

Slip is liquid clay and slip casting is an ideal process in ceramic design for the level of accuracy and the ability to repeatedly produce the object.

The following are the steps for slip casting of plates:

Slip is mixed in a large bucket and kept ready for use. To make sure the mold is dried, the mold would be heated in the oven for 3-4 hours. Before using the mold, it should be dry to touch and clean of all dust and debris. Firmly strap all the pieces of mold together so that the slip can be safely poured into the mold in one continuous motion. To avoid creating a ripple on the casting surface, continue pouring the slip until the mold is full (Figure 4.12).



Figure 4.12: **Pour the slip until the mold is full**

It will take a given period of time to allow the slip to cast. Porcelain usually takes about 15 minutes. The plaster mold will draw the water from the slip. For the cup mold, a thin wall of porcelain will be left on the mold surface after the water is drawn from the slip. When cast thickness is correctly achieved (approximately 1/4 in.), the excess slip will be poured out from the mold (Figure 4.13).

The porcelain will start to shrink in the mold with the clay drying. Before the porcelain is safe to handle, it is kept in the mold. When the porcelain is dry enough to handle, the mold can be taken apart (Figure 4.14).



Figure 4.13: **Pour excess slip out from the mold**



Figure 4.14: **Take the mold apart**

After the porcelain is taken out from the mold, leave the cast to dry for a few hours until it is hard enough to touch without leaving an imprint. Then the surplus clay can be trimmed along the seams by a sharp blade (Figure 4.15).



Figure 4.15: **Trim surplus porcelain along the seam**

The delicate decoration on the plates can be cleaned by an art brush. The ripples on the cast surface are smoothed by a brush or a sponge.

Casting results in a very fine-quality porcelain, with consistent thickness throughout, fine rims, and delicate decoration (Figure 4.16).



Figure 4.16: **Casting mold**

4.4.4 Glazing

Before glazing, test pieces are used to make important decisions and discover the final finish of the design. Glaze testing can be used to understand the oxidized effect on tiles or slabs. (Figure: 4.17)

Through glaze testing, cranberry demonstrates the best finishing effect and color.

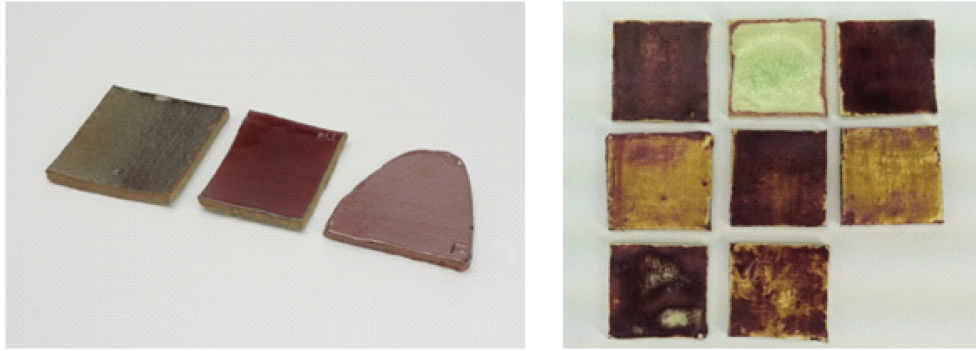


Figure 4.17: **Glaze testing on slabs or tiles**

To further glaze testing, more test pieces are created. Fire more wares, and then a good body of test pieces shows the glaze qualities. The seams are used to understand how the glaze reacts at sharp points, and the three-dimensional form will explain the fluidity and movement of the glaze on a vessel (Figure 4.18).



Figure 4.18: **Glaze testing on wares**

4.5 Design Execution

A set of tableware samples, including a desert plate, a salad plate, a dinner plate and a cup, demonstrates the application of the design guidelines.

The shape of the tableware imitates floral forms with petal curves on the edge (Figure 4.19).



Figure 4.19: **Desert plate**

The flower relief motifs are applied on the surface of the tableware. An attractive result is produced especially when glazed as the glaze highlights and pools in the three-dimensional pattern of the embossing (Figure 4.20).



Figure 4.20: **The flower relief motif on desert plate**

The form is of radial balance. The pattern is applied on the tableware in radial repetitive intervals (Figure 4.21).



Figure 4.21: **The flower relief motif on dinner plate**

The cup is very stable, slender, with a foot diameter that is smaller than the rim (Figure ??).



Figure 4.22: **The cup**

The plate is deceptively shallow, about 1 inch in height. Plates come in standard diameters, a dinner plate being 12 inches. The rim will be about $\frac{7}{8}$ of an inch in total. The manufacturing process will often render the plate thin on the edge to make it look fine, while making this section thicker toward the center to add strength. The internal well of a plate should be deep enough to hold food and sauces without them encroaching onto the

rim. The external height of a plate should allow fingers access underneath in order to lift it safely, approximately 7/8 of an inch (Figure 4.23).

The cranberry red glaze is applied on the tableware, which is food safe.

Porcelain is used to create the tableware and the slip casting method is utilized to build the porcelain prototype.



Figure 4.23: **The tableware design**

4.6 Summary

This set of tableware successfully followed the design guidelines in this thesis. The tableware with a strong relationship with Chinese culture is created by applying the aesthetic features in *Dream of the Red Chamber*. The designed tableware shows exploration of the design guideline.

Chapter 5

Conclusion

The objective of this thesis is to propose a design guideline to apply the aesthetic elements in *Dream of the Red Chamber* into the current daily-use tableware design. The results of the study of ceramics history in Ming and Qing dynasties shows that the aesthetics of Ding, Ru, Guran and Enameled ware are consistent with the aesthetics analysis obtained from the novel. The aesthetic elements, such as shape, proportion, texture, color, pattern, balance, repetition and materials, are studied and analyzed to create a set of tableware with styles of Redology. The sample work is designed to demonstrate the application of the design guidelines. Designers can apply part of the design guidelines to the product design. It is not necessary to consider all of the guidelines. For example, the slender proportion is not considered for the plate design.

These design guidelines help the designer to create a set of tableware with styles of *Dream of the Red Chamber*. The designed product will bear the unique cultural influence of Chinese classic literature. More aspects can be further investigated in the next phase. Recommendations for further research are as follows:

1. *Dream of the Red Chamber* is one of the Four Great Classical Novels. Designers can use the same methodology proposed in this thesis to analyze the other novels and develop the corresponding design guideline.

2. When analyzing the novel, except the description related to the classified subjects, a designer can also consider the theme, the period background, the fascination of the character study, and the social environment where the story happened, from which designers draw inspiration.

3. The methodology proposed in this thesis is only applicable to develop a design guideline inspired by the Chinese classical novel rather than any classical literature. Designers can further investigate the methodology related to another form of literature, such as Tang poetry.

4. The design guideline may be applied to other products, such as furniture, electronics, etc.

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