

การออกแบบภาพวาดภูมิทัศน์จีนใหม่ในการตกแต่งเซรามิก กรณีศึกษาเกี่ยวกับแม่น้ำและภูเขานับพันไมล์

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บทคัดย่อ

จุดประสงค์หลักของบทความนี้คือการสร้างแนวคิดใหม่ในการออกแบบเซรามิกสมัยใหม่ผ่านรูปแบบของภาพวาดภูมิทัศน์ของจีน ภาพวาดภูมิทัศน์จีนเป็นส่วนสำคัญของวัฒนธรรมจีนและระบบภาษา การวาดภาพทิวทัศน์ธรรมชาติยังคงเป็นการสร้างสรรค์หลักของบรรดาศิลปิน โดยมีรูปแบบการแสดงออกที่หลากหลาย บทความนี้สำรวจรูปแบบภูมิทัศน์ในภาพวาด วิเคราะห์การผสมผสานระหว่างศิลปะและรูปแบบภูมิทัศน์ในการสร้างสรรค์เซรามิก ผสมผสานวัฒนธรรมดั้งเดิมเข้ากับสุนทรียศาสตร์สมัยใหม่ เพื่อพยายามหาวิธีใหม่ในการแสดงออกทางศิลปะ

เนื่องจากความหลากหลายของการใช้ภูมิทัศน์ในภาพวาดจีนโบราณนั้นซับซ้อนเกินไป วิทยานิพนธ์นี้จึงยกตัวอย่าง *A Thousand Miles of Rivers and Mountains* ของ Wang Ximeng ที่วิเคราะห์ลักษณะทางศิลปะจากองค์ประกอบสำคัญสามประการ: รูปร่าง องค์ประกอบ และสีที่แสดงออกในภาษาสร้างสรรค์ที่ทันสมัยในการออกแบบงานเซรามิกร่วมสมัยให้สอดคล้องกับลักษณะจีนดั้งเดิม

คำสำคัญ: จิตรกรรมจีน, ลักษณะภูมิทัศน์, เครื่องปั้นดินเผาร่วมสมัย, ศิลปะการตกแต่ง

Redesign of Chinese Landscape Painting in Ceramic Decoration: Case Study on A Thousand Miles of Rivers and Mountains

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Abstract

The primary purpose of this paper is to construct a new idea of modern ceramic design through the forms in Chinese landscape painting. Chinese landscape painting is an essential part of Chinese culture, and its unique painting language system and artistic charm make it a typical representative of Oriental art. Among them, the natural landscape form has been one of the enduring creative themes of artists, with various forms of artistic expression. The article discusses the landscape forms in painting, analyzes the combination of landscape forms in artworks and ceramic creation, blends traditional culture with modern aesthetics, and tries to find a new way of artistic expression.

Since the variety of landscape applications in traditional Chinese painting is too complicated, this thesis takes Wang Ximeng's A Thousand Miles of Rivers and Mountains as an example, analyzes its artistic characteristics from three significant elements: shape, composition and color, and expresses them in a modern creative language to design a contemporary ceramic work in line with traditional Chinese characteristics.

Keywords: Chinese painting, Landscape form, Contemporary ceramics, Decorative art

Introduction

In today's rapidly developing society, people focus more on modern popular culture and gradually away from traditional art. As an essential part of artistic creation, traditional Chinese painting gradually faded from people's vision. Only by looking for the hidden behind Chinese symbols and a deep understanding of Chinese elements can we find a new direction and entry point for the development of modern ceramics. As long as we have the opportunity to enter the tradition and understand it, we will deeply know its internal spiritual culture. By innovating a specific element of Chinese traditional culture and the combination with modern ceramic language, researchers create ceramic works with cultural connotations and characteristics of the times.

The researchers obtained inspiration from the landscape forms in the traditional Chinese painting A Thousand Miles of Rivers and Mountains and redesigned them with ceramic artworks. Chinese painting has a long history and a unique oriental artistic style. It emphasizes "writing the spirit with shape," stresses "vivid charm", moreover, it embodies the Chinese Nation's aesthetic taste in content and creation consciousness. With the techniques of modern ceramic design, the expression of new forms is given so that people can once again understand the artistic beauty of traditional culture. The researchers try to integrate modern ceramics with a variety of traditional Chinese cultures so that these traditional elements can help designers create artworks with Chinese characteristics and more artistic possibilities.

Research Timeline Processes

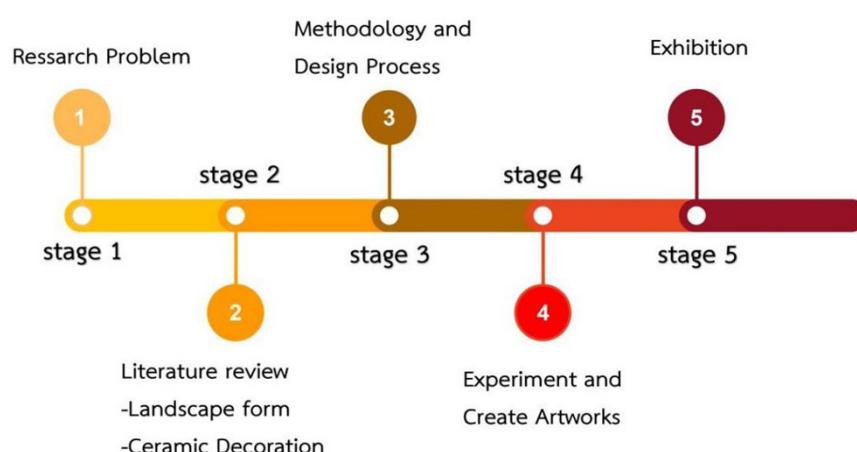


Figure 1 Research timeline processes

Note: From © Zhuo Anjing 11/02/2022

Research Problem

- (1) In the collection of landscape forms, there is much literature on Chinese landscape painting techniques, but there needs to be more practical research on landscape forms in ceramic decorative arts.
- (2) In modern ceramic design, the decoration of landscape forms is primarily flat, not three-dimensional. It is an extension of Chinese landscape painting, needing more redesign of traditional Chinese elements, which cannot meet the public's aesthetic needs.
- (3) In the current literature, there needs to be more exploration of the sustainability of landscape forms by using new materials and technologies to redesign them.

Research objective

Regarding the redesign of modern ceramics with traditional Chinese landscape paintings, taking A Thousand Miles of Rivers and Mountains as an example, there are mainly the following three research objectives:

- (1) To investigate the artistic characteristics of Chinese painting and explore its potential in modern ceramic decoration design
- (2) To explore a new form of presentation of Chinese painting, changing the traditional flat representation of painting, combined with ceramics, can be more widely used in modern space.
- (3) Based on the shape and color of traditional Chinese elements, ceramic art is used to give it a new life and create works with national characteristics, combining tradition with modern artistic aesthetics.

Landscape forms in traditional Chinese culture

1. Landscape form in painting

Chinese painting has a long and gradual historical period. It is difficult to determine its origin. It is generally believed that painting originated from murals and painted pottery in the primitive period. When landscape forms were used as painting decoration, they mostly appeared in the

background of traditional figure painting and then gradually developed into an independent art category — landscape painting. It is one of the primary forms of traditional Chinese painting. A painting that expresses the beauty of mountains and rivers and seeks spiritual sustenance. It can best reflect the Chinese culture and artistic spirit in the history of the development of Chinese landscape painting first sprouted in the Wei, Jin, Southern and Northern Dynasties. The image of mountain and water appeared, represented by Gu Kaizhi's The Painting of Luoshen Fu (Figure 2). Among them, "the water cannot be wide, the people are bigger than the mountain" is the main feature of landscape painting in this period discussed by Zhang Yanyuan of the Tang Dynasty, as well as the spatial and proportional relationship of landscape morphology. (Shou, 2017)



Figure 2 Gu Kaizhi's *Luo Shen Fu*

Note: From Sohu, 2018

During this period, Buddhist thought flourished and developed, as well as the integration of foreign things such as the Western Regions. The subject matter content became more prosperous, and people's concerns gradually shifted to themes such as landscapes, flowers, birds, animals, and people. After the Sui and Tang Dynasties, due to the economic, policy, and cultural exchanges, people's minds were liberated unprecedentedly. Landscape painting began to develop rapidly in an all-around way. Many famous landscape painters and related literary ideas emerged, forming two significant schools of blue-green landscape and ink landscape (Wu, 1985). The blue-green landscape is bright and thick in color, and painting is the main form. The representative work is the Ming Emperor Xing Shu Tu by Li Zhaodao of the Tang Dynasty as shown in Figure 3; The black and white landscape world drawn by the ink and wash landscape is mainly freehand brushwork, with the representative figures Huang Gongwang, Fan Kuan, Jing Hao, Ma Yuan. These outstanding artists have left a brilliant mark on Chinese landscape painting art.

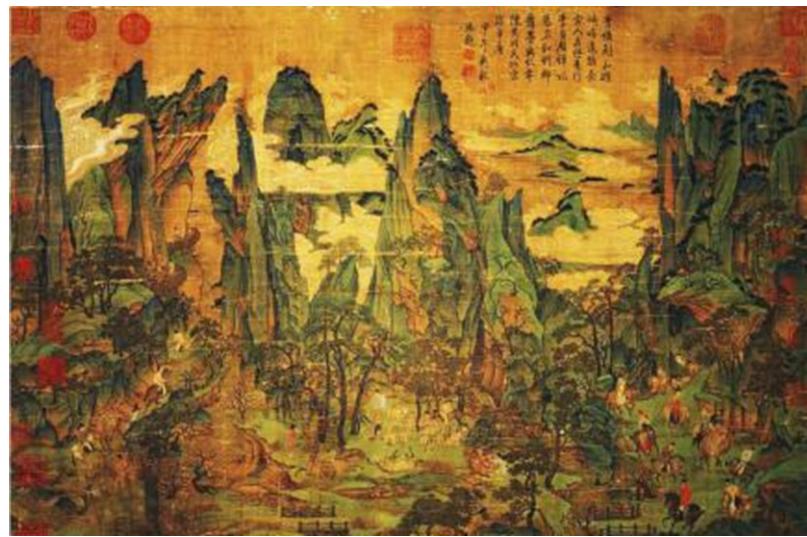


Figure 3 Ming Emperor Xing Shu Tu

Note: From Tencent, 2020



Figure 4 Fuchun Mountain Residence

Note: From Taipei's National Palace Museum, 2020

2. Landscape form in ceramic decoration

Landscape forms are also widely used in ceramics as decorative patterns. As an essential part of the Chinese cultural context, ceramics, like landscape paintings, have a decisive influence on the world art stage. The history of ceramics extends back for thousands of years. At the time of the birth of landscape painting, it was influenced by the painting art of ceramics (Ye, 2006). People have been trying to depict landscapes on ceramics in different historical periods.

In the neolithic period excavated in the Majiayao swirl pattern pottery jar (Figure 5), there is more mature water decoration, an expression of human beings and water closely related to the pattern. The craftsman painted on the surface of the pottery smooth and natural lines. This line is the people living at the time of the Yellow River's turbulent raging pattern of the portrayal as if the rhythm of the flow is very dynamic and tense. The development of white porcelain has special significance to ceramic painting. The white and warm ceramic surface is like rice paper, which provides a perfect carrier for painting on porcelain, while landscape painting matured in the same period, providing a creative edge for ceramic. The exact period of landscape painting also gradually matured for creating a ceramic painting to provide convenience. In the same period, landscape painting also gradually matured, providing a convenient way to create ceramic paintings. Painting techniques such as overglaze and underglaze painting were introduced, making the relationship between landscape elements and ceramics increasingly close. (Tian, 1985)



Figure 5 Neolithic period Majiayao swirl pottery jar

Note: From Tencent, 2020

After the Yuan Dynasty, the process of blue and white painting gradually matured, and ceramics were decorated with many blue and white. The surface of the porcelain was white and pure, and the blue color and white color was stable and easy to fire without losing color. The blue and white painting was mainly like traditional Chinese painting in terms of brush and ink, materials, colors, and techniques, especially the influence of Chinese ink painting were deep and wide, and the decorative themes showed a trend of diversification to meet the aesthetic needs of the public. (Hu & Zheng, 2009)



Figure 6 Doucai Sea House Plate

Note: From Christie's, 2021

After the Ming Dynasty, ceramic decoration in the landscape formed from the background of figure painting separated, forming an independent pattern style, separate decoration depicting landscape scenes applied to the surface of different objects, performance techniques appear underglaze painting and glaze painting process, greatly enriched the decorative picture, for the Qing Dynasty complex ceramic craft laid the foundation. During the Qing dynasty, the art level bent on imitating the retro, the pursuit of the cultural spirit of the previous generation, the literati painting in the composition, mood, and techniques are expressed in the ceramic landscape decoration. During this period, the ceramic decoration method also appeared in enamel, pastel, and ink color. By this time, the technique of painting and decorating ceramics with landscapes as the subject matter gradually matured, and the art of ceramics and painting became closer and flourished rapidly and has been influential to this day (Jia, 2014). As shown in Figure 7, a work by renowned contemporary potter Ning Gang, the author uses various decorative techniques to create a work that conforms to modern aesthetics.



Figure 7 Midsummer

Note: From Sina Collection, 2017

Methodology and process

This chapter mainly describes the research methods and creative process to discover the design essence of the landscape form in the traditional Chinese elements and promote the appreciation of traditional culture. Researchers obtain large amounts of data from the literature, case studies, and field investigations and then interview experts in the field. The interviews will provide valid information in the field and help screen redundant and invalid information collected, plus details. It shows the researcher's creative thinking and process, which can provide readers with more valuable references.

The researcher divides this chapter into the following four parts. As shown in Figure 8.

- Part 01: Data collection
- Part 02: Case study
- Part 03: Experiment
- Part 04: Design and development

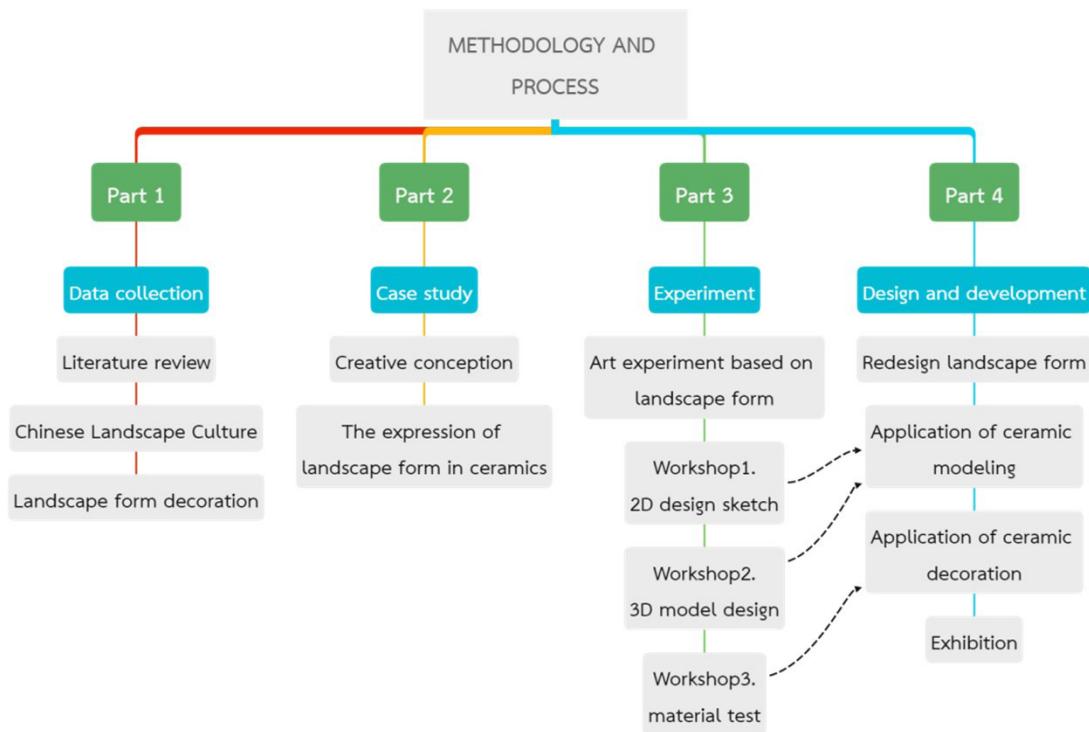


Figure 8 Methodology and process

Note: From © Zhuo Anjing 14/03/2022

1. Data Collection

Using the library and field investigation, we collected many relevant documents. We summarized them to understand the concept of landscape form in traditional Chinese elements, its origin, development, humanistic significance, and spiritual connotation. At the same time, it deepens the study of modern ceramic art and related techniques of traditional ceramic production, analyzes its process characteristics, material use, and expression techniques, and summarizes the knowledge related to this topic as a reference and theoretical basis.

China is a country with a long history and a vast territory. The geographical environment differs from east to west, north to south, among which mountains and rivers stand. People here get along with mountains and waters day and night, forming a unique way of thinking and spiritual outlook. Religion, philosophy, and aesthetics are most closely related. In Chinese Landscape Culture, Li Wenchu (Li, 1996) summed up the Chinese people's religious, philosophical, and aesthetic concepts of landscape. It provides a theoretical basis for thinking about the culture behind the landscape.

The Analects of Confucius Yongye chapter: “The wise man rejoices in water, the benevolent man rejoices in the mountains; the wise man moves, the benevolent man is quiet; the wise man is happy, the benevolent man lives long.” Li Ao’s (Li, 2008) book explains this passage as the people’s noble character is transformed into mountains and water, and water represents the wise man, just like It is as relaxed and easy as running water; the mountain represents the benevolent, and it is as noble and peaceful as the mountain.

In the eighth chapter, *Lao Tzu* writes: “The highest good is like water. Water benefits all things without fighting and treats what everyone hates, so it is almost the Tao.” He believes that the virtue of water is close to the Tao and regards water as the highest quality of human beings. Zhu Xi mentioned that “all things in the world, the self is one” he regards landscapes as the spiritual home of human beings and links the natural landscapes and all things with the value of human life (Li, 2008).

In the paper *landscape Spirit of Ceramic Art*, Xiong Zuchao (Xiong, 2013) proposed that the landscape spirit embodies the spiritual connotation of traditional Chinese culture, and its core is “based on nature”. The core value of contemporary ceramic art is based on the collision of Chinese traditional inner spirit and contemporary trends of thought. In this article, the author discusses the connotation of the spirit of landscape in traditional landscape painting and studies its influence on the creation of modern Chinese ceramic art.

Ceramic Craft and Art (Peterson & Peterson, 2009) include all aspects of ceramic art, collecting works and making processes from various countries’ outstanding artists, which also involves using many new materials to provide a different way of thinking when creating ceramic artworks.

In the article *Talking about Ceramic Comprehensive Decoration*, the author (Yang & Zhang, 2011) briefly discusses the concept of ceramic decoration, its constituent, aesthetic characteristics, and expression forms. It describes the critical influence of different materials on the effect of ceramic decoration. It points out the four most used materials for decoration: clay materials, glaze materials, decorative materials, and special materials.

In the article *The Manifestation of Contemporary Ceramic Comprehensive Decoration*, Xu Lan (Xu, 2020) points out that contemporary ceramic decoration is an integrator of various ceramic art forms. The article summarizes how integrated ceramic decoration study on traditional Chinese painting combines the expressive techniques of Western design and continues to draw fresh blood to create contemporary ceramic decoration works.

The data collection shows how to integrate landscape culture into modern ceramic art and complete artistic works with distinctive national characteristics based on the traditional culture with a significant reference value.

2. Application of landscape form in ceramic works

The widespread use of landscape forms makes ceramic art expression more and more affluent and diversified. Because of the extensive use of various decorative techniques in ceramics, ceramic art's presentation and aesthetic experience are constantly changing.

Researchers collect domestic and foreign ceramic works on landscape forms, analyze the creative ideas of different artists, ceramic molding techniques and the use of comprehensive materials. Summarizing the innovation points and the artist's design concept in the excellent works cases provides essential ideas and methods for creating modern ceramic decorative art.

2.1 Case study 1

The process of Bai Ming's Landscape and Time series of works (Figure 12) is to abstract the landscape form. It is not as straightforward as other artists express in the landscape form but uses conceptual Language, deformed decoration, and abstract shapes for artistic creation. However, this abstract creation still retains the inner core of landscape form. In the series of works Landscape and Time, the author has profound thoughts on the imprints left by the short life of human beings in the long river of history. He skillfully expresses the movement of life and the passage of time through the form of a landscape in his language.



Figure 9 Landscape and Time

Note: From ART.CHINA.CN, 2014

2.2 Case study 2

In the book Ceramic Sculpture (Zhang et al., 2005), the ceramic sculpture is positioned as a three-dimensional artistic image that uses pottery or porcelain as material to create a visible and tactile entity. It reflects social life and a humanistic spirit and has independent aesthetic characteristics, and aesthetics — an ideal art form. Ceramic sculpture has always been accompanied by history and civilization. It carries the spiritual connotation of human beings. It expresses the creator's thoughts and feelings. The comprehensive decoration that combines ceramic sculpture and color painting is also subordinate to the ceramic decoration technique. However, the most important thing when decorating the sculpture is to consider the balance between the shape and the decoration (Lv, 2001).

As shown in Figure 10, the Blue-Gold-Symbol series is ceramic work with the landscape as the theme. The author uses comprehensive decoration combining ceramic sculpture and color painting. It is ingeniously handled in form, combining modern pottery techniques with traditional decoration. The expression effect of the work is novel and has a unique visual experience.



Figure 10 Blued-Gold-Symbol series

Note: From Jingdezhen Ceramic University, 2019

2.3 Case study 3

In Wang Shengli's landscape ceramic series as shown in Figure 11, the two-dimensional landscape painting creation is transformed into a three-dimensional ceramic sculpture, and the two-dimensional landscape painting is derived into other forms and finally assembled into a three-dimensional sculpture. The author brings the artistic conception of landscape painting

into the creation of ceramic art. After firing the soil at a high temperature, decorate the work surface with color painting. The landscapes painting's natural form, such as waterfalls, rocks, and cliffs, is expressed in the form of comprehensive ceramic decoration. The wander between freehand brushwork and realism conveys this unique emotional charm in nature to the audience and leaves people with a good impression of the beauty of landscapes.



Figure 11 (Left) Holy Land Dawn in Landscape ceramic series

Figure 12 (Right) Listen to the spring Landscape ceramic series

Note: From Changchun International Ceramics Gallery, 2021

Results

By analyzing the creation of domestic and foreign ceramic practices with the theme of landscape forms, the researcher has gained an understanding of the creative techniques of these artists' ceramic works. Landscape forms are expressed in modern ceramics in various forms, such as sculpture, overglaze and underglaze painting, color glaze, slab-building and other widely used techniques. These practical materials give a clear understanding of studying the development trend of modern ceramic creation.

Modern ceramic art requires observation and understanding of many artists' works, absorbing advanced aesthetic concepts and constantly improving techniques, so it can provide a sufficient practical basis for creating ceramic works and promote the successful development of ceramic culture.

1. Experiment

1.1 Design Concept

The researcher is employing Wang Ximeng's A Thousand Miles of Rivers and Mountains from the Northern Song Dynasty in China as the central perspective unfolds about redesigning Chinese landscape painting in ceramic decoration. The scroll's total sizes are 51.5 cm wide and 191.5 cm high. The image depicts the size of the rivers and the layered, rolling mountains. The article A Study of Wang Ximeng's A Thousand Miles of Rivers and Mountains (Zhu & Cao, 2022) describes that this painting marks a turning point in the blue-green landscape and gathers the best paintings created since the Northern Song Dynasty, which has profoundly influenced from traditional Chinese art.

The mineral and plant pigments used in the A Thousand Miles of Rivers and Mountains painting have been unfading for thousands of years, and the colors are bright. Modern people can still clearly observe the progression of different colors in the shape of the landscape, skillfully using the changes of light and dark colors. Chen Junchan's (Chen, 2020) article applies the colors in painting to clothing design, and the relationship between color elements in the overall picture is simplified. The picture has a strong visual impact, contrasting cold and warm, false and natural, pure and bright.



Figure 13 A Thousand Miles of Rivers and Mountains

Note: From The Palace Museum, 2017

About the Redesign of Chinese Landscape Painting, this chapter will focus on the analysis of the visual elements in the painting, which consists of two aspects. In the aspect of form, according to the different landscape forms in the painting, it will be redesigned into a three-dimensional shape to change the plane expression. In the aspect of color, it is the division of the transition position of colors in the painting into different shapes.

It is no longer the uniform transition of colors as in the painting, but the images of landscapes in the painting are reconstructed into pieces of different shapes (as shown in Figure 14). Each piece of shape has only one color, which is the most representative color in the blue-green painting.

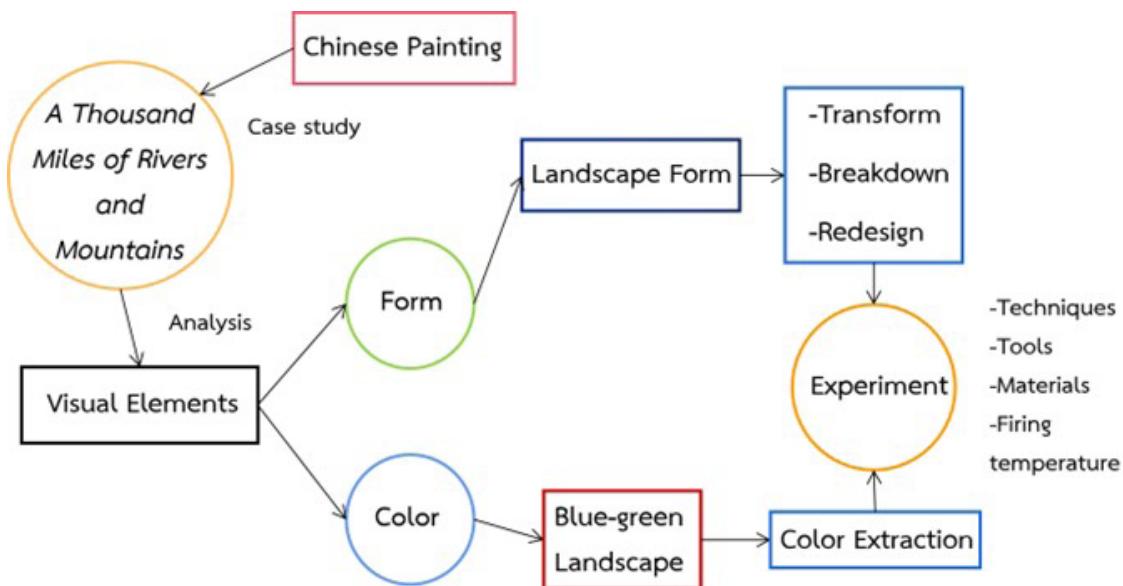


Figure 14 Design Concept Flow Chart

Note: From © Zhuo Anjing 11/04/2022

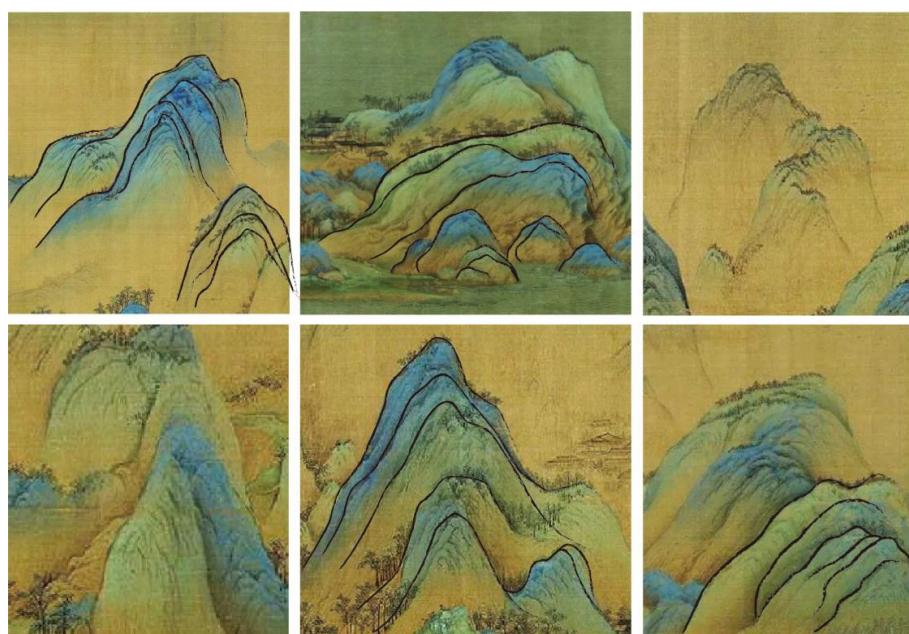


Figure 15 Different landscape form from A Thousand Miles of Rivers and Mountains

Note: From © Zhuo Anjing 13/04/2022

The design sketch is according to the mountain form, as shown in Figure 15, to redesign the mountain's formation and clouds. Draw the shapes of mountains and clouds with simple lines, transform the process of mountain form from painting to abstract form and grasp its core without complexity. Different shapes are put together to form different mountains. The graphic painting expresses itself in a three-dimensional way to broaden the dimension of the work. The researchers try to express the beauty of traditional Chinese landscape by means of modern ceramic decoration and complete the redesign of Chinese landscape painting.

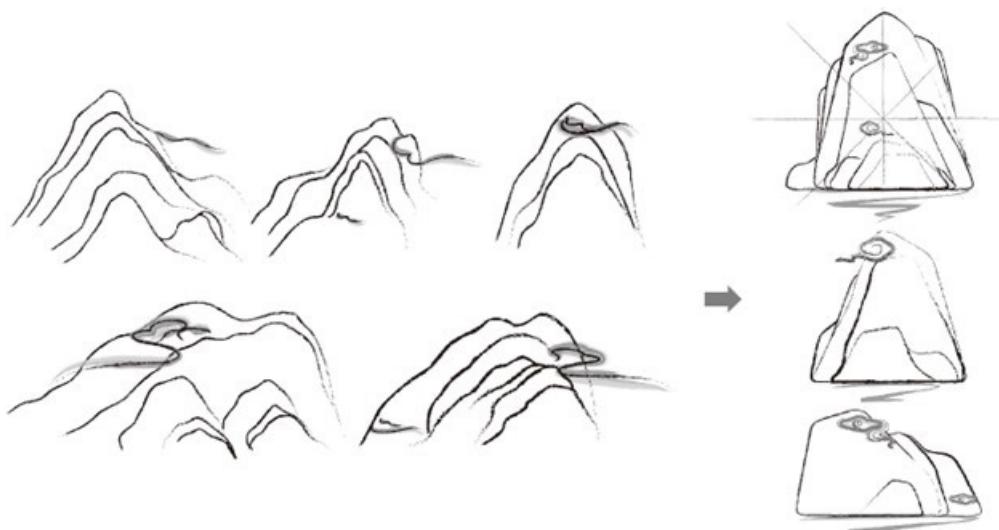


Figure 16 Design sketch process

Note: From © Zhuo Anjing 20/04/2022

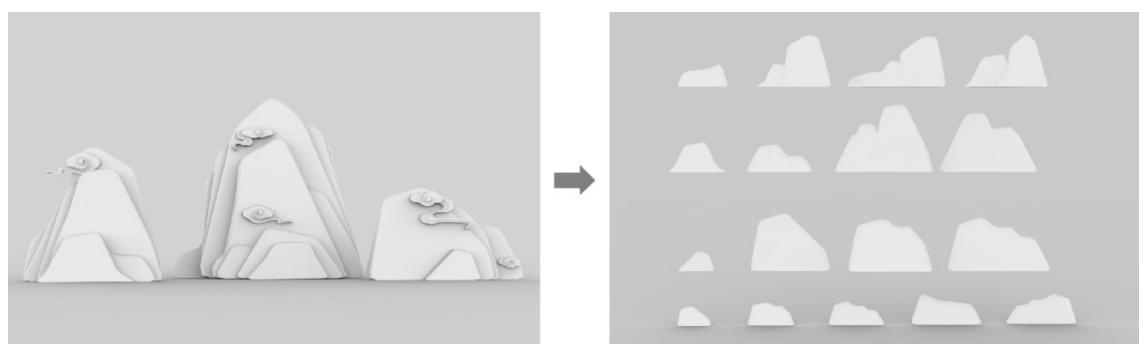


Figure 17 Landscape breakdown form process

Note: From © Zhuo Anjing 30/04/2022

1.2 Color experiment

The researchers conducted creative experiments based on the colors in A Thousand Miles of Rivers and Mountains. They analyzed the colors into three categories — yellow, blue, and green, the most representative colors in green landscape painting. The different depths of the three colors in the picture are extracted in turn, and the color that accounts for the most significant proportion in the picture is selected as the primary color matching. As can be seen from Figure 16, yellow (R153, G134, B68), blue (R86, G133, B153), and green (R143, G180, B142) are the most critical colors in the picture (RGB means color mode), which can be used as the decoration of the main object.

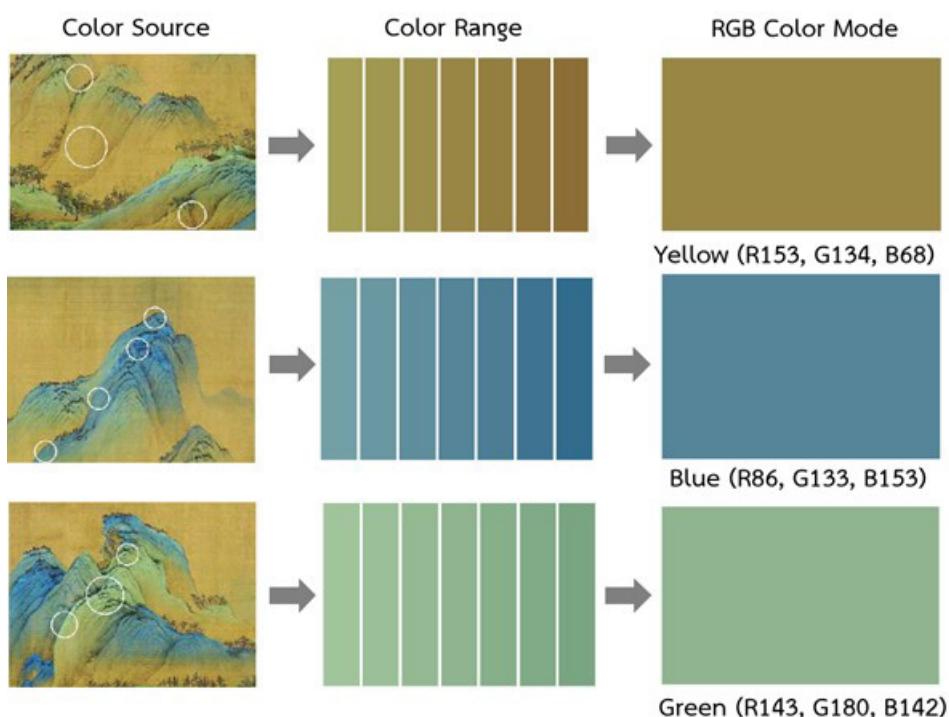
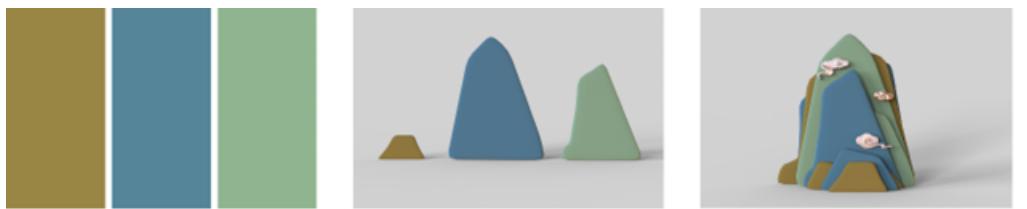


Figure 18 Extract color from the painting

Note: From © Zhuo Anjing 20/04/2022

The layout of decorative colors is similar to that in the picture scroll. Arrange different colors disorderly to highlight the create a visual jump in the differences while paying attention to the mutual echoes between colors, so that they do not exist in isolation and make the viewer bright. The clouds in the painting are difficult to see. The abstract shape of the mountain is contrasted with the concrete image of the cloud, highlighting the visual impression. Two to three clouds are decorated on the mountains and waters, forming a continuous mountain scene.

**Color**

According to the color analysis from the painting in Figure 17, determine the decorative color of the work.

Shape Breakdown

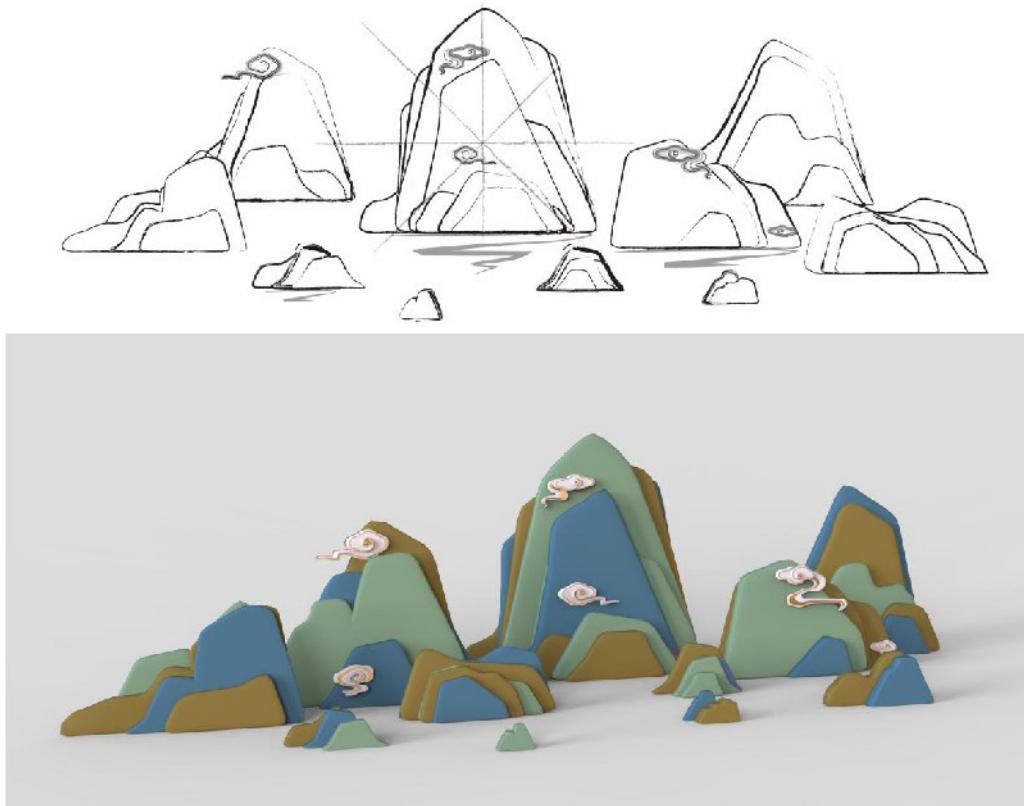
Apply color to the landscape form breakdown.

Color Arrangement

Arrange different colors disorderly to highlight the create a visual jump in the differences.

Figure 19 Decorative color design process

Note: From © Zhuo Anjing 20/05/2022

**Figure 20** Artwork design drawing

Note: From © Zhuo Anjing 23/05/2022

After determining the color, how to make the color is the main problem. The researcher chose to use high-temperature colorant and high temperature white clay and used mud clay color-stain modulation because it used to color the whole body of the object without affecting the firing effect. If using the glaze for coloring, it cannot apply on the contact surface between the object and the kiln refractory kiln-shelf. Otherwise, the glaze will adhere to the refractory kiln-shelf when firing at high-temperature. However, there is no color on the back of the object, which will affect the overall visual effect, so glaze decoration is not selected, choose colorant decoration.



step1:

For the experimental part of clay slip color mixing, select and purchase appropriate high-temperature colorants, as shown in Figure 21.



step2:

Take several cups of 100g pure white clay slip.



step3:

Different colorants were added to the clay slip in proportion and mixed evenly.



step4:

Apply clay slip to the test piece and record each color's number and formula ratio. Next, fire the test pieces at 1250 °C. Select the most suitable color, and mix a large amount of clay slip according to its proportion.

Figure 21 The picture shows the colorants mud production process

Note: From © Zhuo Anjing 10/06/2022

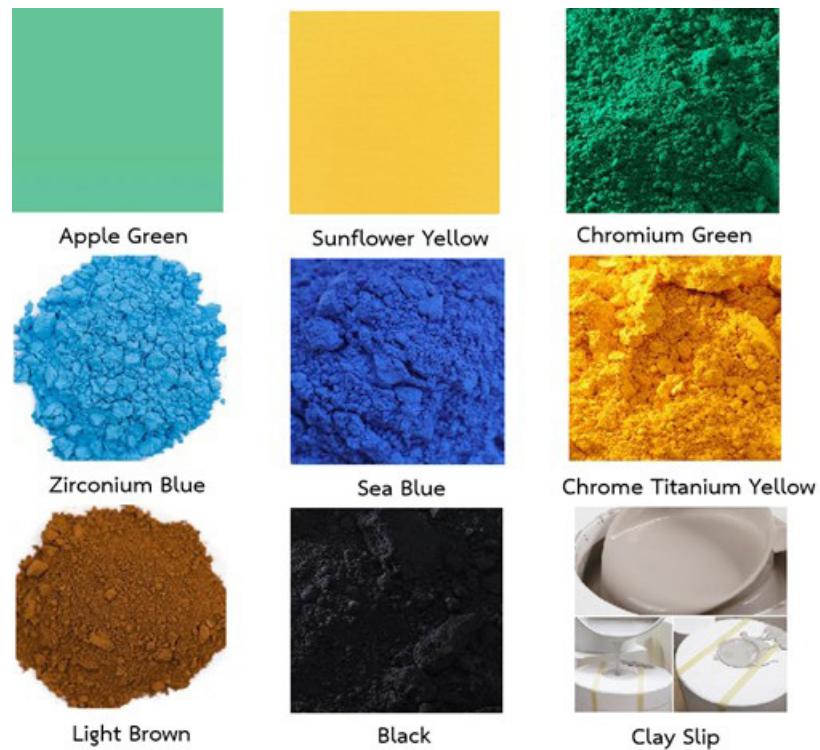


Figure 22 colorants Selection

Note: From © Zhuo Anjing 30/05/2022

Table 1 The data shows the colorants of clay slip ratio

	Colorant Name	Wet slip	Dry weight color stains
1	Apple Green	100g	5%
2	Apple Green	100g	10%
3	Apple green + Sunflower Yellow	100g	10% + 2%
4	Apple green + Sunflower Yellow + Chromium Green	100g	10% + 2% + 2%
5	Zirconium Blue	100g	5%
6	Zirconium Blue	100g	10%
7	Zirconium Blue + Sea Blue	100g	10% + 2%
8	Zirconium Blue + Sea Blue	100g	10% + 4%
9	Chrome Titanium Yellow	100g	5%

Note: From © Zhuo Anjing 30/05/2022

Table 1 The data shows the colorants of clay slip ratio (continue)

	Colorant Name	Wet slip	Dry weight color stains
10	Chrome Titanium Yellow	100g	10%
11	Chrome Titanium Yellow + Light Brown	100g	10% + 3%
12	Chrome Titanium Yellow + Light Brown + Black	100g	10% + 3% + 1%
13	Chrome Titanium Yellow + Light Brown	100g	5% + 5%
14	Chrome Titanium Yellow + Light Brown + Black	100g	5% + 5% + 1%

Note: From © Zhuo Anjing 30/05/2022

Extracting the color matching of this set of works from the primary colors of A Thousand Miles of Rivers and Mountains and how to accurately express the colors with ceramic decoration techniques is a problem researchers face in the production process. After consulting the supervisor and relevant personnel, it decided to choose the mud for decoration. Finally, test piece 4 (Apple Green 10% + Sunflower Yellow 2% + Chromium Green 2%), test piece 5 (Zirconium Blue 5%), and test piece 13 (Chrome Titanium Yellow 5% + Light Brown 5%) as the final decorative color of the work, and a large batch of colored slip were made and fired according to a specific proportion.

1.3 Work size

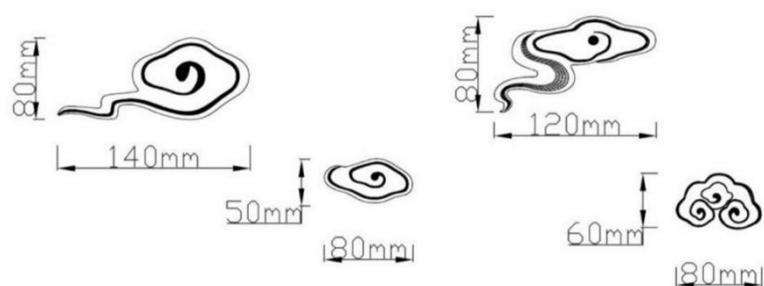


Figure 23 Use CAD to show the cloud front view size

Note: From © Zhuo Anjing 13/05/2022

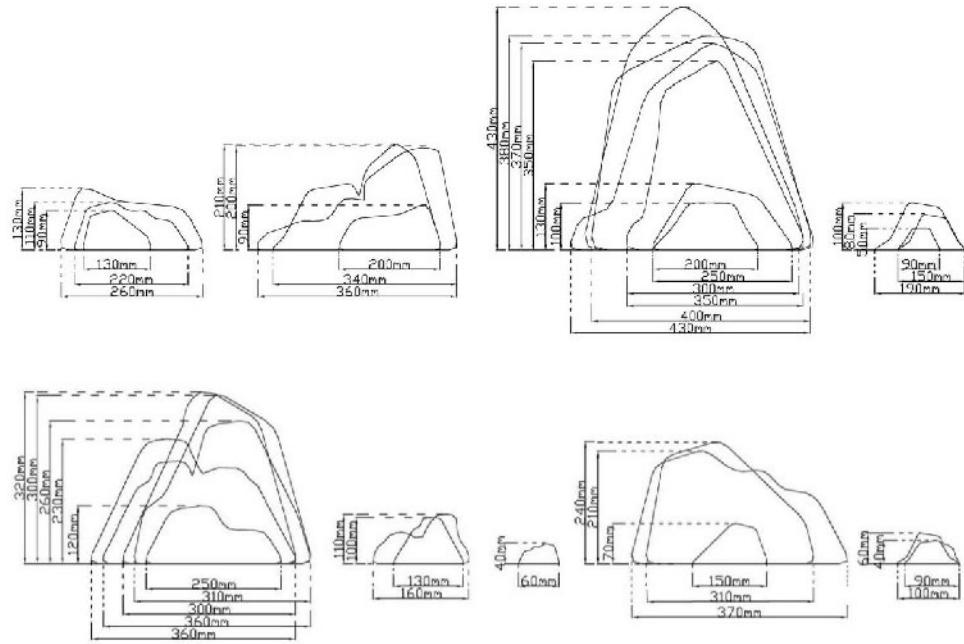


Figure 24 Using CAD to show the landscape front view size

Note: From © Zhuo Anjing 10/06/2022

1.4 Process

1.4.1 Shape making

Sketch with 3Dmax program, as the shape of the work is a collage of many clays, so the large number of clay pieces should be prepared. The operation process uses the machine to press the clay to produce a flat clay piece. The shape and size of the clay are cut according to the size drawing. The cut shape needs to be trimmed in detail, and when the clay is moderately dry or wet, the body is carved with a tool.

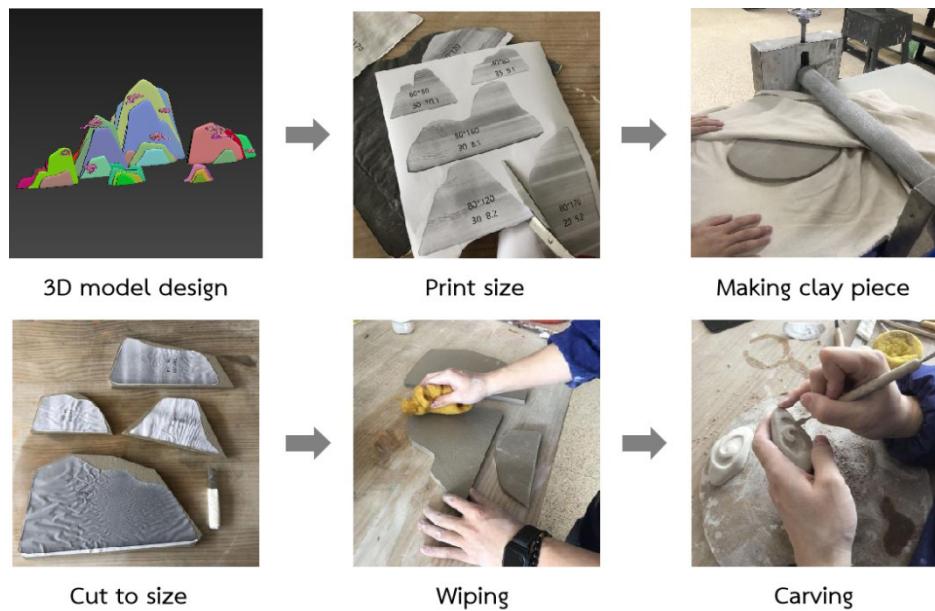


Figure 25 The process of making shapes

Note: From © Zhuo Anjing 15/06/2022

After the clay is completely dry, it is put into the kiln for biscuit firing, and the temperature is set to 700 °C. After taking it out, the object is polished and wiped with water to make the surface of the body smooth. Then according to the color of the design drawing, the clay pieces are classified to facilitate uniform coloring.



Figure 26 Biscuit firing and polishing process

Note: From © Zhuo Anjing 20/06/2022

The prepared mud is evenly sprayed on the clay surface with a glazing machine. After the coloring is completed, the clay is put in the kiln. The kiln is set to two-stage heating. The first stage firing time is 4 hours, the temperature curve is 0°C - 800°C, the second stage firing time is 4.5 hours, and the temperature curve is 800°C - 1250°C.



Figure 27 Coloring and high temperature firing

Note: From Zhuo Anjing 10/07/2022

Stick goldleaf on the cloud according to the cloud decoration in the design drawing. Select the ceramic glue to apply to the back of the fired clay pieces and clouds, and then paste them in sequence, which needs to be fixed for about 10 hours. Final combination completed.

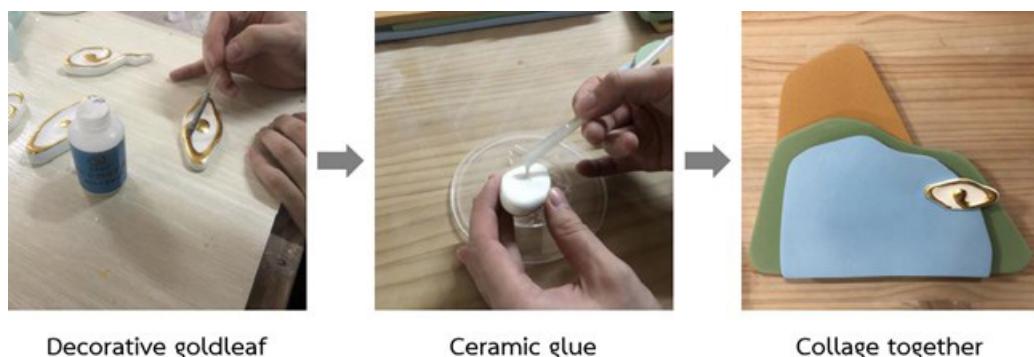


Figure 28 The work collage process

Note: From © Zhuo Anjing 15/07/2022

1.4.2 Work Display



Figure 29 Work pictures

Note: From © Zhuo Anjing 15/08/2022

The molding method of the whole work is mainly clay collage, fired at a high temperature of 1250°C in an electric kiln. The staggering combination of clay pieces of different colors forms a unique artistic effect, similar the image of landscapes in A Thousand Miles of Rivers and Mountains, as shown in Figure 29.

Research Conclusion

When creating ceramic works with traditional Chinese elements as the theme, researchers set their perspective on redesigning landscape forms in ceramic decoration. The article is divided into three parts, the overview of landscape form, the application in modern ceramic decoration, and the ceramic creation process. It sorts out the landscape form in traditional Chinese elements, its origin, development, and humanistic significance, and how it evolves in painting and ceramic art. Finally concluded:

- (1) Summarizes the landscape's different expressions and artistic characteristics in Chinese painting, which can meet the diversified decorative of modern ceramics.
- (2) For the expression of traditional Chinese elements is not just imitation. Still, it needs to be innovated, adding new presentations based on tradition and conveying the idea of a high overview of emotional thinking.
- (3) Obtaining new design concepts in traditional Chinese elements and combining unique materials and technologies can expand contemporary ceramic expression.

The above are some explorations and conclusions of the researchers in redesigning traditional Chinese elements and modern ceramics, hoping to provide reference and help for related learners.

References

ABai, M. (2014). *Shānshuǐ yǔ shíjiān* [Landscape and Time] [Picture]. ART.CHINA.CN. http://art.china.cn/zixun/2014-07/29/content_7099964.htm.

Bass, M. (2012). *Doucai Sea House Dish* [Picture]. Christie's. <https://www.christies.com/lot/lot-5596339>.

Chen, J. (2020). 《Qiānlǐ jiāngshān tú》 de qīnglù sècǎi yùnyòng tèzhēng jí zài xiàndài fúzhuāng zhōng de shèjì biǎoxiàn [The Characteristics of the Turquoise Color of Qian Li Jiang Shan and its Design Performance in Modern Costume]. *Design*, 11, 48-51.

Hu, X., & Zheng, Y. (2009). On the Similarities between the Modern Blue and White Scenery and The Chinese Ink and Water Painting. *China Ceramics*. 3, 56-59.

Huang, G. (2020). *Fù chūn shānjiū tú* [Fuchun Mountain Residence] [Picture]. Taipei's National Palace Museum. <https://theme.npm.edu.tw/selection/Article.aspx?sNo=04000975>.

Jia, Z. (2014). *The Application of Contemporary Chinese Landscape Painting in the Painting Porcelain Research* [Unpublished Master's Theses], Harbin Normal University.

Li, A. (2008). *Lúnyǔ-mèngzǐ* [Analects – Mencius]. Tianjin Ancient Books Press.

Li, W. (1996). *Zhōngguó shānshuǐ wénhuà* [Chinese Landscape Culture]. Guangzhou: Guangdong People's Press.

Lv, J. (2001). Lùn táo yì zònghé zhuāngshì de yìshù biǎoxiàn [Discussion about Artistic Expression of Comprehensive Ceramic Decoration]. *Art & Design*, 6, 51-52.

Ning, G. (2013). *Zhòngxià* [Midsummer] [Picture]. Sina Collection. http://slide.collection.sina.com.cn/slide_26_18496_17461.html?img=168134#p=19.

Shou, Z. (2017). *Zhōngguó shānshuǐhuà shǐ* [History of Chinese Landscape Painting]. Hangzhou: China Academy of Art Press.

Peterson, S. & Peterson, J. (2009). *Niántǔ gōngyì yǔ yìshù* [The Craft and Art of Clay]. Wuhan University of Technology Press.

Tencent. (2020). *Xīn shíqì shídài mǎ jiā yáo xuánwō guàn* [Neolithic period Majiayao swirl pottery jar] [Picture]. <https://new.qq.com/rain/a/20200428A0CJXM00>.

Tencent. (2020). *Míng huángdì hángshū tú* [Ming Emperor's Calligraphy] [Picture]. <https://new.qq.com/rain/a/20200825A03XHV00?pc>.

Tian, Z. (1985). *Zhōngguó gōngyì měishù shǐ* [History of Chinese Arts and Crafts]. Beijing: Knowledge Press.

Wang, S. (2021). *Zhǎn zhī zhōngguó táo yǐ jiā wángshèngli zuòpǐn* [Wang Shengli's Landscape ceramic series] [Picture]. Changchun International Ceramics Gallery. <http://www.cctyg.com/appreciation/2021-01-07/99.html>.

Wang, X. (2017). *Qiānlǐ jiāngshān tú* [A Thousand Miles of Rivers and Mountains] [Picture]. The Palace Museum. <https://www.dpm.org.cn/collection/paint/228354.html>.

Wu, L. (1985). *Shān shuǐ yǐ měi xué* [Landscape and Aesthetics]. Shanghai: Shanghai Literature and Art Press.

Xiong, Z. (2013). *Táocí yìshù zhōng de shānshuǐ jīngshén* [The Spirit of Landscape in Ceramic Art] [Unpublish Master's Thesis]. Nanjing Normal University.

Xu, L. (2020). The Manifestation of Contemporary Ceramic Comprehensive Decoration. *Ceramic Studies*, 2, 109-111.

Yang, B., & Zhang, X. (2011). Qiǎn tán táocí zònghé zhuāngshì [Talking about Ceramic Comprehensive Decoration]. *Jingdezhen Ceramics*, 6, 13-14.

Ye, Z. (2006). *Zhōngguó táocí shǐ* [History of Chinese Ceramics]. Life·Reading·Xinzhi Sanlian Press.

Zhan, W. (2019). *Lán jīn fúhào xìliè* [Blued·Gold-Symbol series] [Picture]. Jingdezhen Ceramic University. <http://www.jci.edu.cn/info/1056/30408.htm>.

Zhang, J., Deng, H., & Liu, H. (2005). *Táocí diāosù* [Ceramic Sculpture]. Wuhan: Wuhan University of Technology Press.

Zhou, K. (2018). Luò shén tú [Nymph of the Luo River] [Picture]. Sohu. https://www.sohu.com/a/242462111_297571.

Zhu, R., & Cao, H. (2022). Wángxīmèng “qiānlǐ jiāngshān tú” tànjiù [A Study of Wang Ximeng's A Thousand Miles of Rivers and Mountains]. *Art Education Research*, 6, 46-47.