

Application of Ceramic Mosaic Art in Architectural Decoration — Taking Park Güell as an Example

Qiao Qian, Pei Wen, Yang Huiyu, Li Weijia

School of Architecture and Art, North China University of Technology, Beijing, China

Email address:

Qiaoqian68@vip.sina.com (Qiao Qian)

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Abstract: At the end of the 19th century, a large-scale decoration movement was launched in European countries, the Antoni Gaudí of the Spanish “Modernist” Art Nouveau contributed greatly to the ornate Catalan style. Park Güell is an important embodiment of Gaudí's ideas, and an analysis from Park Güell will reveal that ceramic mosaic art is an important part of Gaudí's architecture. Taking Gaudí's ceramic mosaic in Park Güell as an example, this paper analyses and examines the background to its development, its decorative techniques and the structural shape of the building, and explores how the artist applied ceramic mosaic art to the decorative design of Park Güell. Gaudí used a new form of ceramic mosaic art to decorate his buildings. Under Gaudí's use, ceramic mosaic art does not merely serve a decorative purpose, but is organically integrated into the building as a whole, making his buildings completely different from the traditional realistic monumental architecture, but rather a fairytale fantasy. Drawing on national traditions, Gaudí used ceramic mosaics as a medium to infuse his architecture with a love of Catalonia and nature to create a unique Gaudí style. This style, embodied in different aspects of architectural technology, structure and decoration, provides a new perspective for later ceramic mosaic art creation and shapes the Catalan modernist style of architectural design.

Keywords: Ceramic Mosaic Art, Catalan Modernism, Park Güell, Gaudí

1. Introduction

In Spain, the Art Nouveau movement known as “Modernism” created a magnificent Catalan style under the leadership of Gaudí, whose masterpiece —The Park Güell, which links all the themes of Gaudí's thought, was the starting point for the maturity of Gaudí's design. This is an architectural work full of romanticism, not only in the implementation of modular construction in the building structure, in its decorative approach, but also to create a unique ceramic mosaic art, Park Güell in the sunlight of Barcelona, its colorful broken porcelain emitted color and light symbolizes the redemption and hope. Gaudí's ceramic mosaic decoration style is reflected in different aspects of construction technology, structure and decoration, which provides a new perspective for ceramic mosaic art creation, and shaped the architectural design of the Catalan modernist style.

2. Gaudí and Catalan Modernism

2.1. Background of the Times

In the second half of the 19th century, Spain was in the midst of a torn between neoclassicism and neo-romanticism in the field of art, and along with its economic development, its architecture was in a state of relative chaos, with the rise of large cities and the urgent need for industrialization prompting people to seek new ways to fill the gaps in literature and artistic style during this period in order to reimagine urban planning. The unique Catalan modernist movement broke through the uncertainty of this period of eclecticism.

Modernism is the Spanish name for the Art Nouveau movement, and Catalan Modernism, made famous by Gaudí, is a cultural movement that combines architecture, sculpture, painting, decorative arts, music and literature. Catalonia is located in northeastern Spain, bordered by the Mediterranean Sea to the east, the Pyrenees to the north, and France (Figure 1). “Since the Middle Ages, Catalonia has been independent

from most of the rest of Spain because of its ethnic uniqueness and its unique language and culture.” [1]



Figure 1. Map of Catalonia in 1608.



Figure 2. Expo Barcelona 1888.

At the beginning of the 18th century, the Spanish ruler, Philip V of Bourbon, abolished the autonomous government of Catalonia and banned the use of the Catalan language. Over the next hundred years, Catalan culture collapsed, and it

was not until the early 19th century that a national revival movement was ushered in. This movement, based on the Catalan industrial economy and the emerging bourgeoisie, aimed to restore the legitimacy of the Catalan language and revitalize the national culture. It was in this historical context that the Catalan modernist movement emerged, a revival movement in the broad sense, or the literary climax of the revival (Figure 2).

2.2. The Catalan Modernist Movement

At the end of the 19th century, Barcelona, the center of the Catalan modernist movement, was a city with a rich industrial and commercial and independent middle-class culture, open, optimistic and actively absorbing the cultural influences of other European cities, where the unbridled artistic atmosphere nurtured the genius of the architect Gaudi.

Catalan modernism, which was inaugurated in 1888 at the First World Exhibition in Barcelona, is the historiographical designation of an artistic and literary movement related to the search for new rights for the Catalan culture, one of the most important in Spain, which from the end of the nineteenth century to the beginning of the twentieth century, modernists struggled to achieve modernity and the revival of the national culture; although it was part of the general trend that emerged throughout European modernism, in Catalonia it acquired its own individuality and differentiation, and became probably the most developed modernism. It sought to recover Catalan culture with a firm desire to modernize the country. The compatibility of Catalan architecture, sculpture, painting and decorative arts and Art Nouveau styles was perfectly combined with the completion of the Renaissance-initiated creation that Catalan culture and art needed, and the Catalan modernist movement reasserted its modernity by changing itself (Figure 3).



Figure 3. Catalan Modernism - examples of paintings.

However, the mere awakening of native consciousness did not achieve the goal of preserving the Catalan national spirit, and the issue of class became the most difficult breaking point between art and society, in which art and society sought the best balance, and in order to achieve the desire to preserve the national consciousness, the artists searched for it in their respective territories, “so that in Catalan Two positions emerged in Catalan culture: one was to immerse oneself in one’s own artistic production, to assert one’s creative ideas with symbolism and to turn away from society

with an attitude of avoidance; the other was to rise up and fight back, to use art with impeccable enthusiasm to change society, with architects joining forces with artists and craftsmen to shape an art that was uniquely Catalan;” [2] It was this positive attitude that led to the remarkable achievements of the Catalan Modernist movement, which was able to go hand in hand with the French Art Nouveau movement, the German Young Stylists, the Belgian avant-garde movement and the Viennese Secession in Austria.

Gaudi is known as the representative of the Catalan

Modernist movement, but he is not the only representative of the Catalan Modernist architects, as Domènec and Puigū have both produced outstanding works to this day. Inspired by nature and seeking with obsession the right artistic approach, he sought and found a treasure — the art of ceramic mosaics (*trencadis*).

3. Ceramic Mosaic “Regenerative Creation”—— Park Güell

3.1. Innovative Exploration of Mosaic Art

Modernist architects favored the use of ceramics, a traditional material that blends steel, glass, concrete and other

modern materials to show a mixture of old and new in architecture; the use of ceramic materials is not new, but as far as the use of ceramics is concerned, Gaudí had a new approach, and his research process was serendipitous. “His first use of ‘*trencadis*’ was in the work of the Güell House, whose subtle, complex, highly naturalistic architecture simply could not be decorated with squared-off squares for the details, and he eventually came up with the solution of breaking before standing, that is, breaking the ceramic tiles and then pieced together and used in the seemingly varied details he created,” [3] and thus by accident, Gaudí created the art of ceramic mosaics, using ceramics of varying shapes and brilliant colors to cover his buildings (Figure 4).



Figure 4. Ceramic mosaic on the roof and walls of the Güell Public House.

In the early twentieth century, a small, quaint town called Esplugas in Barcelona province had developed into an industrial city with beautiful scenery and produced all kinds of ceramic ware. The three-dimensional method of mosaic, than the ordinary two-dimensional method of mosaic increased a lot of difficulty. “Gaudí’s mix of streamlined architectural forms and abstract collage expression makes it a representation of cubist art and surrealism, both decorative and functional.” [4]

Ceramic mosaic art breaks the traditional progressive vertical logic, with creative methods to express its unique artistic expression, thus harmonious, unique and fantastic. “For architectural design, the use of ceramic mosaic art not only brings a strong visual impact, its rich colours and patterns also give a unique three-dimensional sense of architectural space.” [5] To highlight the artistic charm of ceramic mosaic, we must

be good at finding the originality of ordinary things, to explore the versatility of things with a unique vision, Gaudí’s craftsmanship led him to create “*trencadis*”, thus branding the architecture of Catalan modernism with a unique magical mark.

3.2. Ceramic Mosaic Art in Park Güell

“In Gaudí’s architecture, we can see that the mosaic art has departed from the traditional flat position and flat shape to become a part of three-dimensional sculpture.” [6] One of the most characteristic and attractive is the Park Güell (Figure 5), which was built in 1900-1914 on the slopes of the Peralda Hill in northeastern Barcelona, Spain, covering an area of 20 hectares. Today, the park is packed with visitors every day and has become one of the most important national cards in Barcelona.



Figure 5. Güell Park.

The original owner of Park Güell was Eusebio Güell, a local textile and nautical magnate whose family designed many of Gaudi's famous buildings with the support of Güell. 1878 saw the meeting of Güell and Gaudi at the Paris Expo, where they hit it off and became close friends from then on. While the Gouel family's wealth provided a reliable source of funds to realize Gaudi's architectural vision, Gaudi designed and built unique and exotic buildings for the Gouel family that were unique in the world. He designed first the Güell estate, church and crypt on the northwest outskirts of the city, then the Güell Palace on the Ramblas in the center of town, and then the Park Güell, one of the few in the world.

As society and technology changed, Gaudi's work went through a process of development. After 1900, these works, including Parque Güell, belong to the second phase of Gaudi's work. Park Güell is a symbol of the transition from Gaudi's architectural thinking to naturalism, as he began to rebel against the traditional rules of architectural form and space. "He advocates a naturalism that not only gives visual beauty to the curves but also leads to a more rhythmic architectural form." [7]

The park's entrance pavilion is a subtle blend of nature and architecture through a special approach, with bright ceramic mosaics on the park's curved walls, porticos, arcades, caves and seating areas; the building's roof is covered with white ceramic mosaics that look as brilliant as snow. "The building's roof is covered with white ceramic mosaic, which looks as glorious as snow, and the curved contours of the roof and the light reflected by the ceramic mosaic are unique in the context of Barcelona's panoramic view." [8] Inside the garden, a giant lizard inlaid with broken porcelain waits "impatiently" for the ceiling of the Hall of a Hundred Columns in the middle of the hill (Figure 6), sculpted by Gaudi's partner Josep Maria Jujol, which is lustrous and shiny in ceramic. The rhythms between the buildings are coordinated, and the components of the buildings and the small units within them are brought together in a larger structure.



Figure 6. Decorative motif of broken porcelain on the ceiling of the Hall of 100 Columns.

"In the surface decoration of Park Güell, Gaudi abandoned the original method of using tiles to decorate the surface of the building in a more random manner to create a winding decorative effect, the most typical example of which is the daughter wall in the park, which is also a curved back bench (Figure 7)." [9] Daughter wall as a whole around the roof of the market hall, creating a zigzag architectural structure, in

this case, the use of ceramic mosaic for decoration can best improve the details of the building, ceramic mosaic can fit well with the zigzag form of the building so as to optimize the architectural details, at the same time, ceramic mosaic glaze color contrast, fun and vividness, its composition pattern is also varied and With the implied meaning. "The architectural decorative techniques used by Gaudi expanded the artistic expression of the decorative language, with ceramic mosaics becoming a common element in the composition of buildings." [10]



Figure 7. Swivel-back bench.

There are fifty-six types of tiles used in the restoration of the park, and the construction drawings detail the type of tiles and where they will be used; "The restoration of the tiles is done by hand, first by covering the white tiles with openwork paper for coloring, and then by repeating the process over and over again. This process is repeated over and over again, and then the tiles are fired and then broken when they are finished, thus completing the restoration of Gaudi's architectural decoration" [11] Gaudi's use of ceramics combines texture, color, nature and man-made spatial structures in an unprecedented form, giving the park a childlike and realistic style.

4. Gaudi's Architectural Decoration Style

Gaudi's creativity is not to follow the regular and square decoration of the surface of the building, but to change the thinking, inspired by nature, using broken tiles as inspiration to turn the whole into a new style and effect; "due to the differences between materials, color and gloss, the final effect is extremely creative, greatly enriching the appearance of the form;"[12] by Gaudi carefully designed texture pattern The overall very harmonious, very attractive, abstract approach to the integration of different fragments of color and pattern, the composite texture formed by this approach has a unique aesthetic characteristics; Güell Park Hall also used ceramic mosaic design of the top, "the radial sun pattern, asymmetric distribution of shapes and sizes, the use of red, yellow and blue three contrasting colors, different sizes and a variety of color The use of different sizes and a variety of color variations make these patterns composed of ceramic mosaics even more striking against the light gray background." [13]

Gaudi's architecture is strongly nationalistic in Barcelona, and his buildings are a showcase for Catalan culture, highlighting national traditions; "Gaudi participated in research organizations that traveled around Catalonia, studying its historical sites, discovering the long and glorious local history, feeling proud of Barcelona and Catalonia's splendid past, with the determination and dream of revitalizing. They have traveled around Catalonia, studying its historical sites, discovering its long and glorious history, feeling proud of Barcelona and Catalonia's glorious past, and having the determination and dream of reviving its former glory." [14] These studies made Gaudi more enthusiastic about using national traditions, and his identity as a Catalan can be seen in his architecture, where different elements such as traditional craftsmanship and local materials are organically combined in Gaudi's designs and given different national meanings, evoking the memory of Catalan culture. Spain had been ruled by the Arabs for nearly seven hundred years, and in Gaudi's early designs, works in the Mudéjar style have a clear Arab element.

The art critic Daniel Hilliard-Milag, who studied Gaudi, believes that Gaudi's secret was to create architecture with a clear mind, without artistic or technical prejudice. Gaudi through the rational use of architectural components, the relentless search for materials, the audience's psychological use of deep perception, as well as the use of decorative materials on the surface of the building, such as these studies on the aesthetics of architecture, so that the ceramic mosaic art in the real sense from the inner wall to the outer wall, in a unique form to present, to convey a different visual experience of three-dimensional mosaic; in Gaudi's works, ceramic mosaic does not only play a decorative role, "it is related to the structure, shape, function and decoration of the entire building." [15] the integration of the entire building design elements, in the whole to show the broken ceramic mosaic, ceramic mosaic to fit the characteristics of the building structure to wrap the building, is the coordinator of the various design components of the building.

5. Conclusion

Gaudi decorated his buildings with a new form of ceramic mosaic art, making his buildings completely different from the traditional realistic monumental architecture, but presenting a fairy-tale dream, which is well demonstrated in his designs of Park Güell, Batlló Apartments, Casa Mira, etc. on the path of design, he never gave up the spirit of tradition, but explored from the national tradition, and he used ceramic mosaic as a medium for His works are a challenge to traditional function and form, and he created a unique Gaudi style that transcends

his time and reflects his great creative spirit, which is reflected in different aspects of architectural technology, structure and decoration, not only bringing Catalan characteristics to the architectural design, but also providing a basis for It not only brought Catalan characteristics to architectural design, but also provided a new perspective to the creation of later ceramic mosaic art.

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Biography

Qiao Qian, born in 1968; Han; native place, Xuzhou, Jiangsu; Professor, School of Architecture and Art, North China University of Technology; PhD; public art direction.

Pei Wen, born in 1999; Han; native place, Xuchang, Henan Province; master's degree student, School of Architecture and Art, North China University of Technology; public art direction.

Yang Huiyu, born in 1999; Han; native place, Yangzhou, Jiangsu Province; master's degree candidate, School of Architecture and Art, North China University of Technology; public art direction.

Li Weijia, born in 1995; Han; native place, Guiping, Guangxi; master's degree student, School of Architecture and Art, North China University of Technology; public art direction.