

Transitional Zone between Historic Space and Modern Space -Taking the west side of Avenida da Praia Grande, Macau

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Abstract. With the improvement of people's living standards in recent years and the increasing emphasis on the cultural value of historical and cultural blocks, the renovation and renewal projects of historical and cultural blocks are frequently seen in major cities throughout China. However, previous studies have shown that it is difficult for historic and cultural blocks to give both consideration to preserving the original cultural atmosphere of the city and the sense of history of the streets, and offering new needs and functions of the city. Over the years, the own development and evolution of visual communication art and the impact of the outside world, especially the intensification of fundamental social contradiction between social production and increasing needs of the people for material and cultural life due to the advent of the information age of science and technology, have led to the gradual improvement of people's requirements for visual communication art. The rapid development of social economy has greatly improved people's living standards. Technological revolution and knowledge revolution have brought about earth-shaking changes to people's lives, so people begin to question many traditional art forms, and changed their attitudes toward some new art forms and the complicated art phenomena around them from curiosity to artistic examination and selective reception.

1. Introduction

Nam Van is the most prosperous area in Macau at present. In Portuguese, Nam Van means "Great Beach". Now Avenida da Praia Grande does not have any beach and is no longer a coastal road. At that time, there was only one section of the seawall to the south of the government headquarters. The Nam Van Lake Project was the biggest development project in Macau in terms of cost.

1.1 Significance of topic selection

It can be seen from the figure (Fig. 1) that in the selected area the northwest is the historical area and the southeast is the modern area. What I am interested in is the in-between space between the historical space and

the modern space. The in-between space can also be called the transitional zone. So, two terms will appear in my later narration. Due to the existence of the in-between space, the transition between the architectural space and the urban space will have rich sense of hierarchy and progression, thus adding the content of urban space. It also allows the expansion of street space, thereby improving the spatial scale of the street and reducing the street congestion. The purpose of the research on in-between space that I am interested in is that the development of a city is a gradual process and there should be no inconsistency between the development of modern urban space and historical urban space. Through several surveys on the selected planning scope of Nam Van Lake, the author utilizes the knowledge learned to realize the connection between historical urban space and modern urban space, find transitional body and in-between space in urban spatial form, urban function, traffic organization, etc., and realize the organic integration and coordinated development between modern urban space and historical urban space.

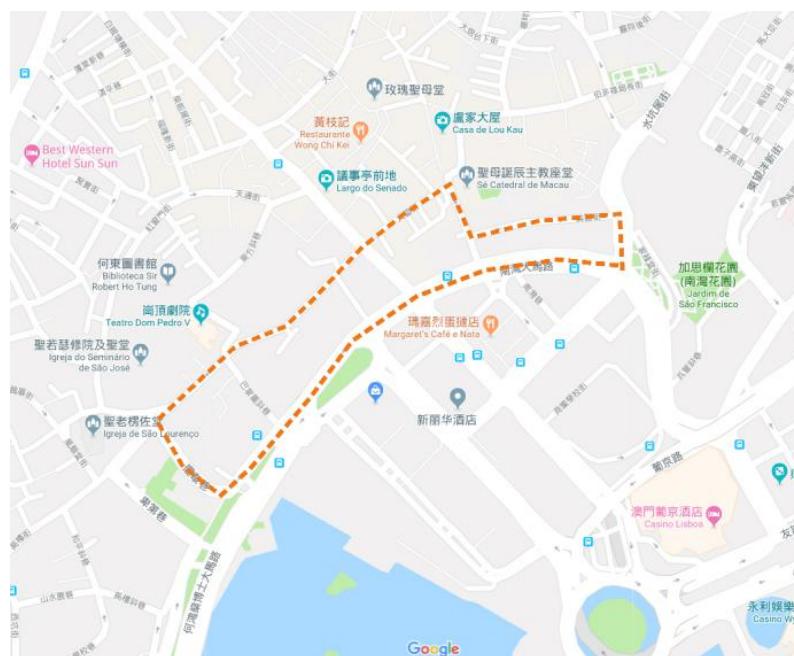


Fig. 1 (photo by baidu map)<https://map.baidu.com/@12640399.31,2518423.41,14z> 2019.3.16

1.2 Issues under study

The modern space and the historical space in a city are interrelated. The historical space does not belong to any particular space mark. Instead, it is the main characteristic of a certain period and should be suitable for the evolution and changes of a modern city. Only by properly renewing and upgrade can it survive to now. This is the vitality that can be inherited and developed.

In Europe, historical space structure has undergone continuous and lengthy development, but for Macau, the rapid development of the city is mainly concentrated in recent decades. Macau is a small region. From the perspective of overall protection of historical areas, one is to avoid the historical areas and build new areas; the other is to mix the old and the new areas. Therefore, most of the cities with sustainable development in Europe show the process of spatial development, while Macau shows the fault phenomenon of spatial development.

Therefore, the image of the whole city leaps from a historical area full of primitive flavor to a modern one.

Throughout the entire history of Macau, churches initially took a very high position as the economic and cultural center of Macau. In order to ensure that the existing church historical area can be preserved completely rather than separated by modern style buildings, issues to be considered in this survey and study include how to protect the historical space and cultural characteristics and make the organic integration of historical urban space and modern urban space. However, I find that the historical urban space and modern urban space have different texture patterns, architectural styles and cultural characteristics (Figs. 2, 3, 4 and 6). There is a need for a transitional part between them to make the historical urban space pattern be continuous and complete, and re-establish the connection between the historical urban space and the modern space to improve the living space and comprehensive environment of the church area in Macau, thereby highlighting the city's characteristics. It is necessary to coordinate the development of historical space and urban modern space so as to avoid the buffer transition between the old and new urban areas where faults occur in the two spaces, thus achieving the goal of maintaining the overall urban landscape. Taking the Avenida da Praia Grande in Macau as an example, the phenomena of space faults are shown in the following three aspects:



Fig.2 (photo by author) 2018.9.12



Fig.3 (photo by author) 2018.9.12



Fig.4 (photo by author) 2018.9.12

(1) Road traffic. The structure of urban road network becomes a mixed zone in the connecting area, especially around irregular historical blocks where the road condition is extremely complex, causing a great impact on urban traffic (Fig. 5). Take Sé Catedral as an example. Because this area is a historical church area, the roads are quite chaotic and blocks are small in size, thus easily causing various traffic jams and affecting normal traffic of vehicles and pedestrians.



Fig.5 (photo by baidu map) <https://map.baidu.com/@12640399.31,2518423.41,14z> 2019.3.16

(2) Urban texture. Dense block-type historical space and large-scale architectural modern space have brought about a sudden change in urban texture. Looking at each other, their respective spatial characteristics cannot be integrated, resulting in the split integration of urban space (Fig. 6). It can be seen from the figure that there is no good transition in the urban texture, directly from low buildings to high-rise buildings.

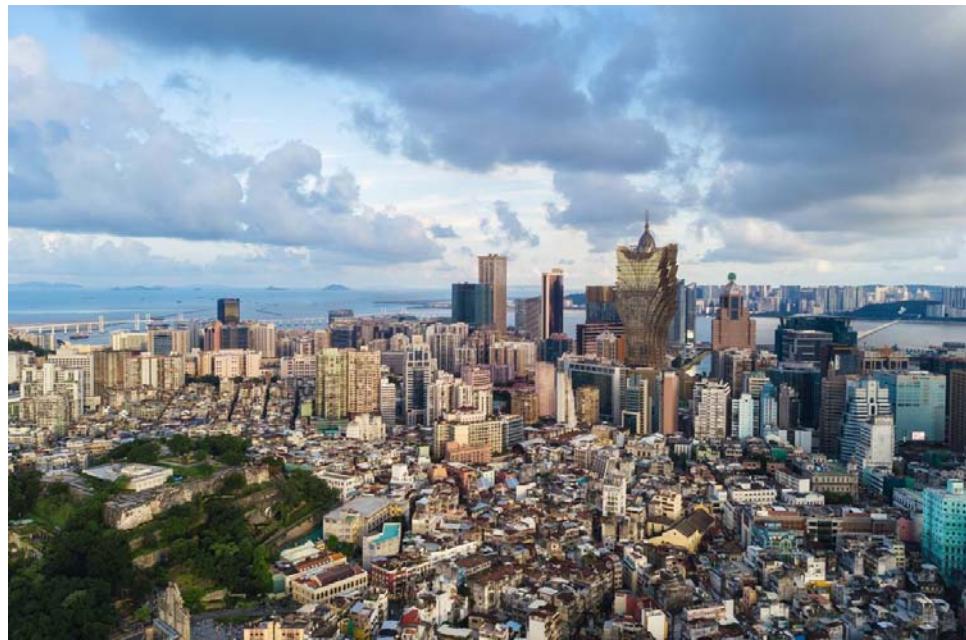


Fig.6 (photo by the internet)<https://torrent.tuchong.com/20300338/> 2019.6.18

(3) Architectural interface. The contrast of the architectural interface causes a sudden change in space. Church buildings and residential buildings were separated on both sides of the road, resulting in obvious illusion of time and space (Fig. 7). The churches representing history and the buildings representing modern times are seen in the same picture without good transition. More importantly, the space fault has brought about the discord between space and social development. The author thinks that it is unfavorable for the protection of historical space and the development of modern space.



Fig.7 (photo by author) 2018.9.12

1.3 Study methods

Through reading some books on urban design, paper writing and study in recent months, the author thinks that

the reasons that affect historical urban space and modern urban space include function, texture, transportation and interface, etc. It is possible to solve these issues reasonably and apply them to the improvement of transitional zone.

(1) Functional complementarity or transformation. The functions of historical urban space differ greatly from those of modern urban space. However, the functions of historical urban space have been seriously lacking and can no longer meet the needs of modern life. Most of the historical blocks are located in the center of the city. Although the initial functions of the historical elements of the city cannot be used any longer after urban development, its spatial form still has historical value. The functions of historic area can be changed or complemented in planning and construction of transitional zone.^① The old or abandoned architectural functions of transitional zones can be changed into new urban functions to realize the transformation and reutilization of urban functions.^② In the historical urban areas with degraded functions, it is possible to add small-scale business feature functions and cultural functions to improve the cultural taste of the transitional zone and promote the development of historical space.^③ According to the characteristics of the transitional zone, it is possible to use the abandoned and dilapidated stores to build supermarkets, activity centers and fitness places, all of which can not only supplement the missing functions of the historical space, but also serve the modern space.

(2) Texture continuation. The spatial texture of historical urban space is probably streets and roads, resulting in dense distribution of historical space. Planning of modern urban space gives clear functional zoning. In the area of hierarchical environment coordination between historical space and modern space, this paper analyzes the pattern and texture of historical space, and on the premise of satisfying the function, makes the transition to modern urban modern gradually to strengthen the connection between historical urban space and modern urban space.

(3) Traffic organization. There are great differences between the roads in historical urban areas and modern urban areas. Roads in historical urban space are formed naturally, so the roads only meet the traffic situation and conditions at that time. With the development of the times and popularization of cars, the historic roads can no longer meet the current needs for traffic. Due to poor road traffic accessibility and insufficient parking areas in historic areas, the traffic situation is not good. Greatly different from those in historical areas, roads in modern urban areas are beautiful, have large cross-section and are suitable for the traffic of vehicles. This paper tries to solve the traffic issues from different spaces: ① overall design of urban traffic network, ② three-dimensional traffic planning and design, such as underground passages. Especially the iron net in front of New Yaohan, there was a parking lot underneath, but last year when Typhoon Hato came, because of the poor drainage, it became "ocean" and the car parked in it became "boat". After that, the underground space was abandoned. If it can be turned into an underground passage, it is to be discussed whether the abandoned space can be reasonably utilized to allow for smooth vehicle traffic. It is necessary to pay attention to the traffic situation of historical space and modern space of the city and solve the contradiction between them to make the urban roads that support the traffic operation of the city smoother.

(4) Interface extension. Buildings in historical urban space are full of primitive historical flavor, while those in

modern urban space are featured by a trend of modernism. The contrast between the two will result in a strong visual conflict. To eliminate the visual conflicts caused by the different styles of the buildings' interface, the principle of visual association is adopted to make the urban interface continue to develop healthily instead of sudden change and realize the continuation of the overall spatial level of the city.

In order to cope with the issues such as incompatibility of urban texture and obvious space-time illusion of building interface, the author has read a lot of theoretical literature and then combined with the problems in the field to get an environmental coordination area (Fig. 8). The first level of environmental coordination area (blue) is the coordination of the style and features of historical blocks, characterized by the coordination of architecture and space with the church area. The second level of environmental coordination area (green) is in the vicinity of the church area, characterized by the coordination between historical space and modern space.

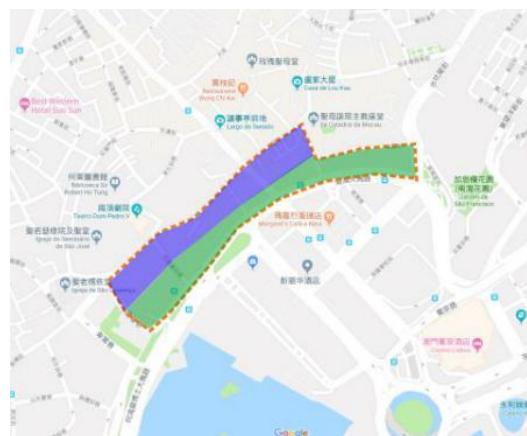


Fig.8 (photo by author) 2019.3.16

2. Application and thinking of visual communication design

Nowadays, with the integration of global economy, all kinds of arts are facing the thinking and selection of nation and world, and history and modernity, and visual communication design is naturally involved in them. In this context, the contemporary aesthetics of visual communication design has become a universal concern. Nowadays, visual communication research is no longer just traditional graphic design, two-dimensional advertising, CI planning and other projects. In view of breakthroughs in various disciplines, visual communication designers grasp the highlights from the advantages of various disciplines and specialties, so that visual communication design can get new support with more complete and more forms and means of expression put into social development.

In view of sufficient development of socialist science and technology, information, media and other sectors, many formats are changing towards diversification. Visual communication has also become a beneficiary. It is developing towards diversification. From creativity, pre-planning, production process to manifestation, it has infiltrated the achievements of other fields. The thinking and design methods of visual communication design are transforming towards diversification, which means that the two-dimensional representation of traditional graphic design is also developing to three-dimensional or even diversification, which coincides with the

convergence and penetration attributes in the cultural field.

With the rapid development of science and media technology and in view of coming visual culture and image era, information communication media have become more diverse and comprehensive, and people's attitude, way and angle of viewing images have undergone tremendous changes. Visual communication design has a strong integration with its design thinking, design methods, manifestations and product benefits towards diversified development. From the perspective of horizontal development, a bigger and bigger intersection has been produced between visual communication design in liberal arts category and computer technology and digital editing technology in science category with a good cooperative development trend presented; from the perspective of longitudinal development, there is a complex connection between visual communication design and other art disciplines in innumerable sections. Till now, visual communication design is no longer a narrow sense of "visual image design" in the discipline settings of colleges and universities, but the creation and design that combines all visual images. It belongs to the category of post-modern design and gives a new concept of "visual communication design". It integrates all the design elements, such as graphics, images, colors and combinations, for artificial perception and stimuli, and presents them through such methods as manifestation, lighting, projection and stereo imaging. These means and design elements are also being applied by other art disciplines. It can be seen that the diverse development of communication carriers of visual communication design has become inevitable, and it will give play its own value in other art fields and draw lessons from the advantages of other art forms, thus gradually becoming a combination of more art disciplines.

3. Analysis on the application of historical elements in the transitional zone

For a country with a long history, the historical elements are a kind of huge resource and cultural capital. With their unique and unified style, the historical elements show a strong implication and charming cultural connotation, providing creative methods, clues and concepts for design. In the context of current situation, the rapid development of the era has caused a fault between the historical area and the modern area. In order to apply the historical elements with Macao's historical characteristics to the historical edge of the transitional zone, the design of fencing and street lamp is used as the media to better integrate the historical elements into it. As far as historical elements are concerned, they have been formed through such processes as integration and development in Macau's history and culture. Historical elements are the manifestation of the essence of history and culture, and a symbol of traditional culture. At the same time, the historical elements are also an important link of Macau's multi-culture. Visual communication design is a kind of internal emotional communication, and also the inheritance and development of different cultures: (1) for visual communication, historical element is not only an important manifestation of rich cultural connotations, but also an important source of material; (2) for historical element, design is an important carrier for its inheritance and development. Of course, these designs may lead people into cultural fields of higher levels.

In addition to absorbing historical elements, as a carrier of culture, design also shoulders the responsibility of inheriting culture, excavates the spiritual connotation of historical elements, and integrates them into it. Modern

society is greatly different from historical society. It is conditional and selective for historical elements to enter modern society. When people look at these elements with modern vision, they will also use these historical elements from their own point of view. Under such conditions, the use of historical elements will also change. As a cultural carrier, historical elements should be integrated into the design. The author thinks that two conditions are needed: (1) design should focus on the creation of meaning; (2) historical elements should have a meaning that makes them "important".

In the design of visual communication, the application of historical elements is not single, but manifests many aspects. The author mainly uses the historical elements as the carrier to illustrate the application of the historical landmark architectural patterns. By integrating the historical landmark architectural patterns into the infrastructure of the transitional zone, the author creates a visual design with the meaning of Macau's historical zone. The integration of the historical landmark architectural patterns is not a simple repetition and copy. Instead, it should be excavated, reconstructed and innovated with modern means to create new elements of design with the blending of history and modernity. This is the edge of the Church Historical Area of the Transitional Zone (Fig. 9 and Fig.10) which uses this kind of fence with history and modernity to achieve the harmony between history and modernity.



Fig.9 (photo by author) 2018.9.15



Fig.10 (photo by author) 2018.9.15

In the design of visual communication, the historical landmark architectural pattern is an important historical element that can be used. Different types of patterns are inherited in different historical periods. Therefore, many architectural patterns are a true reflection of that era, reflecting a certain symbolic significance. In the design of visual communication, it is possible to make full use of these historical landmark architectural patterns and convey their significance more accurately. Design should fully reflect the historical characteristics, contemporary socio-economic and cultural development. The revival of traditional culture may inject new vitality into the design.

The modern buildings on Avenida da Praia Grande are mostly designed by European and American designers, and have had a wide and profound impact on our daily visual habits. These rigid buildings with internationalism style (Figs. 11, 12) of which straight line changes geometrically not only change the form of Chinese architecture, but also profoundly shape people's visual habits, making people's sight more sensitive to the geometric form and order of distinctive features. For traditional patterns, such form is very simple and means

pure and straightforward, but it is very attractive to people's visual perception and will have more "visual impact" than traditional Chinese patterns.

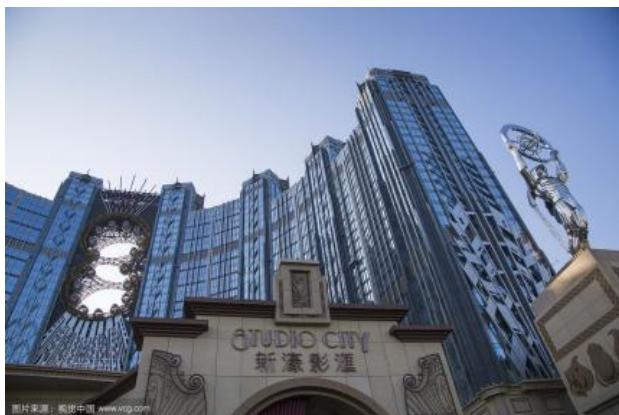


Fig.11 (photo by author) 2018.10.3

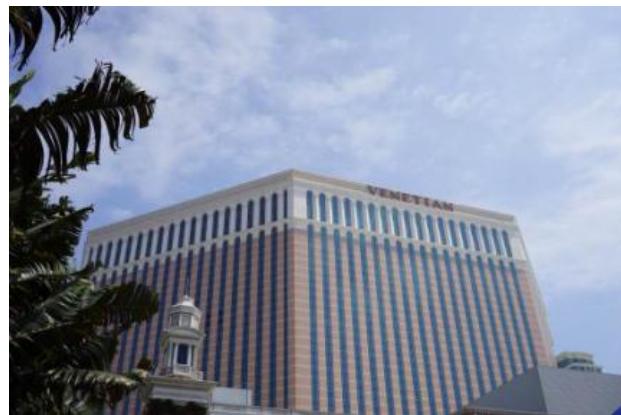


Fig.12(photo by author) 2018.10.3

4. Conclusion

Historical area not only records the changes of the city, but also is an important emotional link for people and an important carrier of the city's history and culture. As the historical area within the planning scope is the urban central area, it must not only be protected, but also meet the requirements of improving central functions and adjusting the spatial structure. Therefore, the transitional zone plays an important role in the process of urban development.

In the design of visual communication, historical elements play an irreplaceable role. With its application, the works may have more intrinsic information that can be conveyed to viewers or tourists. At the same time, they also allow for better inheritance and development of long historical elements, providing another method for the design of transitional zone to achieve better transition between historical urban area and modern urban area.

In modern visual design, historical patterns can often become designers' creative inspiration, which has reference value for modern design. In the process of integrating historical features, the sense of modernity is a prerequisite. After all, it is now the 21st century. Modern design should better embody the characteristics of the era. In modern design, copying and grafting will only give people a sense of conservatism and obsolescence; but if we only pay attention to abstract and concise sense of modernity, it will lose the content and significance; looking at those excellent classics, the common feature is that the creativity of design is both historical and modern in its manifestation. All of these excellent designs reveal the glory of history and culture, and emit the light of modernity.

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