

Application of Furnishings in Catering Space

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Abstract—As one of the special spaces most frequently used in people's daily life, catering space provides people with functions such as catering activities, social activities, leisure and entertainment. As the main body of the space environment and the bearer of the space function, the application of furnishing design should be considered as an important factor in the catering space design. The display design in catering space not only needs to meet people's basic functional needs, but also needs to meet the spiritual and cultural needs of users. In addition, interior furnishings can also divide the space into two parts, enriching the form and level of spatial organization. However, in the interior design of catering space, the author still needs to follow the aesthetic principles, and puts the scale ratio, style characteristics, artistic features and other elements of the display and the space environment into a whole system to consider. In this design practice, combining with excellent cases, it is necessary to comprehensively analyze the function, design principles and influencing factors of furnishing design in catering space, which is a special indoor space. At the same time, it is possible to make a new exploration and attempt on it, which also produced new thinking.

Keywords—*catering space; display layout; space artistic conception; space division*

I. INTRODUCTION

With the development of modern society, dining out in people's daily life has become more and more frequent. As a result, people's requirements for catering space have gradually changed, no longer limited to catering activities, but often accompanied by aesthetic needs and cultural needs. Especially in China, where the food culture is developing so vigorously, people pay more and more attention to the environment and space when they eat. Good dining space is not only to meet the material needs of people's food and drink activities, but also to create a special space atmosphere to meet the spiritual needs of users. As one of the main carriers of space function, the design of the furnishings has become one of the factors that people must consider when designing the catering space.

II. THE RELATIONSHIP BETWEEN CATERING SPACE AND INTERIOR FURNISHING DESIGN

In the space environment that modern people come into contact with, catering space is one of the most familiar and frequently used space environment in daily life. It is not only a space for people to eat and drink, but also an important place for people to provide social, negotiation, rest and other

functions. At the same time, people's life pressure is increasing, and the demand for restaurants is also increasing. People from all walks of life gradually favor the diversification of restaurants. What people need is not only a meal, but also the enjoyment from the material level to spiritual level. The significance of catering space design is to promote the prosperity and development of catering culture and stimulate the continuous innovation of catering culture. Good catering space design can not only guide people's personalized consumption, but also promote the communication among people. Customers can recognize the central idea of catering cultural space by understanding the theme and experiencing the theme, and enjoy the visual and sensory feast brought by catering cultural space.

The catering space design mainly refers to the interior space design, and the interior furniture and furnishings are one of the main carriers of the space function. As an integral part of interior design, interior furnishings play an important role in the interior environment, and also determine the interior design success. Excellent interior furnishing design can set off the indoor atmosphere of the catering space, create environmental mood, promote the indoor environment of the catering space to a new cultural realm. Compared with the space atmosphere, the cultural mood can not only be felt by people, but also be a kind of enjoyment of the spiritual world that can arouse association and enlightenment. Therefore, coordinating different styles and creating different furnishing works in the display art design of catering space will promote the interior space to a new design height. In order to create a better indoor dining environment with clear theme, functional maturation, comfortable and pleasant, and noble artistic conception, it is necessary to have a display design coordinated with it in an excellent dining space design.

III. THE ROLE OF FURNISHING DESIGN IN CATERING SPACE

A. Meeting the Use Function of Indoor Environment of Catering Space

When people divide the nature of the space, the use function of the space is one of the important division bases. As an important carrier of the use function of the space, the primary task of furniture furnishings is to be consistent with the nature of the indoor space to meet the basic functional needs of users when they live in the space.

In the special space environment of restaurant, the use function of space mainly includes catering, social communication, entertainment and other activities for customers. For businesses, it needs to consider the needs of operation, storage, food production and display. The furniture furnishings in the catering space must meet the above basic needs, provide necessary facilities for users' activities in the space, make the space environment more comfortable, and reflect the function and value of the space.

B. Meeting the Spiritual and Cultural Needs of Users

Modern interior furnishing design will not only affect people's life style and quality of life, but also affect users' psychological environment construction and cultural function of space. Therefore, the interior furnishings not only meet people's basic functional needs, but also need to follow the aesthetic principles, and give the necessary consideration to the cultivation of space environment mood. While space artistic conception is often the best way to show the designer's thinking and exploration of space. When the users have activities in space, they can not only feel the beauty of space artistic conception, but also have emotional resonance with the designer. The users can not only experience the enjoyment of perception, but also have wonderful associations of whole space environment.

In the cultivation of space artistic conception, it is necessary to have a comprehensive consideration of interior furnishing design. The material, color, shape and other elements of furnishings will have an impact on the overall environment of the space. For example, in the selection of materials, if the furnishings are made of steel, glass, metal plate and other materials, people will feel alienated. These materials have a hard and cold texture. However, if the designer follows the aesthetic principles and reasonably match these materials, the space can also have the characteristics of rationality and firmness (as shown in "Fig. 1"). In the selection of furnishing color, if the furnishing color with high brightness and purity is selected, it will make people have a pleasant and lively psychological feeling and attract people's attention. The low purity color can bring a peaceful and steady atmosphere (as shown in "Fig. 2"). Therefore, when people try to cultivate a specific artistic conception in the catering space, the designers need to make a reasonable consideration of the configuration and selection of the furnishings in the space. Good display design can not only meet the use function of space, but also set off the cultural mood of space and enrich the spiritual world of users.

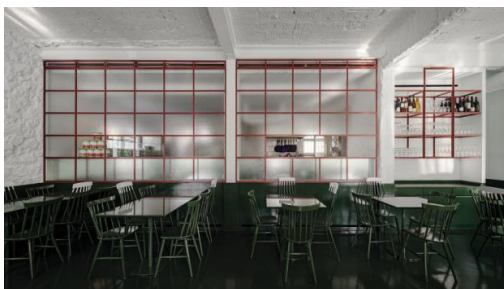


Fig. 1. Lollo's Atene restaurant (source: goood.com).



Fig. 2. Mansura restaurant (source: goood.com).

C. Using Secondary Division of the Interior Space of the Restaurant to Enrich the Spatial Level

For the whole space environment, the role of interior furnishings is not only to meet the basic needs of people's life activities, but also to divide the space interior twice. Taking Chinese traditional interior design as an example, in the plane layout of interior space, it often has the characteristics of running through principal axis, left-right symmetry, clear distinction between primary and secondary, preciseness and balance; in the vertical division of space, it often uses screens, long windows, antique-and-curio shelves and other furnishings to give the space the characteristics of "being transparent in the enclosure, clear in the separation, and ambiguous". (see "Fig. 3").

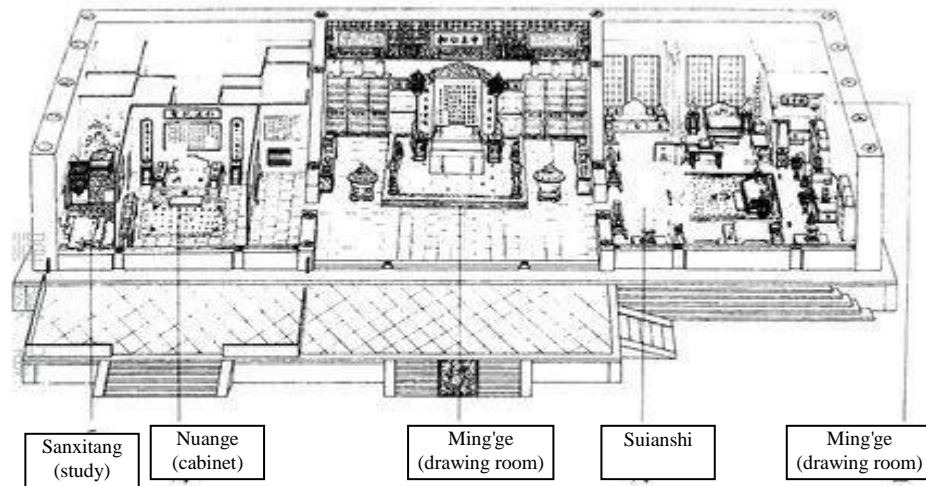


Fig. 3. Traditional Chinese interior layout (source: China classic furniture network).

When applying this design concept to the design of modern catering space, it is necessary to realize the importance of furnishings in the secondary division of space. In the plane division of catering space, the designer must fully consider the proportion and scale of each functional area in the restaurant, the relationship between each small space and the user's activity route and other factors; in the vertical division of space, the designer needs to consider the user's line of sight in the space, the relationship between the upper and lower parts of the space and other factors. Excellent furnishing design should ensure that the use function of space is not affected to the greatest extent. It is necessary to be able to divide the boundaries among various functional areas in the restaurant, clarify the function and nature of each space, and retain the connection among small spaces, coordinate the scale and proportion of space, and enrich the hierarchy of space organization.

IV. ANALYZING KEY POINTS OF FURNISHING DESIGN IN CATERING SPACE WITH CASE STUDY

A. *Furnishings Should Be Coordinated with the Scale and Proportion of Space*

The standards for beauty vary from person to person. In most cases, people have the same pursuit for scale and proportion — appropriate proportion, comfortable and pleasant sensory effect. The Pythagorean School found the golden section proportion as early as in ancient Greece, showing that the proportion and scale of things play an important role in aesthetic activities.

As an artistic creation activity, the interior furnishing design in the catering space also needs to follow this aesthetic principle. In the design, it needs to link the area, height, furniture scale of the interior restaurant space and other furnishing items to consider as an organic whole. Of course, it is also necessary to ensure the normal operation of

the use function of space. Therefore, it is possible to refer to the basic principles of ergonomics and take into account the specific activities of users in the space.

Taking the New York Burger restaurant as an example, in terms of furniture layout, the proportion between tables and chairs is appropriate and the scale is normal. From the perspective of plane layout, the distance among tables is too close, and it may make customers feel too crowded when they have meals or activities. Then, the customers will reduce their personal privacy and sense of security in psychological environment (as shown in "Fig. 4"). The furniture layout of Huanyi small noodle restaurant is obviously spacious and transparent, and the boundary among each dining areas is also clear. The users will feel more comfortable and safe when they have activities in the middle of the restaurant. In addition, in the configuration of indoor furnishings such as lamps and shelves, the scale and proportion is coordinated with the overall space, greatly increasing the user's visual experience (as shown in "Fig. 5").

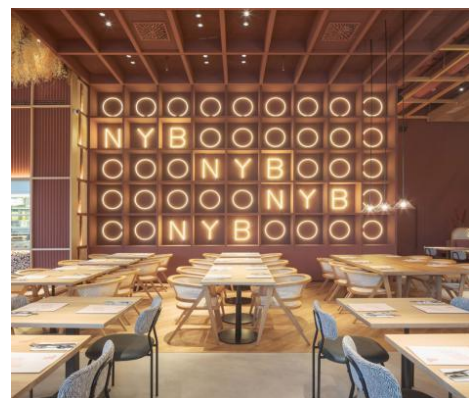


Fig. 4. New York Burger restaurant (source: gooood.com).



Fig. 5. Huanyi noodle restaurant (source: goood.com).



Fig. 7. Yuangu restaurant (source: goood.com).

B. The Style of Furnishings Should Be Consistent with the Space Environment

Style is a necessary condition for art design. It can reflect the internal style and artistic characteristics of the design, and make the design have unique artistic charm. In the catering space, the style of furnishings can be unified with the whole space. It can not only set off the artistic conception of the space, but also highlight the theme and characteristics of the space, and increase the aesthetic taste of the space.

Taking Esi Burger restaurant as an example, the restaurant focuses on creating a natural and simple interior style. Therefore, in the selection and configuration of indoor furniture, natural stone and wood furniture are selected, and the texture of the materials are retained to further foil the overall atmosphere of the space (as shown in "Fig. 6"). Yuangu restaurant focuses on creating a traditional Chinese style of space environment. Therefore, in the selection of indoor furnishings, ancient Chinese wooden furniture is used to give the whole space a quiet, peaceful, steady and heavy tone, while also increasing the cultural connotation of the space (see "Fig. 7").



Fig. 6. Esi Burger restaurant (source: goood.com).

C. Furnishings Should Have Flexibility in Dividing Space

As one of the main objects in the interior space, furnishings not only need to be used as a tool to assist the user to complete various daily activities and meet the material and spiritual needs of the user, but also need to be used as a medium for the secondary division of space organization to separate the interior space into small spaces that are scattered and interrelated with each other. This division is not a simple and absolute division of space, but a clear boundary among the functional areas of the space. However, it is necessary to retain the connection among them and coordinate the relationship among various spaces.

For example, in the plane division of space organization, Yaoyue restaurant adopts the ambiguous and transparent style. For example, the gauze net is added as a barrier among the dining tables. On the one hand, it increases the privacy of each dining area and the psychological security of the users; on the other hand, it does not completely block the line of sight, but increases the space hierarchy, making the visual sense of hazy beauty. In "Fig. 6", wire mesh and wood are used as the separation of indoor and outdoor space, which not only divides the boundary of indoor and outdoor space, but also does not hinder the lighting effect (as shown in "Fig. 8").

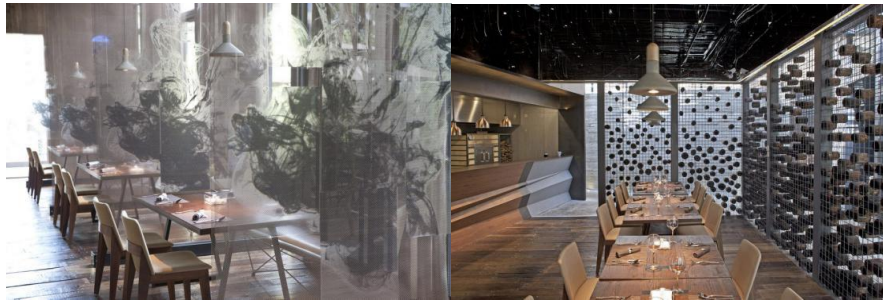


Fig. 8. Yaoyue restaurant (source: goood.com).

Sazha restaurant is unique in the division of indoor vertical space. One of the characteristics of the restaurant is that it suspends the dining table vertically, breaks the tradition of four corners of tables and chairs touching the ground, and leads people's sight to the sky, handles the relationship between the upper and lower space well, which

is fascinating. In addition, it can also see that the restaurant exposes the pipes on the ceiling in "Fig. 8", and then decorates the upper part of the whole space with industrial chandeliers, which not only complements the overall style of the interior, but also enriches the hierarchy of the space on the vertical interface (as shown in "Fig. 9").



Fig. 9. Sazha restaurant (source: goood.com).

V. ANALYSIS ON DISPLAY DESIGN OF THE RENOVATION PLAN OF THE WALNUT

A. Analysis on the Current Situation of Walnut Restaurant

As a representative of the new restaurant that has become popular in recent years, the "Walnut" is unique in the industry with its unique business model of "music + food + performance", and has more artistic and cultural flavor than the traditional bar or restaurant. In order to further set off this inclusive and pleasant atmosphere and better reflect the corporate culture, it is necessary to fully understand the material and emotional needs of customers when designing the furnishings in the restaurant, and endow them with visual feelings and attributes through artistic expression techniques. The design environment and atmosphere give customers a relaxed and pleasant psychological feeling in the process of customers' diet.

In addition, the designers need to fully understand and use the corporate culture in the interior furnishing design of the restaurant. Through the decoration of the space interface, the design of the space physical environment and the matching application of the furniture furnishings, the designers will use the light, shadow, scenery, plants and other means of expression to highlight the space theme, so that the guests can fully feel the life enjoyment brought by the delicious food when eating. And the designers strive to

create a restaurant environment with unified theme, pleasant environment, healthy and comfortable design atmosphere.

B. Application of Display Design in Restaurant Renovation Plan

Based on the analysis of the current situation of the walnut restaurant, it has developed a new design plan for the interior space planning, interior decoration and furnishing configuration of the restaurant. In view of the furnishing design of this space, the author makes a specific analysis and explanation according to the aesthetic principles and furnishing design principles.

First of all, considering the scale of indoor furnishings, all furnishings are designed according to the basic principles of ergonomics. For example, the height of the seat table is set at about 750-790mm, and the height of the seat is set at about 350-430mm to ensure the comfort of users. Considering the catering space with a large flow of people, and referring to the analysis of the flow of people in the restaurant, the distance between the furniture should be set as close as possible to ensure the normal activities and passage of the crowd. The size and proportion of the furnishings in the restaurant are coordinated so that the whole space is neither too crowded nor cramped, nor empty or boring (as shown in "Fig. 10").

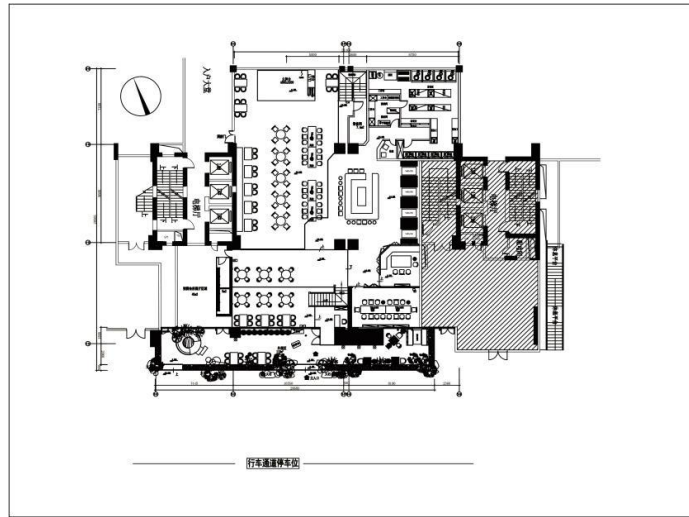


Fig. 10. Plan of the first floor after the renovation of walnut restaurant (source: self-drawn by the author).

On the plane division of space, on the one hand, different types of furniture such as tables and chairs are used to distinguish different dining areas, and each area is connected while maintaining relative independence; on the other hand, furniture such as shelves and ornaments are used to further divide the space, making the space composition richer and creating a sense of space hierarchy. In the vertical division of space, in order to ensure that customers can also watch the performance to the maximum extent, the structure of the second floor adopts the design of "pick space" and "surround type". The middle part is left blank to increase the scope of vision, making the upper and lower space more interactive, and catering to the lively and inclusive atmosphere of the overall space.

In the material selection of furnishings, in order to integrate with the overall light industrial style of the interior, wood, stone, steel and other materials are selected. Wood and stone materials retain their original texture and color, full of natural flavor. At the same time, the warm and simple texture of wood and stone elements also harmonizes the cold breath of steel and concrete structure, making the whole space warm and comfortable. In terms of color configuration, the warm yellow of wood, the brown of brick and stone, the gray of concrete and the green of plants have a wonderful collision and well-coordinated coexistence, so as to jointly create a relaxed and lively indoor environment, and the overall color is harmonious and unified (as shown in "Fig. 11").



Fig. 11. Effect picture of walnut restaurant after the renovation (source: self drawn by the author).

In addition to the indoor furniture configuration, the selection of lamps and lanterns is also very important in the display layout. In this scheme, the author wants to use the light and shadow relationship to create the effect of "day" and "night", so as to distinguish the different space atmosphere of the first floor and the second floor. The setting of the light source needs to be very refined. For example, the author needs to create a night effect on the first floor, so

point light sources are used in the whole space. On the one hand, the brightness of the whole space can be maintained at a low level, but it does not affect people's communication and activities. On the other hand, the light can be projected on important nodes such as the dining table, artwork, stage, etc., and a mysterious and comfortable atmosphere can also be created (as shown in "Fig. 12").



Fig. 12. Effect picture of walnut restaurant after reconstruction (source: self drawn by the author).

In addition, when judging the interior furnishing design of a restaurant, the decoration of the space interface, the furniture configuration, the VI design of the restaurant's meal plate and table mat, etc., should be taken into account. In order to reflect the design excellence, the author also specially designed a new VI system of the restaurant. Taking the design of menu and coaster as an example, in order to integrate with the light industrial style in the dining room, the color and texture elements of bare concrete are selected for the background of menu and coaster. On the whole style, it tends to be simple and generous modernism design. ("Fig. 13" and "Fig. 14")



Fig. 13. Menu design — front (source: self-drawn by the author).



Fig. 14. VI design effect drawing (source: self-drawn by the author).

VI. CONCLUSION

In this scheme, the author analyzes and discusses the development prospect of music restaurant in modern city,

investigates the existing music restaurant, makes specific analysis on customer population, restaurant environment, profit situation, etc., and deeply understands the concept, method and principle of indoor environment design of catering space with excellent cases, so as to meet the basic requirements of customers' spiritual and material needs. From the perspective of exploration spirit and design, the author will fully consider the functional division and well-organized streamlined lines for the needs of service in the restaurant, investigate and study the interior furniture and furnishings design, and apply the basic principles of aesthetics and artistic methods to integrate indoor environment. It is necessary to arrange the table position as much as possible, and humanize the flow organization such as flow of people, meals, material transportation and storage. Through this design practice, the author has explored and applied the new design of the interior space of the restaurant, which has created new thinking. As one of the main objects in the space, interior furnishings not only affect people's life quality, but also influence people's spiritual and cultural world imperceptibly. Therefore, when the author carries out interior environment space design, it is necessary to put the furnishing design in an important position for consideration.

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