

Research on Small Apartments Design

Liu Wen

Dalian University of Technology City Institute, Dalian Liaoning 116600, China

*Corresponding Author

ABSTRACT. *In recent years, with the booming development of our country's urbanization and the soaring house price, small apartments have played one of the most important roles in the young people's lives. So the designers should focus on how to build comfortable and warm living environment for young people in a limited space on house type designing process. According to the principles of residential design for young people, this paper analyzes and explores relevant schemes and suggestions on the small apartments design, China's urbanization process has been gradually accelerated with the trend of great large number of people flooding into the city, and the housing price has also risen accordingly. In case of the highly increasing house price, young people prefer to choosing the small apartments as their transitional houses. Therefore, small apartments occupy an important position in urban construction, and people have put forward higher requirements for the design and space utilization of small apartments. The core problem that every designer urgently needs to solve is how to design small space for young people to be more warm and comfortable. This situation requires designers to consider and study the design of household space in an all-round way to meet the needs of different groups of people for space.*

KEYWORDS: *Small apartment; Space design; Horizontal space; Longitudinal space; Variable space*

1. Current Situation of Small Apartments Space

1.1 The Conception of Small Apartment

At present, domestic scholars still do not have an exact definition for the conception of small family apartment. It is considered a form of household for small families and single people to satisfy basic life needs that only have 3 kinds of functions-kitchen, bedroom, and toilet. In China, we regard the following household types as the "small ones": the type of three rooms less than 100 square meters, the type of two rooms less than 80 square meters, and the area of one room less than 60 square meters. For the usable area inside only 15-30 square meters, we regard it as "super-small housing". This paper mainly explores the small apartment of 50-70 square meters which could only satisfy the daily rest of the residents. And it is very strict to create a comfortable, relaxed and warm living environment in such a small apartment.

2.2 Defects of the Small Apartments Space Design

At present, people's values and lifestyle have changed dramatically, so they are no longer satisfied with the simple survival environment, but the quality of life, and they pay more attention to the comfort of housing. "Small apartment" mainly focuses on the function of rest, while other functional designs are often overlooked, such as washing and cooking. Most of the "Small apartment" do not have independent kitchens and living rooms, and they contain an open kitchen, connecting the kitchen to the living room, the bedroom to the bedroom. In general, the bedroom lacks the independence of space. Some of them share living room with bedroom, dining room with living room, no laundry space, etc. The above design styles can not meet "people-oriented" principle. Due to the constraints of space, in addition to the basic living demand function such as bedroom, bathroom, and open style kitchen, the other auxiliary space is largely omitted.

2. Demand Analysis of Young People

Young people are both of the central force of society and the main force of social consumption. At present, our country's housing demand are mainly "post-80s" and "post-90s" who have experienced great change of society and with relatively open lifestyle and life concept. At the same time, they prefer to relieving the pressure in social, dinner, shopping, consumption and some other ways. For this, it is very necessary to set up a gathering

place in the home. Furthermore, under the influence of internet, more and more young people live a more self-centered life, and always according to own hobby to carry on the house design. Area for them is secondary factor, they pay more attention to design the house according to their own habits.

Firstly, as a main force of consumption, young people's consumption is often fashionable and impulsive, and they pursue a sense of modernity and fashion. Secondly, they pay more attention to individuality to show their aspiration or interest. Thirdly, they have their own aesthetic ideas, and emphasize the quality and comfort of life in space design.

3. Design Method of Small Apartment

3.1 Design of Horizontal Space

Small apartment is relatively narrow, so on the horizontal angle, designers should to meet young people's basic living requirement, but also to improve the life quality as much as possible, and they need to set some other life function areas such as: reception room, dining room, study area, etc. In the design process, the designer should fully consider the customer's lifestyle, as well as the location and area design of the functional areas to achieve the cohesion and mutual benefit among the functional areas.

In addition, the planning of public and private areas should also be considered. According to the different degrees of privacy, the corresponding design and planning should be carried out on visual and auditory factors. Usually, the design of moving area tends to be doorway, and the rest of quiet area should not only satisfy its basic function, but also satisfy the aesthetic and life taste of young people.

3.2 Design of Longitudinal Space

Longitudinal space design is the most effective method to solve the problem of insufficient area in small houses. The longitudinal space design mainly includes the furniture longitudinal design, the home appliance longitudinal design and the spatial interface longitudinal design. For the apartment with high living space, it can be divided into two layers, which can largely solve the problem of small apartment area. In design process, the role of vertical space should be brought into the programme, the conventional layout should be broken, an open vision should be created and the sense of hierarchy of living space should be increased.

In furniture level, the designer should also consider the concept of vertical development, use vertical space design to increase the room storage space such as display items in a higher space, so that under which we can design work areas, living areas, sofas, desks, etc., for rest or learning.

3.3 Design of Variable Space

Variable space design is the key point of current small apartment space design which can freely change the space according to the needs of customers, so as to meet the needs of different functional areas. Through the design method, we can achieve the comfort goal, and realize the plasticity of family space.

The architectural space adopts frame structure, and adopts light partition or sliding door to reduce the space waste in the process of space division. The furniture and partition are connected in the design process to realize the division and transformation of the space. Using sliding door and sliding partition can not only effectively divide the space, but also increase the visual and psychological sense of space.

Variable space design also needs to be designed according to the different use time of the object, such as the sofa bed that can be changed according to different time. During the day, it can be used as a sofa to meet and socialize while in the evening it can be converted into a bed. Another example is the open kitchen. The kitchen table can be used not only as a dining table, but also as a desk. It can be seen that, in variable space design process, the designer can carry out a targeted design according to the life habit and schedule of the customer to meet different time and different functions.

In a word, the design of the small apartment has been the most important one in the design area, with the "post-80s" and "post-90s" who have the different life concepts and living habits becoming the main group of small apartment consuming. Small apartment design can not only satisfy the basic life demand of young people, but also make full use of more limited space, rich the function area to meet the pursuit of resident to life quality.

References

- [1] Zhu yong, han guoqiang (2016). Research on the Design of Small Apartment Storage Space. *Building Materials and Decoration*, no.42, pp. 31-32.
- [2] Xu xiaowen (2016). Analysis an Interior Design Strategy of Youth Small House. *Theoretical Observation*, no.1, pp. 32-33.
- [3] Era (2017). A Brief Analysis of the Design Elements of Small Family Interior Space. *Art and technology*, no.10, pp. 10-11.
- [4] Zhou Xiaoming (2015). Architectural Design of Small House. *Theoretical observation*, no.3, pp.35-36.