

Exploratory research on spatial design thinking and spatial design methods

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Abstract

In recent years, as people are increasingly demanding of space design, space design staff will be the model of three dimensional space decoration in the space design, both in terms of space construction model, the space image, spatial thinking, and so on ways to reform and innovation of space design, the design thinking, the combination of diverse creative thinking and space In order to design a reasonable, perfect and best space design, the combination of space design thinking mode and green sustainable development mode, which can not only be conducive to the green and sustainable development of the city, but also conducive to the construction of a new space, conducive to the future development direction of the city.

Keywords

spatial design thinking; Space design method; Reform and innovation.

1. Space design and space design thinking

As we all know, space design is inseparable from design thinking, in other words, space design thinking will directly affect the core ideas of housing and urban design, design thinking is throughout the whole process of space design. In recent years, in order to meet the needs of the public, China's housing space designers through the transformation of the traditional design style, so as to open up new activity areas and improve people's lifestyle. Space design thinking is mainly in the design process, designers through the use of abstract thinking, design ideas, ideas, ideas through the way of drawing on the drawings to show, through consultation, deliberation, the content of the design drawings for improvement. It can be seen that design thinking is more like a psychological and ideological activity. After space designers express these contents, they also need to repeatedly consider the content of space design, and whether it conforms to a certain logic. Both indoor and outdoor space design is to provide people with a shelter from wind and rain, therefore, space designers need to ensure that space adaptability under the premise of space design environment comfort, to provide people with a comfortable and harmonious life, work, leisure environment[1].

2. Space design and space design concept

Because space design is mainly through the combination of logical and non-logical design, so as to coordinate the differences between the two, so as to build a harmonious, characteristic, beautiful space design work. Therefore, before space design, space designers need to survey and measure the place, and combine local characteristic factors with space design, so as to design excellent design works. The differences between logical and non-logical house design are analyzed and studied as follows:

Because of the space design in the space design, the main purpose is to meet the demand of using people live, work, leisure, not only to meet the material needs of the people also need to meet the needs of the spirit of people, therefore, in building design, need to related content

needed for science and technology, People's Daily life content into the space design, Make the space design have certain logic. In addition, different space requirements of the design of the content and decoration is different, such as: living environment design and work area design is different, religious church design and temple design is different, modern factory decoration design and exhibition design is different, and so on. Therefore, space designers need to have space design thinking, space design thinking needs to have logic, and logic needs to have structural system and checking system. Among them, the structural system requires space designers to have a strong design knowledge reserve and the need to continue to in-depth study of the design content, only in this way, the designers in the space design, the house design is not particularly abrupt, abrupt. The calculation system mainly needs space designers to have good reasoning ability to calculate the bearing capacity of the housing structure in the space design, so as to reasonably distribute the stress points. Therefore, the above two design methods are inseparable from logical design thinking, through the use of logical thinking space design content into a scientific, reasonable, authentic decoration style. The logical characteristics are shown in Table 1[2].

Table 1 Features of logical design style

species	The characteristics of
Tectonic system	Need to have a strong design knowledge and design learning ability
Check system	Good reasoning and calculation skills are required

Instead of logical space design thinking, mainly through the design process, combined with the local design style, national customs, customs, characteristics and other content and space design. Use: the Palace Museum has the qing Dynasty style, the ancient Greek temple has the classical column architecture, the church has the Gothic style, the Baroque style, the Chinese garden has the landscape characteristics and so on, the space designers will be local characteristics and customs into the decorative style, so as to form a unique design style. To see the logic space design thought mainly includes the image of the design personnel design thinking, intuitive thinking and inspiration thinking, rather than logic design thinking, design thinking is the main core thinking inspiration, design personnel through inspiration design thinking, design pattern to break all the rules, to build a new design concept, design a different design. The specific characteristics of non-logical design style are shown in Table 2.[3.4]

Table 2 Characteristics of non-logical design style

species	The characteristics of
The image thinking	Propose new design method and idea, make new design style
Intuitive thinking	It is beneficial to expand the thinking of designers and put forward new concepts
The inspiration thinking	Break the traditional design style, reform and innovate a new design style

3. Main factors affecting design thinking

In recent years, with the continuous improvement of the quality and level of life of Chinese people, people in the pursuit of material life at the same time, more and more attention to spiritual life, therefore, in the process of space design requirements not only practicality but also aesthetics. In the process of space design, the main factors affecting designers' thinking are: local culture, decorative materials, application of technology and so on. Among them, cultural differences not only exist between east and west, countries, but also with ethnic groups and even gender. In the design process, space designers need to measure and view the spatial pattern, and design a space design map suitable for people's needs according to the

user's demand conditions and combined with the spatial pattern.

4. Conclusion

Space design thinking in the process of development, cannot leave the design of logical thinking ability, at the same time also need to design personnel refer to the local culture, local conditions and customs, content of technology, space limitation, material requirements, and so on, thus designed to meet the demand of space design, through the use of space design to express thoughts and feelings of the designers.

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