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The Influence of the Environment and the Use of Innovative **Materials in the Interior**

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Abstract: A person creates a material and spiritual world around himself and for himself in forms adapted for perception and development. Therefore, the environment always expresses human relations, captures social shifts and cultural processes in Uzbekistan, it absorbs space as an artistic material, resulting in psychophysical connections between a person and the subjectspatial environment, which is in the process of continuous change.

Keywords: interior, naturl, architecture.

Introduction

The purposeful organization of the interior space is the main task of architecture, the primary basis of architectural composition and the first stage of design. The solution to this problem largely determines how comfortable and beautiful the interior of the room created for a person will be. The internal three-dimensional structure is one of the most important components of the interior. It is based on the natural connections between the construction of internal space and external causes that influence its formation, including new trends in architecture, art and society.

Already at the very initial stage of design, interior modeling takes place, the social order is comprehended, initial data are accumulated for choosing one or another internal spatial scheme of the future structure, taking into account the functional purpose, technical capabilities and stylistic features of architecture, as well as natural and climatic conditions and local national traditions of Uzbekistan. Social, political, economic, historical, cultural, ideological and aesthetic factors have a decisive impact on the development of the spatial structure of structures. Technological progress at each historical stage of the creation of architectural objects makes it possible to realize socio-artistic views on the nature of space and consistently develop spatial structures taking into account the influence of light, color, furniture, textiles on human health. Of course, the choice and final formation of the internal spatial structure is influenced by the creative individuality of the master, who professionally determines the requirements of the people living in this space.

Architecture is an art that affects a person most slowly, but most firmly," said American architect Louis Henry Sullivan. New scientific data confirm this and demonstrate that the power of the environment around us is really great. For example, the height of the ceiling affects the tendency to think more abstractly or in detail. The lower the ceiling, the lower the level of abstract thinking.

In the mid-50s, there was a period in Soviet architecture when construction on a massive scale by industrial methods was especially actively developing. Fashion and artistic style in architecture and interior were dictated by the state. One of the most powerful ways to influence people was the process of uniting people "into a mass". The main goal was to distract from everything that could contribute to the development of individuality. The industry produced a minimal set of unimpressive things to create stereotypical interiors. As a basis, a direction was chosen that focused on the constructive and technological feasibility of the new form. Smart furniture, nanotechnology in the interior.[1]





Pic.1. Interiors of the 50s





Among the numerous means used by modern specialists of Uzbekistan in the field of interior design, there is the use of such classical techniques as stained glass, textiles, mosaics, capable of transforming the sound of any expressionless space, giving it individuality and significance.

However, along with the expansion of the artistic aspects of their expressiveness, the development of technological possibilities of execution, the value of these artistic means is often replaced by a design role, limited only by the stylistic design of the interior, they are often used unreasonably, without taking into account the nature of the space. At the same time, it is clear that the use of such expressive means for the development of interior aesthetics requires a scientifically reasoned approach, especially those bearing or losing the different character of historically established styles and trends.

The choice of artistic techniques and technological means in the design of modern interiors should also be justified by a systematic approach that allows you to solve problems, starting with the analysis of the conditions of the current environment, to identify a number of interacting levels that together will affect the choice of artistic means, and to embody the idea in a material that meets the nature of this space. The results of the analysis should lead to the synthesis of the values of the identified components of the object, the definition of its structure as a stable unity of elements, their relationships and the integrity of the system. Smart furniture, nanotechnology in the interior. Smart furniture, nanotechnology in the interior.

In the course of the research, it was found that the main criterion for obtaining a reasonable result in solving the problems of interior aesthetics is the inseparable unity of the nature of the environment, the ideological and artistic design, the material used and the features of technological solutions. Therefore, the basis of the proposed scientific design methodology is a system of interior parameters and the corresponding characteristics of the environment, the principles of interaction of which are reasonable motivation criteria for setting a design task, choosing an appropriate design solution, as well as materials and technologies that meet the requirements for a certain functional type of interior. Smart furniture, nanotechnology in the interior.

Innovations play an important role in the development and improvement of interior design. With the advent of high technology, it became possible to use new materials and technologies, which greatly expanded the capabilities of designers. One of the most innovative areas is the use of new materials. For example, the appearance of nanomaterials has made it possible to create surfaces with unique properties, such as antibacterial or self-cleaning. This is especially true for kitchens and bathrooms, where cleanliness and hygiene are important.

It is known that interior elements can affect our emotions and psychological state in different ways. By changing the environment around you, you can reduce anxiety or enhance creativity. Architectural designer Polina Stepanova explains why the interior affects well-being and how to create the perfect space for peace of mind. [2]

Innovations play an important role in the development and improvement of interior design. With the advent of high technology, it became possible to use new materials and technologies, which greatly expanded the capabilities of designers. One of the most innovative areas is the use of new materials. For example, the appearance of nanomaterials has made it possible to create surfaces with unique properties, such as antibacterial or self-cleaning. This is especially true for kitchens and bathrooms, where cleanliness and hygiene are important. Houses that are cleaned by rain, furniture that is not afraid of stains, luminous curtains, air-purifying carpets and a white "living" kitchen - this is today and tomorrow of nanotechnology.

The nano interior is based on the idea of proximity to nature, which finds its expression in the fact that a person's living space is designed in such a way that he feels as comfortable as possible, becomes an integral part of his home. The inseparability is one of the fundamental details of the new interior, it should look solid, and not consisting of disparate parts, and this is its main difference from other design trends.



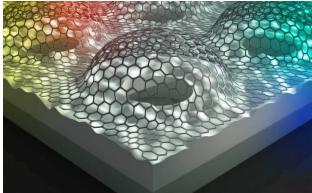


Pic.2. Smart furniture, Nanotechnology in the interior

What materials are used in nanointerriers are: granite is a material of magmatic origin, and, like everything extracted from the earth, has a radiation background. But it is worth noting that even potatoes with carrots have it;

- 1. "smart glass" allows you to switch the state of the glass from frosted to transparent with "one click". Durable and high-quality material combines unique properties, such as transparency, a variety of colors, light transmission capacity. Smart glass is able to solve a number of tasks at once:
- 2. in matte mode, replace the partition, curtains, shading screen or blinds. And in a transparent state, it does not allow ultraviolet rays into the room;
- 3. plexiglass is a material similar in composition to plexiglass, but it has auxiliary components, thanks to which the popular plastic has acquired many useful properties that make it in demand. It is characterized by higher strength, high light transmittance, saves heat due to low thermal conductivity, no color changes-it is immune to the action of sunlight, resistant to a large temperature range, moisture, hygienic and does not require complex maintenance. But it is subject to external damage and easily catches fire;
- 4. corian is officially considered the first artificial stone created. Corian is a leader in sales and in the production of new products. Initially, artificial stone was created to replace human bones — this indicates its 100% environmental friendliness. Now it is an ideal material for making kitchen countertops, bathroom countertops, sinks and window sills. Its advantages include durability, strength, a large color gamut, the creation of a seamless surface and much more.





Pic.3. Corian nanostructured surface

Polyurethane foam - This type of plastic has been produced since 1954. In the 1960s and 1970s, it was popular with rebellious designers who sought to refute the usual ideas about furniture. Now insulation panels, stucco decor and interior items are made of polyurethane. But although polyurethane has become the norm of life, the furniture made of it still looks unexpected and provocative, which is proved by the new Double Up bench from the Italian company Sturm und Plastic.[3]

It is possible to list a lot of the latest materials of nanotechnology, but to note the progress in this area is rapidly developing.

Conclusion. In the course of the research, it was found that the main criterion for obtaining a reasonable result in solving the problems of interior aestheticization is the inseparable unity of the nature of the environment, the ideological and artistic design, the nanomaterial used and the features of technological solutions. Therefore, the basis of the proposed scientific design methodology is a system of interior parameters and the corresponding characteristics of the environment, the principles of interaction of which are reasonable motivation criteria for setting a design task, choosing an appropriate design solution, as well as materials and technologies that meet the requirements for a certain functional type of interior.

List of used literature

1. Aronov, V. R. Artist and subject creativity. Problems of interaction of material and artistic culture of the XX century. / V. R. Aronov.-M.: 1987.-232 p.

- 2. Architecture of civil and industrial buildings: textbook: for universities. in 5 volumes / Central Research Institute of Theory and History of Architecture M: Stroyizdat, 1984. - T 1. Gulyanitsky N. F. History of Architecture. 3rd ed. supplement 1984. - 334 e.
- 3. Yuldasheva, M. K., & Kamilova, M. (2023). FOREIGN EXPERIENCE IN THE DESIGN AND CONSTRUCTION OF INNOVATIVE ARCHITECTURE OF MUSEUMS OF THE WORLD. CENTRAL ASIAN JOURNAL OF ARTS AND DESIGN, 320-326.
- 4. Kamilova, M. E., & Xamrakulov, O. M. (2023). PROBLEMS AND MAXIMUM PRESERVATION OF THE TRADITIONAL STRUCTURE OF HOUSING IN THE HISTORICAL PART OF THE CITY OF SAMARKAND. Procedia of Theoretical and Applied Sciences, 5, 127-129.
- 5. https://domastroika.com/innovatsionnye-materialy-v-dizajne-hhiveka/?ysclid=lnewkpougv551349236
- 6. Voronina V.L. Folk traditions of architecture of Uzbekistan. M., 1951.
- 7. Maikova V.N. Artistic culture of the national dwelling of Uzbekistan. Tashkent, 1990.
- 8. Urinbaeva M.B. Traditions and continuity of the interior of residential buildings in Uzbekistan, Tashkent, 1992.
- 9. https://sanat.orexca.com/
- 10. Kamilova, M. E., & Xamrakulov, O. M. (2023). PROBLEMS AND MAXIMUM PRESERVATION OF THE TRADITIONAL STRUCTURE OF HOUSING IN THE HISTORICAL PART OF THE CITY OF SAMARKAND. Procedia of Theoretical and Applied Sciences, 5, 127-129.
- 11. Yuldasheva, M. K., & Kamilova, M. (2023). FOREIGN EXPERIENCE IN THE DESIGN AND CONSTRUCTION OF INNOVATIVE ARCHITECTURE OF MUSEUMS OF THE WORLD. CENTRAL ASIAN JOURNAL OF ARTS AND DESIGN, 320-326.
- 12. 7. Elmuradovna, J. E., Turdimurodovich, M. I., & Zuyadullayevich, Z. U. (2020). Modern tourist requirements in samarkand. International Journal of Scientific and Technology Research, 9(4), 1538-1540.
- 13. Yalgashovich, X. S., Turdimurodovich, M. I., & Bekzod, I. (2023). PROPOSALS ON INNOVATIVE SOLUTIONS OF ORGANIZING THE ARCHITECTURE MULTIFUNCTIONAL SPORTS FACILITIES. Journal of new century innovations, 33(1), 114-119.
- 14. MAHMATQULOV, I., & ISMOILOV, B. (2023). LANDSHAFT ARXITEKTURASIDA DEVORLAR, ZINALAR, **PANDUSLAR** VA QIYALIKLARNI TIRGAK 'LLANILISHI USULLARI. Journal of Research and Innovation, 1(7), 13-18.