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FEATURES OF INTERIOR DESIGN OF SOCIAL HOUSING

The purpose of the study are analysis and definition of the main functional-planning, artistic and aesthetic features of the formation of interiors of social housing and development of proposals for their modern design solutions.

Methodology. Theoretical and practical research methods were used, namely analysis of scientific and popular literature on the research topic, generalization of approaches to functional-planning and stylistic solutions of social housing based on analysis of design experience, experimental computer modeling using ArchiCAD and 3DsMax.

Results. Based on the analysis of research and modern practice of formation of social housing, the methods of functional-planning and artistic-aesthetic organization of the internal environment of social housing and its subject-spatial content are revealed. Features and examples of rational interior design solutions for small apartments are considered.

The scientific novelty lies in the generalization of previous research on this topic and the identification of functional and planning features of the formation of the subject-spatial environment of social housing of small apartments and providing suggestions for the design of their interiors.

Practical significance. The results of the study can be used in their introduction into the modern practice of designing social housing with economical small apartments and in the development of interiors of their internal subject-spatial environment.

Keywords: social housing; affordable housing; interior design; planning; apartment; small premises.

Introduction. Housing is one of the primary lives needs of a person and its accessibility is an urgent social problem. Today, a significant number of people around the world cannot afford to buy housing at their own expense. For vulnerable groups (disabled people, young families, low-income groups and others) this problem remains particularly relevant. Social housing - a way to provide citizens with housing, small apartments, which are sold at low prices and on preferential terms. In Ukraine, affordable housing is housing that is made and distributed according to a standard project, or it is a reconstruction of an old building. The desire to reduce the material costs of housing often - often leads to a nonfunctional and unaesthetic interior. Creating a harmonious environment in social housing is an urgent problem in our country today.

Analysis of previous researches. The topic of social housing is considered in various books, articles and scientific publications. To date, much research has been aimed at identifying the typology of social housing

buildings and determining the peculiarities of the formation of the architectural and planning structure of the living environment.

Functional-typological and sociopsychological problems of housing were studied in the works of V. Abyzov [1], I. Gnes [7], G. Gnat [4]. The works of V. Kutsevych [10], M. Omelyanenko are devoted to the rationing of housing, the works of O. Bachynska [3], Y. Zozuli, E. Evseeva, V. Korol, A. Yablonska, T. Zaslavets [8, 9].

In the article V. Abyzova and N. Ostapchuk "Peculiarities of interior design of social housing of small area" [2], the problems of formation of interior of social housing of small area are considered and the analysis of scientific researches concerning the functional – planning organization of premises of this type is carried out. As a result of research, the most widespread receptions of designing of small-sized premises by means of transformation of inhabited internal space are defined.

In the dissertation G.O. Gnat "Formation of the planning structure of apartments of

social and affordable housing" [5], the conditions of formation of social and affordable housing in Ukraine are analyzed. Based on the analysis of the main factors, a theoretical model of forming a fund of apartments of social and affordable housing is formed, a number of features of the planning structure of social and affordable apartments, solving the internal space of small apartments and a range of optimal planning techniques are determined.

In the article I.P. Gnes "Affordable housing: tasks of optimizing the typological structure of the housing stock" [6], analyzes the situation with the formation of affordable housing in Ukraine. Based on the results of special sociological research, preferences are identified for different options for solving the problem of affordable housing, depending on the total area of the apartment, its cost, method of payment, financial capabilities of future residents. Three categories of affordable housing are proposed, including short housing, the introduction of which will significantly expand the audience of potential consumers of affordable housing.

Scanlon Kathleen, Fernández Arrigoitia, Melissa and Whitehead Christine's "Social housing in Europe" [11] highlights some of the most important trends in the scale of social housing in Europe; the driving forces of these trends and the implications for the future provision of social housing are discussed. In particular, it is about the extent to which social housing helps to ensure that households have access to adequate standard housing at a price they can afford in different conditions in the European Union.

The book «Everyone needs housing. Fair, Social, Affordable» by German architects Ursula Kleefisch-Jobst, Peter Köddermann, Karen Jungoffers a comprehensive overview of affordable housing: from the significant models of the 1920s to modern concepts today. Expert essays cover the problem of housing from different points of view, the solution of which is crucial for the social cohesion of our society [13].

At the same time, the issues of functionalplanning, artistic and aesthetic features of the formation of the interiors of social housing and the identification of their rational design solutions require further research.

Statement of the problem. Identifying the features of interior design of social housing of small area leads to the study of modern trends in their formation with the definition of rational methods and means of functional zoning and planning of small apartments, multifunctional and universal use of their premises with appropriate artistic and stylistic arrangement of the interior. The purpose of the article is to analyze and determine the main functional-planning, artistic and aesthetic features of the formation of the interiors of social housing and the development of proposals for their modern design solutions.

Results of the research. Social housing is state-owned and rented buildings. Their main purpose is to provide affordable housing in a short time, with the maximum population density. In theory, this sounds great, in fact, with the advent of new neighborhoods, there have been many social problems. Such buildings turned into huge "anthills", and the neighborhoods built by them - in dangerous ghettos. Such construction was especially popular in the middle of the XX century, when the world experienced a crisis of housing shortage. Along with new demands, technology began to develop. Typical design became especially popular when buildings, constructions, constructions were massproduced. Thus, appeared the first prefabricated houses, which one after another filled the entire territory of the Soviet Union.

Abroad, social housing accounts for about 30 percent of the total housing stock. Talented and well-known architects are often invited to solve housing issues – after all, social housing does not have to look monotonous against the background of more respectable houses. Below are examples of implemented social housing projects in Ukraine and abroad (Fig. 1, Fig. 2).





Fig. 1. Interior of social housing in the center of Slobozhanska united community. 2020 and housing in the village. Tsarychanka, Dnipropetrovsk region 2018 [14]



Fig. 2. Examples of social housing: a – apartment, Paris, France. 2020; b – apartment, Sao Paulo, Brazil (by Corsi Hirano Arquitetos)



Fig. 3. Perspective image of a smart apartment in the Smart Oseli residential complex, Kyiv. Kitchen, recreation area and office (author's project)

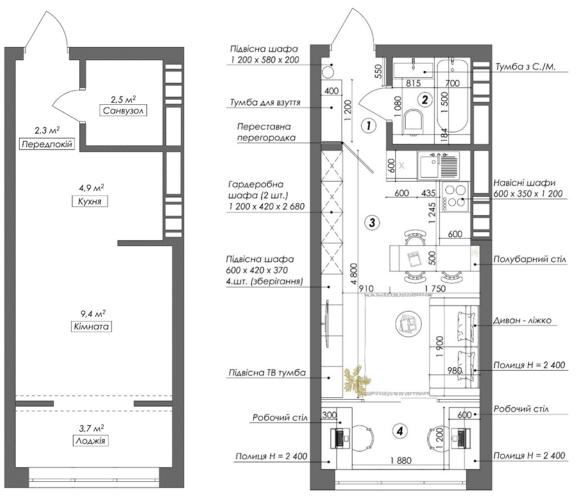


Fig. 4. Reference plan of the apartment in apartment complex «Smart Oseli», Kyiv and the plan of its replanning with an arrangement of furniture and the equipment (author's project)



Fig. 5. Storage areas in built-in furniture: a – built-in storage around the bed (TM Design Studio project, Taichung, Taiwan, 2020); b – storage in the built-in kitchen – niches (project BATIIK STUDIO, France, Paris, 2017)

The analysis of modern domestic practice of interior design (Fig. 1) shows that the quality of living conditions in Ukraine has not improved significantly, because the desire to reduce material costs for the construction of affordable housing leads to dysfunctional and outdated interior design solutions. Social housing with all its limitations can and should be functional and comfortable. The quality standard of social housing is constantly growing. The experience of foreign construction of affordable housing proves that social housing can be comfortable and extraordinary in terms architectural solutions and at the same time acceptable in terms of construction cost.

The main idea is to create affordable and comfortable housing for young families and students, as well as other social groups. Affordability of housing is achieved by a small area of apartments, which significantly reduces their price. At the same time, none of the residents, regardless of the size of the living space, should suffer from the lack of any important systems in the house [11].

The most important task is the decision of zoning and planning in apartments. Zoning for small areas is very important because it is necessary to provide ways to maximize the use of all available space, while using maximum space. You also need to place various functionally important areas: bed, kitchen, desk, living room, and sometimes a children's area. Comfortable living will depend on the choice of rationality and interior style. If the apartment has a good layout, it will be rational to use movable partitions for zoning space. Glass or transparent inserts in sliding doors will allow light to enter the room, creating a freer space. In this way you can create a zoning of the room, without unnecessary walls and corridors.

As an example of multifunctional and universal use of living space, we present a development made in the framework of a master's thesis project on the topic: "Features of interior design of social housing" (student

Y. Brazhnikova, supervisor Prof. V. Abyzov). On a small area of the apartment (22.8 m²) there is an entrance hall, a bathroom, a kitchen, a rest and sleeping area, an office for two workplaces. Below is a reference plan of the apartment and a plan of its redevelopment with the location of furniture and equipment (Fig. 4).

With the help of a glass partition, it was possible to divide the space between the living and working areas, which makes the room brighter and more multifunctional. The project mainly uses furniture of simple geometric shapes for the best configuration of a small space. The main material in the project is wood, and its combination with various metal mechanisms that allow you to change the functionality of the room depending on the needs of the owners of the apartment. The main color is beige, which symbolizes warmth, comfort, tranquility and harmony. Below is a perspective image of the interior of this apartment (Fig. 3).

The design of a small apartment is not only carefully thought-out planning, but also functional content. Practical solutions are hidden storage systems for household items, which can perform a variety of functions. The built-in cabinets have elements of the kitchen, items for cleaning, store seasonal items, sports equipment, build workplaces. To increase the comfort of small apartments, you should pay attention to special transforming furniture. The more tasks one subject performs, the better. There are many options for tables, sofas that have storage space. The comfortable space should have the maximum number of storage Placing built-in closets or using areas. headboards, complementing it with niches or shelves helps to use the space next to the bed (Fig. 5, a, b).

In small apartments, a bar counter in the kitchen or a small dining table can be used to organize the workplace. Most often, people place the workplace in front of the window, so you can use the window sill, enlarging it and turning it into a work surface. Abroad,

furniture on wheels (rollers) is very popular in small apartments. They can be easily moved not only within one room, but also transported to another room. Previously popular table – a book. It turned from a small bedside table into a large table. Now you can see a lot of furniture on wheels, it's sofas, tables, cabinets and more. They can be used to quickly change the interior space.

For small apartments it is better to use light tones that create a feeling of air and space and do not overload the area with decorative elements. Preference in style is better to give minimalism. Recently, eco-style is also gaining popularity, with its natural shapes, smooth corners and durable materials.

Conclusions. The standards of quality of social housing are constantly growing. The

experience of foreign construction affordable housing proves that social housing can be comfortable and extraordinary in terms of architectural solutions and at the same time acceptable in terms of construction cost. The interior design of social housing must meet all hygienic requirements and be comfortable, functional and cozy. The most important and priority is the correct zoning and planning of housing and its interior space. When solving and designing the interior of a small apartment should provide an increase in its versatility with the help of furniture transformers, niches with built-in furniture and other solutions that will ensure the efficient use of small areas. Social housing with all its limitations should become functional and comfortable.

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ОСОБЛИВОСТІ ДИЗАЙНУ ІНТЕР'ЄРІВ СОЦІАЛЬНОГО ЖИТЛА

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Метою роботи є аналіз та визначення основних функціонально-планувальних, художньо-естетичних особливостей формування інтер'єрів соціального житла та розробка пропозицій щодо їх сучасних дизайнерських вирішень.

Методологія. Використано теоретичні та практичні методи дослідження, а саме аналіз наукової та популярної літератури по темі дослідження, узагальнення підходів функціонально-планувальних стилістичних рішень соціального житла на основі аналізу досвіду проектування, експериментальне комп'ютерне моделювання за допомогою програм ArchiCAD ta 3DsMax.

Результати. На основі проведеного аналізу досліджень та сучасної практики формування соціального житла виявлено прийоми функціонально-планувальної та художньо-естетичної організації внутрішнього середовища соціального житла та його предметно-просторового наповнення. Розглянуто особливості та приклади раціональних дизайнерських інтер'єрів малогабаритних вирішень квартир.

Наукова новизна полягає в узагальненні попередніх досліджень по даній тематиці та виявленні функціонально-планувальних особливостей формування предметно-просторового середовища соціального житла малогабаритних квартир та наданні пропозицій щодо дизайну їх інтер'єрів.

ОСОБЕННОСТИ ДИЗАЙНА ИНТЕРЬЕРОВ СОЦИАЛЬНОГО ЖИЛЬЯ

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Целью работы является анализ определение основных функциональнопланировочных, художественно-эстетических особенностей формирования интерьеров социального жилья разработка предложений ПО ИХ современным дизайнерским решениям.

Методология. Использованы теоретические методы исследования, а практические именно анализ научной популярной литературы теме исследования, обобщение подходов Κ функционально планировочным и стилистическим решениям социального жилья на основе анализа опыта проектирования, экспериментальное компьютерное моделирование с помощью программ ArchiCAD и 3DsMax.

Результаты. На основе проведённого анализа И современной исследований формирования социального жилья выявлены функционально-планировочной и приёмы художественно-эстетической организации внутренней среды социального жилья и его предметно-пространственного наполнения. Рассмотрены особенности примеры дизайнерских оптимальных решений интерьеров компактных квартир.

Научная новизна заключается в обобщении предварительных исследований по данной тематике и выявлении функциональнопланировочных особенностей формирования предметно-пространственной среды социального жилья малогабаритных квартир и предоставлении предложений по дизайну

Практична значущість. Результати дослідження можуть бути використані при впровадженні їх у сучасну практику проектування соціальних житлових будинків із економічними малометражними квартирами та У розробці інтер'єрів ΪX внутрішнього предметно- просторового середовища.

Ключові слова: соціальне житло; доступне житло; дизайн інтер'єру; планування; квартира; малогабаритні приміщення.

их интерьеров.

Практическая значимость. Результаты исследования могут быть использованы при внедрении его в современную практику проектирования социальных жилых домов с экономическими малометражными квартирами и в разработке интерьеров их внутренней предметно-пространственной среды.

Ключевые слова: социальное жилье; доступное жилье; дизайн интерьера; планировка; квартира; малогабаритные помещения.

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