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THE IMPORTANCE OF FURNITURE IN THE TWENTIETH-CENTURY RESIDENTIAL INTERIOR SOLUTIONS IN AZERBALIAN

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ABSTRACT

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THE GENERAL NATURE OF THE STUDY

The relevance of the research. The habitat that ensures the life and activity of humans is an ancient material and architectural building that has passed a long way of development in the variability of civilizations. As the period changed, residential areas related to social stratification took certain forms-kaha hollows, snowman, clay hollows, castle, simple houses, mansion and palace type houses.

Gradually, better protection of habitats and the search for a more comfortable and perfect architectural and structural solution turned them into fundamental and massive residential buildings.

Residential buildings can be considered a mirror of the urban way of life in the example of Ichary Shahar (Old City) of the city of Baku and present-day "Big Baku". The architectural and planning solution of the main residential buildings, which shaped the structure of the city since the 19th century, the volume forms, the interior design of the apartments and the character of the artistic decoration still attract attention with their impeccable solution.

The flexibility of people's lifestyles to meet modern demands, the changing attitudes towards comfort and convenience require more efficient proposals (reflecting the synthesis of building technology and new materials in apartment interiors). This has not yet found its rational solution. It should be noted that the most extensive analysis and research of this area of architecture and the location of residential buildings with its core, while the issues of architectural planning are multifaceted and interesting, but the artistic expressive design of interiors with their internal environment spaces can be considered as such a difficult and complex process.

Formulation of the question. For centuries, a lot of work has been done to improve residential construction. Successive sociopolitical structures have made some progress in improving living conditions during their phases of development.

In our time, the layout and constructive-architectural solution of residential buildings, as well as the use of new means to reflect their artistic expressiveness, opens up great opportunities for improving the interior. However, due to the haphazardness and small number of scientifically sound proposals of individual projects, it is not possible to see the benefits of solving the issues at the necessary level.

The use of new construction technological processes and new material synthesis in the organization of the living environment reflecting the modern lifestyle in accordance with the needs of people allows to achieve results in accordance with the real life.

Architects and scientists of Azerbaijan and foreign countries have put forward many suggestions for the solution of this problem and proposed the implementation of a number of new plan and space solutions in this direction. Historical analysis was conducted by M. Huseynov, A.V. Salamzade, G. Alizade, N. Aliyev, A. Gasimzade, Sh. Fatullavev, M. N. Efendivev, A. K. Alakbarov, G. T. Garagashli, P. P. Nadeykin, D. E. Zubayev, A. E. Lyaster, T. G. Salimov, A. M. Mustafayev, Y. A. Rustamov, O. S. Maharramov, E. G. Aliyev, I. R. Abdullayerva, A. M. Mehdiyev and others. It should be noted that A. B. Ikonnikov, B. Bremer, N. Miloslavskava, and members of other Russian research institutes conducted research and studies in this direction, as well. Even the most prominent architects of the world paid attention to the interior design of residential buildings. Among them, Le Corbusier, Frank Lloyd Wright, Mies van der Rohe Gropius, can be cited as an example. The presence of various approaches to the solution of the problem once again confirms that the living environment is one of the most important areas of human activity. The important thing is to be comfortable and convenient of the living environment since humans spend more time there during the day. In modern times, architects and designers of Azerbaijan have contributed much to the solution of this problem. In particular, it is worth mentioning Sanan Salamzadeh, Rahim Seyfullayev, Sanan Sultanov, Babek Shamilov, Nariman Imamaliyev, Famil Aghayev, Sanan Sultanov, Elchin Aliyev, Evgeny Kiryasov, Alexander Garber, Ilgar Isbatov, Nazim Valiyev, Novruz Eldarli, Zaur Gafarov, Mahmud Mahmudzadeh, Azer Adiloghlu Talibov, Nazrin Aliyeva, Fuad Taghizade and others.

In the history of Azerbaijani architecture, the external stages of development of architectural forms are widely covered, but little attention is paid to the stages of development of the internal environment. A set of tools that positively influence the interior design of modern residential buildings and take into account new technological developments has not been analyzed and has not found a rational solution

Purpose and objective of the research. The role of furniture in the organization of residential building interiors is analyzed and solutions are determined through various methods.

The dissertation addresses the following issues:

- 1. Typological features, interior environment issues, and analysis of forms of design of interior spaces in the historical development of individual houses which are representatives of folk architecture;
- 2. Investigation of functional and design development of furniture, which has a great influence on the organization of internal space of existing residential buildings in 20th century;
- 3. Highlighting trends of change based on technological achievements against the background of modern requirements;
- 4. Defining the principles of improving the interior of new-build residential buildings on the example of Baku, using modern styles and means in the artistic design of furniture.

Analysis of the importance of furniture and ways of renovation in the interior solution of twentieth-century residential buildings were chosen as **object of the dissertation**.

Theoretical and methodological foundations of the research.

- The analysis of fundamental and other materials on the subject and solution of the problem;
 - The study of scientific and practical materials;
 - Photofixation of the interior decoration of existing buildings;
- The proposal of a modeling method based on the results of sociological surveys.

The scientific novelty of the research lies in the fact that for the first time proposed the role of furnishing in the design of interiors of residential buildings and new principles for their improvement.

The practical significance of the research. Since a human is individual, the living space they choose for themselves, namely the layout of the living space and the artistic design of the interior, must be unique. An infinite number of design forms can be created that meet a

person's needs through style and means. These design forms can be reflected in the solution of interior furnishing in the projects of new low-rise and high-rise residential buildings in Baku.

We also consider that a number of the findings of the study can be used in the teaching of architectural and design specialties.

Approbation of the dissertation. About the main provisions of the dissertation work, the author holds scientific conferences of various levels-"Republican scientific conference of doctoral students and young researchers" organized by the Ministry of Education of the Republic of Azerbaijan, various scientific-practical conferences held at AzUAC. The results of the dissertation were published in scientific journals.

The structure and volume of the dissertation. The dissertation consists of introduction, three chapters, and conclusion The composition of the work presents illustrative materials consisting of animated, drawing, photo materials. The scope of the research consists of 299259 symbols and 155 illustration pages.

THE MAIN CONTENT OF THE DISSERTATION

The "Introduction" part justifies the relevance of the dissertation. The purpose and objectives of the research, chronological boundaries are determined. The applied theoretical and methodological basis are considered. This part of the research provides information on its scientific novelty, practical relevance, approbation, structure, and scope.

Chapter I. Chapter I, entitled "Classification of residential buildings and analysis of internal space in Azerbaijan," consists of three subsections.

1.1 A subsection of Chapter I, entitled "Stages of formation and development of residential buildings, describes the phases of formation and development of residential buildings. It is noted that the enclosed and simple micro-space that embodies ancient life is considered to be the most perfect man-made structure.

The features that determine the characteristic appearance of dwelling houses in different periods require a study of the principles of their organization. The study of the material and spiritual culture of the people is impossible without determining the types and forms of residential areas. Natural and geographic conditions, the prevailing socio-economic and political structure, peculiarities of socio-economic development, norms of family and household traditions, economic activities have influenced the formation of types and forms of residential areas that have survived to this day in Azerbaijan, and their traditions are closely connected to the folk architecture. The knowledge and experience accumulated in folk architecture, which deeply understands the character, lifestyle and way of life of people, has been passed down from generation to generation and has played an important role in enriching the traditions of construction through examples of survived dwelling house patterns built in historic cities, especially in Lahij, Ordubad, Icheri Shahar, Sheki and other cities in the early and late Middle Ages.

Well-known ethnographers I. A. Robakidze and A. I. Milstein noted that settlements and sites are ancient monuments¹.

The formation of residential buildings was influenced by the lifestyle of the population, construction techniques, building materials, the form of roofing, the location feature, the plan structure. The changes had an impact on the inner space. Socio-economic and cultural level of the people, direction of economic activity, folk traditions, logistical possibilities, proximity to major cities and other factors played a crucial role in the changes taking place in the interior of the house.

Azerbaijan's step towards capitalism, of course, had an impact on architecture. In these periods, urban planning was developing and reflected itself in the application of high-level construction experience. In the development of socio-economic relations, residential buildings characteristic of the 19th and early 20th centuries were already distinguished by their rich and diverse architectural-planning methods.

1.2. In subsection II, entitled "Typological features of the architectural and layout solution of residential interiors", analysis is carried out depending on the typological features of the interiors of

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¹ Azərbaycan memarlıq tarixi. Azərbaycan memarlığı XV-XIX əsrin əvvəllərində. Üçüncü cild. Bakı: 2013, səh. 192-210

residential buildings and functional differences in the design of the architectural plan.

Residential buildings have undergone a great evolutionary process and stages of development under the influence of natural and climatic conditions, socio-demographic processes, economic and urban and household traditions, from a simple one-story hut to high-rise skyscraper. The determination of typological features of residential buildings was analyzed in terms of storeys, sections, functionality in the internal planning structure of the building and other factors. Therefore, it would be correct to divide them into low-rise and high-rise buildings and determine the degree of compliance of each of them with a human lifestyle. Until the beginning of the 20th century, low-rise apartment buildings in Azerbaijani cities had three forms: a simple country house, a house with a private yard, neighborhood-type multi-apartment houses, densely arranged and lined houses. The extensive information provided by A.M. Mehdiyev about people's residential building is very important².

In terms of number of storeys, residential houses are divided into low-rise houses (2-3) in the 20s and 30s, in the 50s and 60s mid-rise (3-6), in the 80s and 2010s high-rise buildings (9-16) and skyscrapers (17-24). Nowadays, 30-storey buildings can be encountered in Baku. Their difference in architectural forms is also reflected in the planning solution

In the mid-20th century, national and classical forms and styles emerged in experimental residential houses designed by prominent Azerbaijani architectural scholars M. Huseynov and S. Dadashov. As an example, the houses built by "Buzovna Neft" and "Azneft" plants for oil workers, and buildings located in intersection of Nizami and S. Vurghun streets can be presented. Azerbaijani architects G. Alizade, E. Gasimzade, T. Abdullayev, F. Orujov, A. Novruzi contributed greatly to the formation of today's artistic appearance of Baku³.

Three points were taken as important criteria in both the formation of the residential houses and the organization of the interior:

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² Мехтиев А.М. Народное жилище Азербайджана. Тебриз: 2001, 334 с.

³ Fətullayev-Fiqarov Ş. XIX əsrin əvvəllərində Azərbaycanda şəhərsalma və memarlıq. Bakı: «Şərq-Qərb», 2013, 480 s.

the form of the interior and its feasibility; rational solution of the technique based on the shape and organization of the interior; creating consistency in the connection of the interior and premises.

Typological features and architectural-planning differences of residential building interiors manifested themselves in more prominent form in four stages.

- 1. Interior in the design of ancient and medieval buildings.
- 2. Interior in the 19th and early 22th centuries (1850-1910s).
- 3. Interiors at the stage of the radical technological rise of the countries of the world from the 20s to the 30s of the 20tg century and the emergence of design.
- 4. Interior in the 40-90s of the 20 century and in the modern time, in 2000-2017.

Our goal in displaying the typological features of residential home interiors is to correctly assess the role of housing, available furniture and equipment in the formation and development of human lifestyle in general.

The research covers the formation, development and internal space solutions of residential houses in Azerbaijan.

The principles of formation and organization of residential buildings have been polished for centuries and brought to the formation of certain regularities in the modern period.

At the end of 19th and beginning of 20th century the change feature of Interior Design in evolution of residential buildings in Azerbaijan was more pronounced. Artistic and architectural trends observed in the direction of the development of architecture of dwellings in Azerbaijan from the 18th to the early 19th and 20th centuries, manifested in the organization of the interior of buildings and the artistic expression of furniture.

1.3. The third subsection, entitled "A study of the history of furniture and other equipment in residential interiors" presents a historical analysis of furniture and other equipment in the interiors of existing residential homes. In the formation of residential houses and interior space solutions, regionalism was more evident in the way of construction and composition. Very few palace buildings had a richer design. In many cases, the railings of the buildings had a beautiful

decoration at the expense of the meshed iron bars. The subsection presents an analysis of the architectural and artistic design of properties considered "income houses," which have left a profoundly positive trace in the construction of residential buildings in Baku. Additional architectural elements such as balconies, bay-window and glassed gallery, created a turn in the constructive, architectural and artistic-aesthetic design of residential buildings. In particular, in the mansions of Z.A. Taghiyev, The Asadullayevs, Haji Shikhlinsky, wealthy people of that time, the walls, fireplace and ceilings were completely covered with colorful patterns⁴.

As technology advances, new building materials have led to structural changes as well as innovations in interior design of buildings. First of all, it was reflected in the internal layout of buildings - the principles of placement by function of rooms, the difference in area, design solutions and artistic composition.

Analysis from a historical perspective shows that the interior, in addition to reflecting the style of its time, required a new approach to itself, shaping the human mind.

Residential furnishings are not only a manifestation of internal architecture, but also a form of representation of architecture and architectural styles reflected in the interior. Thus, furniture forms can be seen as a reflection of the level of technical and aesthetic tastes, following architectural forms.

Over time, there were many technological innovations in the production of furniture, new constructions had emerged. In particular, it is worth mentioning the Viennese Carpenter Michael Thonet, who laid the foundation for industrial design in the production of furniture. The technology of bending invented by him is widely used today.

Since the 60s of the 20th century, the development of chemical industry led to the production of polymeric furniture. In the following years, although the emergence of "wall furniture" aroused interest among the world population, there was a repetition in the forms of furniture.

The placement of indoor equipment in the interior of residential

⁴ Юсифова К.Р. Экстерьеры и интерьеры жилых домов на рубеже XIX-XX вв в Баку. Москва: «Жилищное строительство», № 5, 2018, сэh.40-47

buildings, spatial structure, its proportionality and architectural-design solutions have been summarized and studied on the basis of world experience. Since the research is devoted to determining the role of furniture in the interior of residential houses in the regions of Azerbaijan, it is considered very important to reveal the characteristics of the area based on national values and determine the level of the current situation

Chapter II Chapter entitled "The Role of Equipment and Furniture in the Interior Solution of 20th-century Residential Buildings in Azerbaijan" consists of three subsections. The chapter analyzes the interiors of residential houses.

2.1. The first subsection entitled "Functional space and artistic-architectural organization of furnishing in the interior" notes that the interior is a larger information carrier than the external volume form of the building. The interiors of residential buildings existing in Azerbaijan are divided into several stages: ancient traditional interiors; the interior of the era of capitalism; the interior of the Soviet era; post-Soviet interiors or modern interiors.

The main structural forms of traditional interiors of ancient houses are determined by the current materials, technologies, traditions of the era and the functions of residential buildings. The interiors of the era of capitalism cover the period of development of the industry and are characterized by the emergence of new residential buildings, the emergence of various social strata, and the aesthetic expressiveness of the interior. The interior of the Soviet era was characterized by its development with the establishment of a new historical stage, which led to the creation of a new architecture, lifestyle, life and a new interior. The interior of the Soviet period is divided into several stages of development: 1917-1920; 1930-1940; 1946-1950; 1960-1980. Modern interior has been influenced by global trends and has formed new approach style, new type of furniture and different styles.

The walls, which were a constructive element of the existing residential houses in Azerbaijan, had a function of support, as well as a function of furniture. The use of wall niches in the design of interiors in many cities and regions of Azerbaijan since the Middle Ages is reflected in the works by I.R. Mamedova, A.M. Mehtiyev, N.M.

Gulieva. From the point of view of architectural elements, niches, shelves and others were beautiful and remarkable. It should be noted that I.R.Mammadova analyzed extensively the interiors and home appliances of residential houses of the city of Shaki. In addition to niches, shelves, trunks, couches, cradles, chairs, stools, and large mirrors decorated with wood carvings were widely used in the interior. One of the main elements of the interior space of Azerbaijani people's houses was the presence of load places-jamatkhana. The linens were collected in jamatkhana. The household utensils were packed into mafraj, yakhtan and trunks and put in the place of load. The formation of fireplaces, along with functionality, gave the interior a decorative effect⁵.

Since the 1930s, the advent of factory furniture, its mobility, and the introduction of new technologies in construction have reduced interest in these structural elements. Of particular importance in this direction were the studies by Y. B. Somov, T. M. Sokolov, N. N. Sobolev, E. M. Sahutu, A. I. Lokotko, N. I. Aladov, A. S. Sergachev, D. Kesin, I. Klugen, P. Schmussler, A. Schneck.

In modern times, the emergence of new planning solutions and new functional zones of apartments, the emergence of new furniture and technical equipment require a scientific approach to interior design.

When designing the interior is very important that it meets the physiological, psychological, ergonomic, hygienic, environmental, professional and other human requirements. This, in turn, requires architects and designers to have high professionalism and special knowledge.

Thus, when decorating furniture in the interior it is necessary to use functional furniture, not overloading the microspace of the room, and its artistic and architectural appearance provides the living needs and comfort of people.

2.2. The subsection of second chapter, entitled "Features of Furniture Solutions in Residential Interiors in International Practice", a step-by-step analysis of furniture solutions in residential interiors in the practice of countries around the world was conducted:

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⁵ Məmmədova İ.R. Şəki yaşayış evlərinin interyeri. Bakı: Elm, 2008, 155 s.

- 1. In the practice of European countries in the Middle Ages;
- 2. On the background of modern architecture 18th and 19th centuries.
 - 3. In modern times 20th century and early 21st century.

As the interior and design methods of residential houses correspond to the architectural styles, the furniture was also analyzed against the background of these styles. The influence of the East on the layout of the interiors of European countries, the geometry and straightness of the forms and elements of equipment. The manifestations of characteristic features of architectural styles in the equipment were studied and analyzed. Furniture surfaces are covered with columns, pilasters, floral ornaments, germs, cupids, grotesques, arabesques, braid, garlands, pistons, lion heads, griffins, waxed coatings, relief and embossed patterns, china, gilding and veneering.

Major economic, political changes, industrial innovations and many inventions that took place in Europe at the end of the 19th century led to the creation and development of large industrial enterprises. The establishment of furniture factories also coincides with this period. A specific serious turn in the interior space organization of architectural buildings was also observed in the production of furniture. During this period, national forms appeared in folk architecture and furniture production.

In 1919, the Bauhaus School of Technical Aesthetics was founded in Germany, occupying a special place in twentieth-century architecture and design, and in 1920, the special technical school BXYTEMAC in Moscow. Highly qualified artists-masters and designers were prepared here for the industry.

In the second half of the 20th century, local architects and craftsmen began to create furniture forms. All-union exhibitions and special competitions played an important role in the formation of new principles of furniture design for residential and public buildings.

2.3. The third subsection, entitled "National traditions and forms of organization of furniture in the interior of residential houses in Azerbaijan" highlights the most important and

sustainable forms of life in accordance with the principles of organization and design of the interior as a place that meets the vital requirements. Thus, living is the most vivid example of both the level of development of society and the cultural heritage of the population. residential buildings, interior spaces, objects and building materials of the regions were analyzed here.

In contrast to the monumentality of the houses of Absheron, of particular interest are wooden houses in the Guba, Shamakhi, Lankaran and Ismailli zones, or raw and burnt brick houses in Ganja, Sheki and Ordubad. The form and structural elements of residential buildings influenced the organization of interior space and equipment design⁶.

The constructive structure and structural solution of the dwellings that became widespread in the 18th and 19th centuries, the organization of interior space on the basis of national traditions and the placement of equipment require special research. Despite its utilitarian functions, the equipment in the interior also acts as artistic decorative elements. For example, in the Middle Ages, kitchen cabinets were replaced by open shelves on the upper tier of walls. At the same time, due to the flat design of the steam coming from the wall with its ornamentality, fireplace became the place of accumulation of small objects. One of the characteristic features of the elements located on such wall surfaces and replacing modern furniture is not only to create space in the interior, but also to ensure their free compositional solution.

The similarity of the interiors of houses in different regions consisted in their traditional form of use, the proportions of the rooms, the systematic arrangement of replacement furniture niches and jamaatkhanas according to certain laws. The similarity of the interiors of houses in different regions consisted in their traditional form of use, the proportions of the rooms, the systematic arrangement of replacement furniture niches and jamaatkhanas according to certain laws. This had a positive effect on their appearance in terms of visual perception.

⁶ Zahidova H.Ə. Azərbaycan etnoqrafiyası C.Cabbarlı yaradıcılığında. Bakı: Elm, 2011, 304 s.

The formation and more pronounced manifestation of purposeful aesthetic organization of the interior in the traditional dwellings of the ethnos formed in Azerbaijan began practically at the end of the eighteenth century and continued until the beginning of the twentieth century.

Many Azerbaijani and foreign scholars have published a collection of "Analytical Materials of Caucasian Tribes and Territories" about the construction materials used in the construction of houses, the floors of houses, the shape of roofs, the design of apartments and furniture and other equipment used in the interior, I. R. Mamedova's study "The Interior of Sheki Houses" examines the architectural style of houses of the 18th-20th centuries, the components of dwellings, construction materials, interiors of houses, samples of applied art, etc. A large and comprehensive study by A. M. Mehtivey's on residential houses is also of particular importance. He revealed not only the architectural and planning structure of residential houses, but also their features in different regions, and conducted a comprehensive analysis of the typological specificity of furnishing. In N. A. Zahidova's book "Azerbaijani Ethnography in the creativity of J. Jabbarly," detailed information about the historical and ethnographic situation in the first half of the twentieth century can be found. The ethnographic information reflected in J. Jabbarly's works is of great scientific and practical importance for the in-depth study of the evolution and qualitative changes occurring in the dynamic development of people's life and culture. J. Jabbarly gave his ethnographic research, collected since the beginning of the last century, to Professor B. V. Muller. B. V. Muller worked on these materials and published them in 1929 and 1945.

Analysis shows that the spatial and object organization of architecture over the centuries, depending on the influence of many factors, determined the construction specificity of life, the need to use architectural elements, the formation of furniture in the interior and their artistic design. It is the ethno-cultural heritage and achievements of Azerbaijan that reflect its national traditions and spiritual value in various artistic and architectural manifestations

and, as a result, form a nationally oriented way of life based on centuries-old accumulation.

Certain principles of the use of furniture and equipment in the organization of the interior of residential houses in the twentieth century on the basis of features, national motifs and traditions of the dwelling houses were revealed in the book "Architectural History of Azerbaijan" by M. A. Useynov and A. B. Salamzade (in detailed study of living in the 18th and 19th centuries) and later in the book "Architectural Urbanism in Azerbaijan at the end of the 19th and beginning of the 20th centuries" by Sh. Fatullayev.

Chapter III. Third chapter is entitled "Features of furniture design development in modern residential interiors" consists of three subsections.

3.1. In the first subsection, entitled "Artistic-design forms of furniture in the works of prominent architect designers", the formation of the relevant aesthetic life of modern society has necessitated the emergence of the concept of design. The rapid development of modern technology extends to all areas of human activity. In particular, the design of furniture acts as a guarantor of the comfort of the environment, which in the minds of modern human and which is necessary for them. Design as a culture desired by the human mind is a synthesis of a wide range of art fields, reflecting wide range of activities. In the 1930s, new concepts emerged in the development of the industry as a result of special committees that gradually linked art with technology. For example, "applied art" and "industrial art".

Today interior design is distinguished by its principled experimentation. Based on the opinion of the Roman historian Totsillo, we can say that "the interior is not only the enclosure of an area with walls, but also the creator of the inner world". The inner space is an environment that affects the emotions, consciousness and behavior of a person. With its conservation, it is reflected in other types of art, as well as in decorative applied art, music, literature, architecture and design.

An interior characterizes the creative abilities and skills, imagination and way of thinking of the architect and designer who

realized it, as well as the person to whom it belongs. The interior, like a human being, possess appearance and spirit. It is impossible to imagine two identical interiors, as there are no two identical people.

Creating a comfortable and cozy environment depends on the components of all parts of the interior, their harmony with each other, its quality performance. That is, the functional, technical, ergonomic, aesthetic, environmental and economic issues of the interior must be addressed comprehensively.

The perception of the interior is directly influenced by the structure of its constructive elements. Thus, in the architecture of the interior is very important to decide the relationship of the floor, wall and ceiling, lines and elements that they create, texture, color, in the perception of the internal environment.

English artists had a great influence on the emergence and development of new forms of furniture in interior design. This can be seen in the works by Y. Morris, Reskin, Bern, Jones, and other art historians. The emergence of a new approach to styles and furniture production led to the creation of many craft workshops and schools. Of these, the Bauhaus School based in Germany deserves special mention. Mies van der Rohe, Mart Stamm, Alvar Aalto, Le Corbusier, Endi Uorxol contributed greatly to the creation of modern furniture.

The development of functional design in the mid-twentieth century aimed to create the most comfortable and thoughtful environment for architects, designers, and other artists. In this regard, the main focus of the design system proposed by Le Corbusier was furniture design. According to his ideas, furniture should serve to expand the functional capabilities of a person.

Today in the design of furniture in the interiors of residential buildings can be found styles of high-tech, techno, interactive, ecostyle and so on. Thus, style should be aimed at creating a healthy interior environment for the human factor.

3.2. The second subsection, entitled "Principles for Improving Furniture Types in the Interiors of New Residential Houses," covers the periodic definition of furniture design requirements, their analysis, principles of interaction with the

environment and people, and the direct impact of conditions. General rules and methodological principles used in the improvement of furniture design apply at several levels: in the expansion of space; in the variability of form; in the synthesis of materials; in the nature of artistic design elements.

Some of the architectural styles that left a peculiar imprint in the history of architecture are of high value as the creators of harmonious and fine art, they have become a model and analogy base of modern architectural styles. These styles are used in the design of residential interiors of different types and shapes and realize their positive aspects against the background of modern requirements.

Recently, the presence of a number of new approaches in the solution of the internal environment of residential buildings creates the conditions for the creative search of architects-designers in the form of a synthesis of new technologies and modern materials. The colors of the natural materials used create a very strong visual impression in the synthesis of artificially obtained colors. These ideas can be seen more clearly in the work of architect Rahim Seyfullayev. In his projects, he tried to provide content to the environment through form, light, color, materials and texture and to solve problems in a complex manner.

Worth noting the apartment he called "the orange interior" in a high-rise apartment building. Here, the author has implemented a beautiful design of the field solution within the existing architectural scheme, going beyond the standard compression environment. The plan solution of the apartment and the design of the interior were carried out in a unique way. The two-storey private house built on the basis of its project in Guba is also of interest. The original form and large scale of the villa and its convenient location on the slope give it a special expressiveness⁷⁷.

In modern times, during the development of projects, architects are trying to solve the exterior, interior and equipment in a complex way. This approach makes it possible to create completeness and style of the interior with the exterior. There are many successful works of architect-designers in the direction of realization of conformity of interior equipment, especially furniture to interior style and harmony

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⁷ Эфендизаде Р.М. Рагим Сейфуллаев-архитектор. Баку, 2015, 207 сş

with interior. The architects working in this direction are Sanan Salamzadeh, Rahim Seyfullaev, Sanan Sultanov, Babek Shamilov, Nariman Imamaliev, Famil Aghaev, Sanan Sutanov, Elchin Aliyev, Evgeny Kiryasov, Alexander Garber, Ilgar Isbatov, Nazim Valiev, designers Mahmud Mahmudzade, Azer Adiloghlu Talibov, Nazrin Aliyeva, Fuad Taghizade and others.

Nowadays, architecture has opened up the possibility for every architect to present their philosophy. Here, according to Le Corbusier, it is "an architectural way of thinking".

The size of the equipment and the organization of the interior when improving the form of indoor equipment is based on the relationship "human-product-environment". The proposal of new planning structures during the design of residential buildings requires the conformity of furniture forms to the micro-spatial dimensions of the premises. The form must correspond specifically to the functional designation of the location.

Taking into account the fact that the modern way of life and the environmental situation load a person with negative energy and a harmful environment, architects-designers should pay more attention to the choice of materials both in the interior and during the design and preparation of interior equipment. In general, the interior should instill in a person a sense of positive mood, comfort and closeness to nature.

When evaluating modern furniture, along with its artistic and technical and economic aspects, the quality and properties of the material should be properly selected in the process of making the form.

3.3. The third subsection, entitled "Means (form, design, material, color, light, accessories, etc.) of artistic furniture design in our time," discusses form, construction, material, color, etc., which are the means of artistic furniture design.

Shape, color and texture of the furniture not only affect the overall design of the interior, but also provide comfort and convenience. Some researchers also confirm that the form has a positive emotional impact on the selection of furniture for residential interiors. Form in furniture characterizes the visual material expressiveness of its internal and external structure, content and structure.

Features of the design in the form of furniture are manifested. The tectonic organized form reflects the work of construction and materials, the principles of technological installation. Material, construction and technology form a single completeness.

Volume-form design, material, color selection and accessories, which are the main means of furniture design in residential building interiors, are of irrefutable importance. The material influences the constructive strength, reliability and artistic aesthetic understanding of furniture.

In particular, it can be seen that R. Seyfullayev creates a composite accent in the interior by using colors of natural materials in his projects. Projects demonstrate the ability to skillfully use of forms, light, colors, materials and texture. This gives comfort, convenience and beauty to the interiors created by the architect with a rich artistic fantasy.

Along with natural materials, composite wood materials, metal and polymeric materials are widely used in the preparation of modern furniture. Back in the 50s of the 20th century, designer furniture made of synthetic materials was found in industrial design. Plastic materials are widely used today, keeping their relevance, as they have unique opportunities for the realization of any idea.

Architect N. Imamaliev managed to create a comfortable indoor environment using modern materials. He tried to create a modern environment for human, taking into account climatic conditions and environmental aspects of materials. N.Imamaliyev created a new form of expression in the projects using materials of different nature both outside and inside space. The colors, materials and textures used in the interior have played an important role in the realization of the general idea. Lighting, furniture design, etc. were solved with special precision in the interior.

Selection of accessories in accordance with the general nature of the interior is specific to the satisfaction of aesthetic requirements of the interior and furniture. Accessories used as an artistic design tool in furniture have different shapes, colors and textures, perfecting the quality of design elements of the product and artistic-decorative solution of external surfaces. The use of advanced technologies and new materials in the design of modern furniture allows more perfect and high-quality execution of decorative design methods. In order to improve the above, the following are proposed.

- 1. To give preference to avant-garde directions, to take into account technical capabilities during artistic-design and stylization.
- 2. To renew the structure principles of the composition in the direction of modern furnishing of residential interiors by applying the national elements and features of the avant-garde direction in order to increase decorative features.

Observed trends show that in the design of furniture in the interior, artistic forms are more attractive than in technological forms. This also shows interest in changing the approach to standard furniture design of residential building interiors. New opportunities were gradually opened in the apartments to provide more universal features, environment and interior comfort. In this case, changes in the structure of the apartment lead to changes in the principles of furniture design.

The main findings of the research:

At the end of the comprehensive study, the following main conclusions were obtained and suggestions were put forward in the dissertation:

- 1. During the investigation of the reasons for the creation of settlements, it was found out that the establishment of settlements in certain regions of Azerbaijan had an impact on the formation of their architectural and internal environment. For this purpose, the natural conditions, the external relationship and multipotentiality of the selected area were taken into account as a result of scientific research and the typological features of the houses were shown.
- 2. As a result of the analysis, it was determined that the influence of economic and social factors in artistic architectural design and furniture supply of residential buildings in large cities was manifested more in interior design. Because of the strong influence of natural-climatic factors, they created a certain form of design.
 - 3. As a result of historical investigation of furniture and other

equipment in residential building interiors, it was revealed that although the first examples of them were given more functionality, there were gradual changes in their artistic design and constructive structure in the later stages of development.

- 4. It was established that since the end of 19th and beginning of 20th century functional purpose of furniture became complicated and the principle of functional zoning of apartments gradually formed their specific principles. These include the principle of complex arrangement of furniture, the principle of systematicity, the principle of layout in accordance with the design and structure of the room, the principle of economic and social justification in accordance with the requirements of the population, the principle of ecological cleanliness, the principle of functional constructive connection of elements of furniture and equipment, as well as
- 5. As a result of an analysis of the nature of furniture solutions in residential interiors in the practice of international countries, the attitude and styles of many countries to this area were determined. The development processes taking place in society, natural conditions and technological achievements also affected the production of furniture. The implementation of creative skills and effective tools in this direction has taken the lead in such countries as Italy, Finland, Germany.
- 6. Arrangement of furniture in residential building interiors in Azerbaijan has always been different because it is based on national traditions and design motives. In modern times, interior design has found new forms of manifestation, taking advantage of the experiences of other countries.
- 7. Design solutions of furniture as an artistic language of interior design, found its distinctive shades in the work of famous architects and designers and got a very interesting form arrangement. While luxury is preferred in some of them, technological achievements are based on technology and the use of ecologically clean and new construction materials is considered more efficient.
- 8. The principles of improving the range of furniture show itself more vividly in the design of modern residential building interiors of Baku. Thus, providing functionality, decorativeness to

the functional zones, especially the partitions between the hall and the living room, synthesis of materials revealed new possibilities of presentation of artistic design.

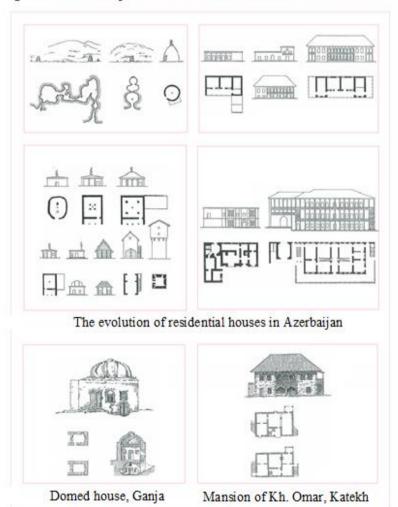
- 9. It was established that the artistic design solution of modern furniture produced in Azerbaijan should be carried out depending on the planning solution of the building, location designation, functional technological processes, ergonomic and functional dimensions, production conditions, materials used, social and aesthetic requirements. According to the results of surveys conducted among the population, it was found that more attention is paid to the functionality, stylistic features and color solutions in furniture.
- 10. In modern times, it is possible to strengthen decorativeness by means of material synthesis, texture, color, methods of decorative design, accessories, light solutions along with various means in the artistic design of indoor environment equipment.

The main content of the dissertation was published in the following articles:

- Yusifova K.R. Yaşayış interyerlərinin formalaşdırılmasının sosial cəhətdən məqsədə uyğunluğu//AzMİU, Elmi əsərlər №1, Bakı-2013, s.3-6
- 2. Yusifova K.R. Mebel tətbiqi sənət əsəri kimi//AzİMETİ-nin Elmi əsərləri Toplusu. Bakı: 2006, s.186-190
- 3. Yusifova K.R. Dekorativ tətbiqi sənət növlərinin Azərbaycan memarlığında rolu//Beynəlxalq elmi-praktik konfrans, Bakı: 2014, s.19-20
- 4. Yusifova K.R. İnteryerin formalaşdırılması və onun layihələndirilməsinə verilən tələblər//Beynəlxalq konfrans, Bakı: 2013, səh.199-202
- 5. Yusifova K.R. Yaşayış interyerlərinin təşkilində kompozisiya xüsusiyyətləri//AzMİU, Elmi əsərlər № 2, Bakı: 2014, səh.13-15
- 6. Yusifova K.R. Yaşayış tikililəri mühitində qısa müddətli istirahətin təşkil xüsusiyyəti//Elmi Praktik konfrans, Bakı: 2016, səh.130-133

- 7. Yusifova K.R. Yaşayış binalarının interyerlərinin əşya mühitinin müasir dizayn problemləri//Elmi praktiki konfrans. Bakı: 2016, səh. 214-224
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- 10. Юсифова К.Р. История мебельных изделий в Азербайджане. Архитектура и строительные науки, № 1,2, 2014, Беларусия, стр.57-58
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- 12. Юсифова К.Р. Экстерьеры и интерьеры жилых домов на рубеже XIX-XX вв в Баку. Москва: «Жилищное строительство», № 5, 2018, сэh.40-47

Stages in the development and establishment of residential houses



Stages in the development and establishment of residential houses



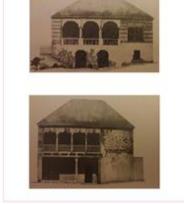
Mansions in 19th century, Shusha



Ancient residential house, Shusha



Residential houses of the Dadanovs, Shusha



Mansion, Balakan



Villa in 19th century, Guba

Stages in the development and establishment of residential houses



Houses of the Zohrabbayovs, Shusha



House of Mehmandarov, Shusha



İnner space of Shusha residential house, 19 century



İnner space of ancient residential building



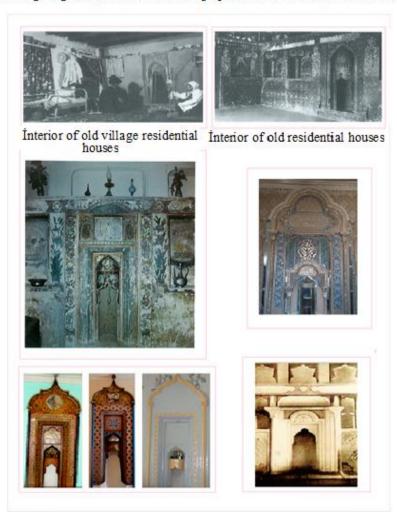


Omamental fragments of balconies Traditional solution of interiors of Nakhchiyan mansions



of village homes, 19th century

Designing furniture and other equipment in residential interiors



Fireplaces of ancient residential houses in 19th century and early 20th century

Designing furniture and other equipment in residential interiors

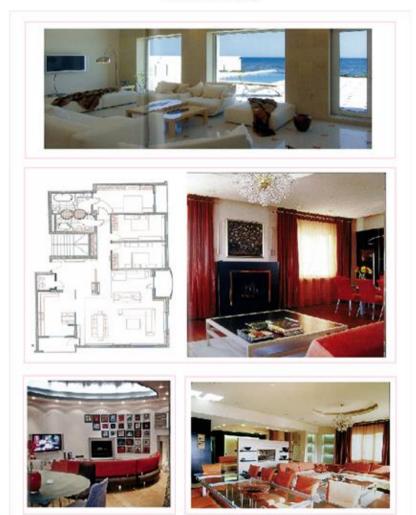


Residentual building interior



İn the example of Haji Zeynalabdin Taghiyev's home

Modern interior



Interior of residential buildings in Absheron and Baku. Architect R. Seifullaev

The defense will be held on <u>24</u> <u>December</u> 2021 at <u>14</u> at the meeting of the Dissertation council FD 2.29 of Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at Azerbaijan University of Architecture and Construction.

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