# The development of the architectural object under the influence of social history

## Ludmila Bachinska

Kyiv National University of Construction and Architecture 31, Povitroflotskyy prosp., Kyiv, Ukraine, 03037 ludmila\_bachina@ukr.net, orcid.org/0000-0002-6942-5627

Summary. Throughout the history of mankind people evolve: while they explore the space around themselves, they develop tools of work, language, the environment, gaining experience, developing skills, form of society, state, concept of beauty, methods of construction and more. Along with them architectural and urban objects change in function and layout, form and style, physical and spatial parameters, and the like. History of architecture and urban planning studies the main directions of urban art in different times, different era and as a cultural heritage of different peoples. However, until that time, it is not clear how the differences in socio-economic conditions and political structure in the States affect the formation of architectural and urban planning object.

The study revealed that these factors are crucial. They affect the structure of society with a hierarchical construction of groups, where the representatives of the authorities, and the powers that protect them, are at the top. A certain structure of society requires certain methods of placement of the people in the city plan. Therefore, through *the society as a method it is the implementation impact* of these factors on the architectural object. The article considers structures of society in Soviet and world practice and the impact of social structure on the architectural features of dwellings in Ukraine in the XX – beginning of XXI centuries.

**Key words**: man and his needs, economic relations, political conditions, society, architecture and urban planning.



Ludmila Bachinska professor of the Department of fundamentals of architecture and architectural design PhD, Ass. Prof.

#### THE INTRODUCTION

In the theoretical and historical literature, which study the architectural and urban heritage of different eras, in determining characteristics of the formation of architectural trends there are references to differences in socioeconomic structure of the States that existed at different times. It also refers to the influence of various factors such as nature and climate, technological progress and traditions of the people and cultural borrowing from neighboring States. But so far, they are not scientific papers that would prioritize some factors on the formation of architectural and urban planning object, show by way of their influence, outline the common trends and regularities of the formation of this object regardless of the era that is considered. This method will allow not only to study the historical achievements of humankind in this field of material and spiritual culture, but also to understand the current situation and ways of its further development. Among a number of factors that affect architecture as major there were selected socioeconomic and political conditions of society in this study.

#### THE PURPOSE OF THE RESEARCH

The aim of the study is to detect *the mode* of action of such manifestations of social history as a socio-economic and political conditions that arise in historical social process, the formation of architectural and urban planning object: its types, features of functioning, planning, composition, development, form, style etc.

## THE METHODS OF THE RESEARCH

The methods are used in the study:

- *analysis* of the characteristics and Genesis of human life and its needs;
- the causal relationships of human life, its needs, social and socio-economic and political conditions of existence for the formation of the architectural object in different historical epochs;
- *comparative analysis* of urban and architectural heritage, depending on the socioeconomic and political conditions in Ukraine during the XX early XXI centuries.

# THE RESULTS AND DISCUSSION

Mastering the surrounding world, humans evolved from ancient times and improved their own conditions of life. They adapted the environment – their homes and villages for their needs. People were busy with the production of food and livelihood that is economic activity. During communication with each other, they assigned duties in the team and thus determined the role of each in the public process. Gradually people have perfected the tools, language, handicraft, mastered the techniques of agriculture and construction and improve its organization. In the primitive collective, all members of the cell were equal and were engaged in the production of food.

Over time, this organization became a hotbed, where there was one leader who took responsibility for community life, vitality and the ability to safely and comfortably. Thus *the economic relations* between the members of the primitive group was born, was established the role of each of its members and was formed the initial primitive social hierarchy [1...4].

Over time, the number of needs of people has increased. Needs become complex, belong to different spheres of activity (Fig. 1).

Thus, the types of economic activity, types of economic relations arising in the process of life of people, system of governance are shaping the structure of society as well-established organism in which the conditions of existence determine the social structure of the population and the specific role of each member of society. The development of the human community to a certain level leads to the formation of a state with a complex hierarchy of social strata. M. Stepyko notes that «today, all societies are complex structural formations defined by a complicated weave of relations,... ...presented institutional systems: economy, law, politics, science and so on.» [5, p.13].

Today, the concept of society is assessed as extremely important for understanding all social processes: «the historical events, social, political, economic and spiritual phenomena, structures, relationships, change and transformation» are forms of his manifestation [6, pp.3-4]. In connection with the processes of globalization people have become the energy basis of life of society [6, p. 13]. Social reality consists of social actions, social relations, social faces, social groups and social roles (F. Znaniecki, as cited in [5, p.14]). The totality of conditions that influence the formation and functioning of man in society, development of personality, its abilities, needs, interests, consciousness, forms the social environment [7, p.856]. Therefore, the life of society in all its many manifestations, including the economic system, socio-economic relations, system of governance in the state and political organizations, like many other aspects, promotes the formation of a single organism social

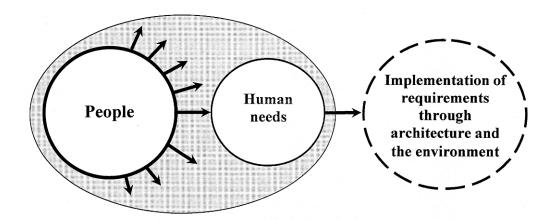


Fig. 1. The connection of man with the architectural object and the environment

environment that lives according to certain laws and refers to social stories [8, pp. 15-16].

This level of social development, which covers all the main components – the economy (kinds of economic activities), economic relations, system of governance (and degree of education of the state) and the structure of society – clearly reflects in the diversity of people's needs.

The history of the development of the human personality connected with the history of development of his needs. Human need urged him to activities in which a new, more diverse and complex needs. Moreover, this contributed to a more diverse range of activities [9, p.522]. In addition, each person is the bearer of individual, public, social thought, citizenship [10] that forms the views of the community. Thus, the needs and views of people within each epoch are implemented in the material and spiritual culture of humankind, a huge reservoir of which is urban planning and architecture [11].

The architecture performs an important role – provides for the formation of space around it for its needs [12]. Among the different requirements to the environment since ancient times, it was needed protection from the weather and other negative impacts of the environment, as well as the organization-isolated environment for ease of performing essential functions. It provides housing and settlement, and later during expansion needs, it was a variety of architectural, engineering and town planning objects – houses, enterprises of ser-

vice and labor, city, communication system [13], regional planning [14], the system of settlements, even those that eventually needed to be updated in accordance with changing social needs [15], and forward-looking proposals for the future [16, 17].

A number of different factors influences on the formation of urban planning and architecture of buildings. Among them, there are important climatic conditions. They give man certain conditions of life, food, building materials, helping to determine the direction of the buildings and layout of settlements, and also affect the areas of settlement and population density. The landscape and the availability of drinking water are important for the construction of settlements. The first settlements were located near water – on the banks of rivers, lakes, seas, swamps. The presence of moist soil and rainfall influence the formation of housing architecture and planning of the settlements.

Also important factors are the historical events and political relations with neighbours, scientific and technical progress, religion, ideology, the concept of beauty and aesthetic ideal, and much more. But the factors listed above – economic relations in society, the system of government and social structure of the population, which define the characteristics of a specific country and its citizens, the specifics of their needs in General and in the field of architecture and urban planning, in particular, of course, are Central in urban planning and architecture.

Even watching the development of architecture and urban planning in different ages in different territories and in different countries, it can be argued that *public life is reflected in architecture and urban planning*, and therefore, architecture and urban planning may serve as an object for studying social history [18, 19].

This method of justification trends in urban planning and architecture based on the above key factors have allowed us to construct a scheme of the influence of socio-economic and political conditions in urban planning and architecture. These factors to the greatest extent is a source, the reason for the formation of a particular society, which primarily requires a specific planning of the city, formed according to certain principles, certain types of public buildings and their architecture.

This diagram shows the General construction of the social hierarchy of the population of any country that was historically determined and created in a natural way. Upstairs it has representatives of the authorities, and below are the force that protects and supports of power - the army, internal forces, judicial authorities, political, ideological organizations and religious communities. Still the following are the different segments of the population, among which, in particular, with high property status is located above and slightly below (Fig.2). Usually urban and architectural objects, primarily built for the social elite (those who are on top of the social pyramid) - representatives of government, the rich, who may make an order and financial contributions to the construction of urban ensemble. In Fig.3 these populations are shown in blue. In modern democratic States, this area was expanded and includes people with middle income, intelligentsia and officials.

In Soviet times, the social pyramid was built differently. The government was formed of representatives of the party elite and the ruling apparatus. Below there are the same Progovernment forces – the army, internal troops, courts, political, ideological organization. The workers were located at the top of the social pyramid unlike the natural social structure of the population, because in Soviet Russia a dic-

tatorship of the proletariat was proclaimed. The peasantry was placed a little lower, and servants, and the intelligentsia – is even lower (Fig.4).

On the example of Soviet history between the two wars, we can see how ideological myth about the worker as a hegemonic power in society are actually realized in life. In Fig.5 orange highlighted part of the top of the social pyramid in the 1920s and early 1930s, where there was a place for the workers. The architects-theoreticians and practitioners have created for them the projects of settlements, of new type of houses-communes, public buildings service, for the dissemination of sports and cultural activities among the population – clubs, reading rooms, canteens, kindergartens and nurseries, schools, bath-Laundry complexes and the like.

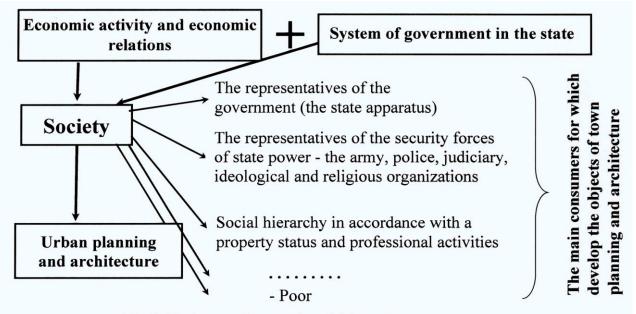
In the late 1930 – 1940-ies, when the power became stronger in the face of the leader, the social structure of the Soviet people with the workers upstairs is also supported. But really the best buildings were erected for the party elite, senior officials, intellectuals, which supported and glorified the power (in Fig. 5 highlighted in red).

You can also trace the influence of key factors – socio-economic and political conditions for the further stages of development at subsequent stages of development of Soviet architecture in its planning, the types of public buildings, architectural styles, and the like.

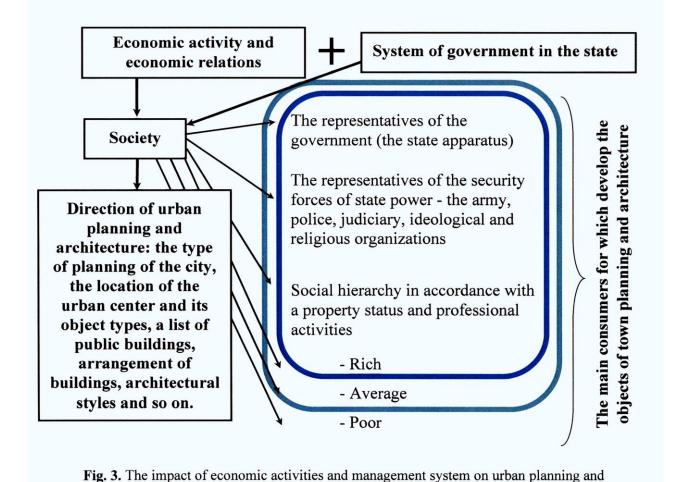
At the end added another graph showing the influence of the ideology of the customer, who is government representative, on urban ensemble (Fig.6). Objects of official architecture will always reflect the ideological components in shaping the style of architecture.

On the examples of architecture of residential buildings of the Soviet and post-Soviet times in Ukraine, which is depicted in Fig.7, it is possible to see how changes in the economy and the system of government in the state was reflected in the architecture.

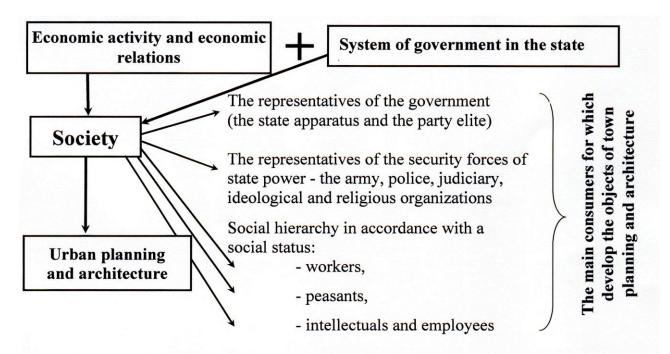
1920-e years were marked by the attention to the workers as the chief member of the new society. The working life before the October revolution of 1917 was minimal primitive when sufficiently compressed living



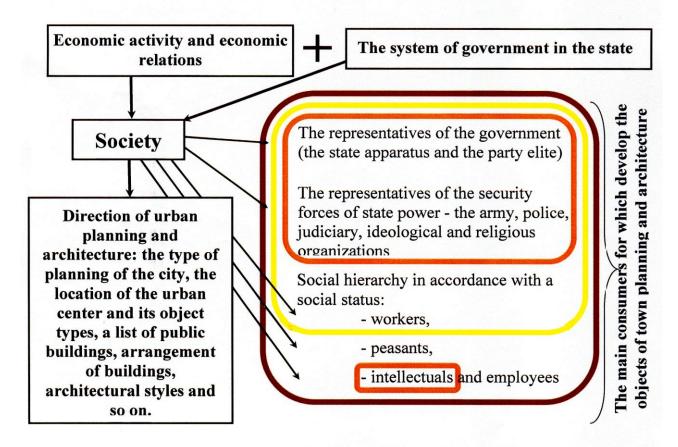
**Fig. 2.** The impact of economic activities and management system on urban planning and architecture (the world system)



architecture (the world system) - social layers, which are built architectural objects



**Fig. 4.** The impact of economic activities and management system on urban planning and architecture (the Soviet system)



**Fig. 5.** The impact of economic activities and management system on urban planning and architecture (the Soviet system) - social layers, which are built architectural objects

conditions. Therefore, after obtaining a high social status for the workers it was necessary to determine new conditions of stay on the basis of equality in the enjoyment of their team the various types of service. M.Y.Ginzburg wrote about the tasks of functional art at the time as «the invention of new types of architecture, is meant to make the socialist way of life» (cited in [20, p.34]. And this has led to the development of houses-communes block structure, in which each block that was designed for certain desired functions, architecture is of a simple form, which only emphasized the function and the structural system. The structure of communal housing as an innovative idea often used for planning of the district or a separate village, as it provided the opportunity to organize the zoning and to solve the sanitary issues in the building.

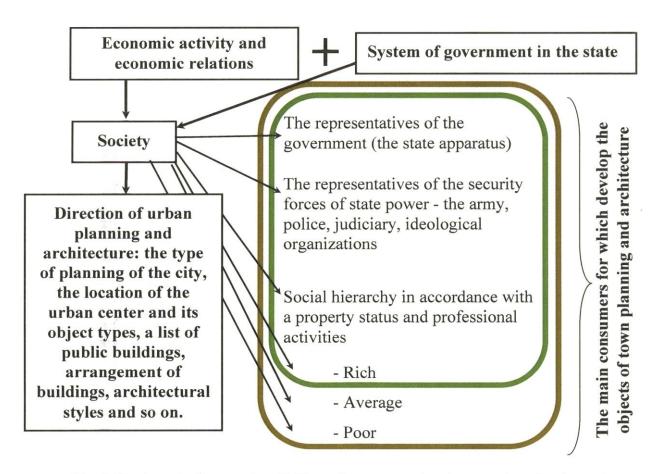
Time 1930s – early 1950s years, is the period when gradually centralized form of government in the Soviet Union strengthened on the basis of the priority of the leadership of the Communist party before the political and Executive authorities. Global political situation is getting worse, the economy is focused on the development of heavy industry, a search for new ways and experimentation in architecture and urban planning, the party and state organs and the professional community define the new ideological orientations in the art to Renaissance architecture on the basis of the classical heritage, that given its reinterpretation in accordance with the new conditions of social development. There was return to the manmade classical forms in architecture, to the construction of a block perimeter and the construction of large-scale urban ensembles of symmetrical construction. Lush architectural forms, classical details, designed in reinforced concrete, extensive use of concrete sculpture that represented working people, was supposed to symbolize the power of the state, the popular love to power and harmonious conditions of life during the Soviet system the country's leadership and the socialist system of economic management. The best facilities in the city center was intended for the party elite and artists, members of creative unions, that praised

the power, and the workers lived on the periphery of cities, in modest premises with limited facilities structure and under the terms of the settlement in separate rooms.

In the second half of 1950 - 1970-ies there has been a reorientation of housing in providing people with apartments for each family separately with a minimum area, but those that provided a certain minimum level of comfort. Over time, the norm of the total area for 1 person, that were accepted and approved from the top, gradually increased, the comfort level is improved, the area has grown, room with a pass-through disappeared, WC allowed to design only one-bedroom apartments. The architecture of the housing that was industrial of methods of construction, your image reflect equal conditions for all inhabitants regardless of their social status. The architecture of the housing that was industrial of methods of construction, in its image reflects equal conditions for all inhabitants regardless of their social sta-

In the above three periods in architecture and urban planning of the Soviet country with a socialist economic system, each stage was determined by the state-party regulations that were issued in the form of state plans and proclaimed as binding in any sector of national economy tasks. But the government has given housing for free. Independent Ukraine took the path of market economy with a parliamentarypresidential form of government. After a long period of adaptation to new economic conditions and to adapt the construction industry focus on the needs of the population begins to generate requests for types of housing at cost. In the 1990-ies difficult economic situation of the urban population had an impact on changing socio-demographic, and low purchasing power did not allow for the purchase of an apartment of the majority of workers in various industries [21].

2000-e years were marked by the formation of complexes of luxury housing for the wealthy segments of the population (see Fig.7). Complexes in the industrial center of Ukraine Dnepropetrovsk – (modern name Dnieper) – were built especially expressive,



**Fig. 6.** The impact of economic activities and management system on urban planning and architecture (the world system) in Ukraine - social layers, which are built architectural objects

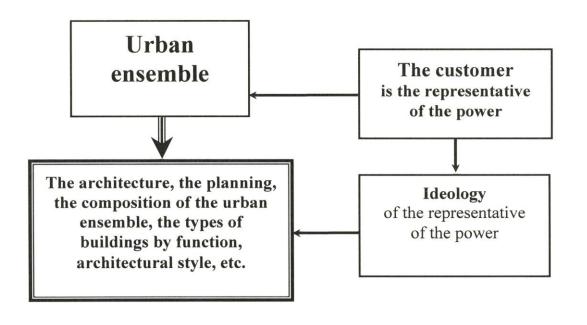
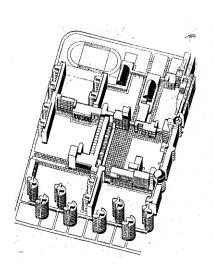
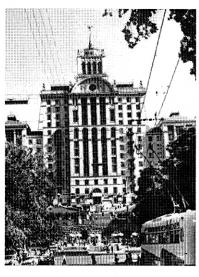


Fig. 7. The ideology of power in the architecture of the urban ensemble

| A socialist economic system  The Soviet system of government |                           |                     |  |  |
|--|---------------------------|---------------------|--|--|
|  |                           |                     |  |  |
| Theoretical search of housing for                            | Housing for the elite     | Housing for workers |  |  |
| workers  | Kyiv, Khreshchatyk street | Kyiv, New Darnitsa. |  |  |







| A socialist economic system     | The capitalist economic system  Parliamentary-presidential system of government  The late 20th - early 21st centuries |                          |
|---------------------------------|---|--------------------------|
| The Soviet system of government |   |                          |
| 1950-1970-ies                   |   |                          |
| Housing for the people          | Housing for the rich  | Житло для бідних         |
| Kyiv Residential complex        | Kyiv Residential complex  | Kyiv Residential complex |
| «Voskresenskiy»                 | "Triumph"   | «Smart house»            |







**Fig. 8.** The architecture of residential houses of Ukraine in Soviet period of the building of socialism and in the period of Independence of a capitalist form of economy and a Parliamentary-presidential system of government

diverse in style and image, of European design. For the 2010-ies a significant demand for housing with a minimum area of simple shape, cheap materials of the facades is typical (Fig.8).

That is, as always, the architecture clearly reflects the economic and political situation in the state through the appropriate structure of society and its needs.

## THE CONCLUSIONS

- 1. Architecture and urbanism are formed from ancient times and develop along with the person to ensure his / her needs. Therefore it is impossible to consider the Genesis of architectural objects, the creation and use of certain architectural styles outside the study of the history of social development.
- 2. Modern science has found a new direction under the name of «social history», which unlike the previous limited opinion determined that social development affects all life processes of society and forms them. Therefore, to determine the causes and tendencies of development of architecture and urban planning it is necessary to investigate various processes occurring during development of the society as such.
- 3. One of the most important areas in human activities is economic activities and economic relations arising in the process, as well as the political system in the state. These aspects of the socio-economic and political life form a certain structure of the society.
- 4. Society changes over time and its needs are growing quantitatively and become more diverse and complex, including requirements in architectural and urban sites.
- 5. Mapping of the historical architectural heritage of different ages and socio-economic conditions and political structure of various States have allowed tracing the main trends of forming of architecture and urban planning:
- any structure of society is formed as a social hierarchy where at the top is the representation of power and the forces that support it;
- the structure of society, naturally created, reflects a hierarchy of social classes according to their wealth, but created artificially, for ex-

- ample in the Soviet Union, raises up the poor population workers and peasants;
- urban planning and architecture in the first place created for those social groups that are at the top of social pyramid, that is, the natural structure of society – for the wealthy, for artificial structure for the poor. It defines the tasks that need to be implemented in urban planning and architecture;
- the type of government in the state with solutions in urban spaces and architectural image of the buildings makes use of specific methods of development, types of public structures, types, and composition of the urban ensemble, its architectural styles, and the like.

#### **REFERENCES**

- 1. **Hrushka Emanuel, 1963.** The development of urban planning. Bratislava. Publishing house of the Slovak Academy of Sciences, 650 (in Russian).
- 2. **Bunin A.V., Savarenskaya T.F., 1979.** The history of urban art. In two volumes. Moscow: Stroyizdat. Vol.1, 495 (in Russian).
- 3. **Bunin A.V., Savarenskaya T.F., 1979.** The history of urban art. In two volumes. Moscow: Stroyizdat. Vol.2, 412 (in Russian).
- 4. **Stepanov G.P., 1971.** The art of architecture. Leningrad, Znaniye, 33 (in Russian).
- 5. **Stepyko M.T., 1998.** The Genesis of ethnicity: origins, modernity, perspective (philosophical-methodological analysis). Kyiv, Society Znaniye, KOO, 251 (in Ukrainian).
- 6. **Kizima V.V., 2007.** Society and Existence. Kyiv, Publisher PARAPAN, 204 (in Russian).
- 7. **Modern** philosophical dictionary, **1998.** Edited Kemerov V.Y. London, Frankfurt am Main, Paris, Luxembourg, Moscow, Minsk, PANPRINT, 1064 (in Russian).
- 8. **Bachinska, L.G., 2016.** Urban planning as a reflection of socio-economic and political conditions. Regional policy: historical origins, legislative regulation and practical implementation [Kiev-Ternopil]. Vol.II. The materials of the Second international scientific-practical conference (Kyiv, 14-15 December 2016), MONU, KNUCA, Economic thought. In two part, Part 2, 280 (in Ukrainian).
- 9. **Rubinstein S.L., 1999.** Fundamentals of General psychology. Saint-Petersburg. Publishing

- House Piter, 720 (Series Masters of psychology) (in Russian).
- 10. **The experience** of the human personality: Essays in philosophical anthropology, **2000.** Lviv, Svichado, 388 (in Ukrainian).
- 11.**Ludmila Bachinska, 2009.** Modern architectural eclecticism: causes and tendencies. Ukrainian art history: materials, research, reviews. Collection of scientific works, IIFA of a name of M.T.Rylsky, Kiev, NASU, Vol.9, 334 (in Ukrainian).
- 12. **Gabrichevsky A.G., 1993.** Theory and history of architecture: Selected works. Edited by A.A.Puchkov. Kyiv, The editorial Board of the journal Samvatas, 302 (in Russian).
- 13. Mikola Osetrin, Oleksandra Bondar, 2016. The town planning experience in implementing the principle of roundabouts on the approaches to bridges. Underwater Technologies, Vol.03, 75-82 (in Ukrainian).
- 14.**Iryna Ustinova, 2015.** Theoretical principles of wave urbanistics. Underwater Technologies, Vol.01, 33-42.
- 15. Eugenia Kazakova, 2017. Problems and directions of reconstruction of historical centers of small settlements of the Volyn region (on the example of Klevan, Rivne region). Underwater Technologies, Vol.05, 84-91 (in Ukrainian).
- 16.**Merlin Pierre, 1975.** New towns: regional planning and urban planning. Translated from the French. Moscow, Publishing House Progress, 255 (in Russian).
- 17. **Ludmila Ruban, 2016.** Underwater urban studies: modern issues and trends. Underwater Technologies, Vol.03, 54-65 (in Ukrainian).
- 18.**Bachinska L.G., 2004.** The architecture of the housing: The problems of theory and practice of structure formation. Kyiv, Gramota, 408 (in Ukrainian-Russian).
- 19.**Bachinska L.G., 2016.** The architecture of the housing of Ukraine of the middle of XX beginning of XXI centuries: historical and analytical essay: a tutorial. Kyiv, KNUCA, 292. (in Ukrainian).
- 20.**Ikonnikov A.V., 2006.** Space and form in architecture and urban planning. Moscow, KomKniga, 352 (in Russian).
- 21. Bachinska L.G., Stogniy A.V., 2009. On the impact of socio-demographic structure and purchasing power of the urban population of Ukraine on the types and planning of modern housing. Modern problems of architecture and urban planning. Collection of scientific works, Vol.21, 310-328 (in Ukrainian).

# Развитие архитектурного объекта под влиянием социальной истории

#### Людмила Бачинская

Аннотация. В течение истории развития человек как таковой эволюционирует, осваивая пространство вокруг себя, совершенствует орудия труда, речь, окружающую среду, приобретает опыт, развивает навыки и умения, формирует общество, государство, понятия о красоте, приемы строительства и многое другое. Вместе с ним архитектурные и градостроительные объекты изменяются по функции и планировке, по форме и стилю, физическим и пространственным параметрам и т.п. История архитектуры и градостроительства изучает главные направления градостроительного искусства в разные времена, разные эпохи и как культурное наследие разных народов. Но до сих пор не выяснено, как отличия в социально-экономических условиях и политическом устройстве в государствах влияют на направления формирования архитектурно-градостроительного объекта.

В данном исследовании установлено, что именно эти факторы являются определяющими. Они влияют на создание структуры социума с иерархическим построением слоев населения, где представители власти и силы, которые их защищают, находятся вверху. Определенная структура социума требует определенных приемов расселения в плане города. Таким образом, через социум как способ происходит реализация влияния указанных факторов на архитектурно-градостроительный объект. Рассмотрены структуры социума в мировой и советской практике и в качестве примера - влияние социальной структуры населения на особенности архитектуры жилья в Украине в течение XX – начале XXI столетий.

**Ключевые слова**: человек и его потребности, экономические отношения, политические условия, социум, архитектура и градостроительство.