The «Ideal City» Concept in the Modern Architecture

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Abstract – The term «ideal city» was clarified in the context of historical development of human civilization. The purpose of our research is to determine features of «ideal city» in the modern architecture, including the process of urbanization. It is concluded that the real challenge for urban infrastructure in the XXI century will be problems related with deficit of energy, solidity of buildings, social-economical and spatial safety of towns people. Two theories about «ideal city» in the XXI century were motivated in this article. First of all, we will focus on the development of big cities (megapoles) for human being (work, rest, regeneration), secondly – we will study the phenomenon of de-urbanization – idea about rejection of urban lifestyle, and return to natural environment, situated out of town.

Key words – modern architecture, «ideal city», urbanization, de-urbanization.

I. History of the «ideal city» concept development

For centuries, cities have been formed and evolved under the influence of various factors. Despite the territorial and climatic features the structure of the city was determined by socio-economic, religious, political, ethnic, cultural and other processes. Despite the fact that all the cities were different on a number of criteria, there has always been the idea of the «ideal» city where all sectors of the urban environment work in order to achieve perfect environment for human life. This trend is relevant also today.

The concept of the «ideal city» has a long tradition and a sustained history of development. In particular, Plato and Aristotle emphasized in their philosophical papers on the need for a clear functional zoning, hierarchy of spaces and the symmetry of composition. In the Middle Ages the «ideal city» idea was unified with Heavenly Jerusalem, which was formed by the fusion of real city arrangement with Christian beliefs. In the Renaissance epoch the «ideal city» concept became popular among architects, philosophers and writers. In 1427 P. Brachiolini opened Vitruvius treatise to the world, which greatly influenced the conceptual approaches of this time to urban planning. During the 17-18th centuries science and technology achievements were promoted as such which could make life easier for people. At this time, the defensive walls, which retarded the cities development, were no longer needed. In the 19th century vision of the «ideal city» conceptually changed. A big city became the subject of criticism because of dirt, relocated residential enclaves, noise and lack of greenery. Subsequently, new Utopias appeared where the city becomes the subject of socialist experiments [4].

Vancouver today belongs to the «ideal city» list, which headed the list of the most comfortable cities for many years, for thirty years it has been following a strategy of the population density increase, so that people do not need to move to the suburbs. Rather than grow wide, it lines up. This not only significantly saves urban space, but also opens views of the mountains and sea that surround Vancouver to the residents. Local admiration of landscapes became the basis for creation of the concept of «corridors for landscape» where skyscrapers are to be arranged in such a way as not to obscure the view from the southern perspective. Buildings have become narrower and higher, also they were placed at a considerable distance from each other. It allowed to achieve several goals, including: opening of the beautiful panoramic views for the residents who live above and increase urban space for residents who live below. Vancouver paradox is in the following: the more crowded city became, the more people sought to live in it [1].

There was a metaphor during some time in the field of urban development – «city- is a machine for life». But afterwards this idea has changed, the ecological environment significantly has worsened. Thus, environmental problems transformed the preferences from «the technical city» to «biocity». As a result, a lot of projects «Cities of the Future» appeared, focused on the use of environmentally friendly materials, green spaces etc. However, at the many of them the implementation of «artificial» nature is monitored, while the fight for the preservation of nature as the most primary human value is not a priority. Current projects «ideal cities» may be classified in several major groups, such as «smart city», «escape from civilization», «life under the dome», «city – is a living organism» and so on. But this division is rather arbitrary, because different approaches fundamentally often have many similar features [1].

II. The modern concepts of the “ideal city”

Therefore, in the 20th century the «ideal city» was replaced by the «city of the future» concept. Thus, the concept of «universal city-cell» was formed, which can be placed in the air, ocean, space and fit in with the idea of the polycentric city. The following ideas about the ideal city are also considered such as modern: «city – house» (provides the city accommodation within a single monolithic volume), «island – city» (floating habitation under a double membrane, which under UV purifies the air), «aeropolis» (is formed near the center of air connections), «transpoliya» (is formed linearly along transport and infrastructure routes) etc. [2].

In today's urban planning the concept of «happy city» has been forming. An important feature of such city is facades in the streets and the building greening. For example, the experiment conducted in the US capital proved that the facades of buildings not only affect the behavior of its residents, but also their emotional state. The study found that residents of New York try to go past the streets with uniform facades as soon as possible, as they feel more depressed, passing such buildings. Instead, residents who walk in more «alive» streets feel satisfied...
and happy, even when the street is more dirty and shows no «industrial purity» [1].

A green area around the residents homes has not less impact. And it is not just the environment. First of all, we are talking about the continuing human need to be connected with nature. Distance from nature not only badly influences the people, but has rather dangerous consequences. First, it makes people feel more aggressive. Secondly, the so-called «areas of wasteland» lead to an increase in banditry and crime. Thus, in greener areas of Chicago crime rate was several times lower than in the areas where the landscape is dominated by cement and stone. If from the window of Chicago - man concrete and asphalt can be seen mainly, he feels a strong psychological fatigue, he is angry, nervous even yelling at his children [1].

III. A «Smart City»

A common example of «ideal city» in the modern architecture is a «smart city» – space, pierced by information technologies, the inhabitants of which independently determine their life schedule that is the most comfortable for school, work, recreation, etc. [3]. «Smart City» is the most accessible and convenient for all the residents regardless age or social status.

This approach was realized in the project of Masdar City (UAE), the author of which is the famous architect Norman Foster. Masdar is positioned as a city with zero emissions of harmful substances into the atmosphere, energy efficient, based on the use of «intelligent networks», without waste and without cars. Through the use of renewable energy, city should become an example of alternative vehicles and technologies that do not require the use of oil. Architectural Masdar feature will include delicate designs that at the buildings roofing level will cover almost all the streets. It will allow even on a hot day to keep cool and significantly reduce energy consumption for air-conditioning of the city buildings. Using of existing and advanced materials to reduce energy consumption will become a model for other cities in the future. Thus, energy use per capita in Masdar is 25% less than the standard of the other cities. Using a combination of traditional UAE architectural forms and modern technologies in the Masdar, it was planned to create the unique microclimate and memorable visual image [3].

Conclusions

In today’s global world the concept of «ideal city» is closely linked with the concept of urbanization - the process of urban population and the cities growth, the transfer of urban lifestyle to the countryside. Today 54% of the world population live in the built-up areas, and according to the UN urban areas will grow by another 2.5 billion people up till 2050. So the problems related to the shortage of energy density, spatial and socio-economic security of urban residents will be the real challenge for urban infrastructure systems. Proposals for urban planning and development will be directed for their solution. Likewise, the concepts of «ideal cities» should take into account the effects of urbanization - both positive and negative.

Therefore, we can assume at least two development approaches to understanding the «ideal city». The first one will focus on the infrastructure of large cities (metropolises) improvement for human life, namely his/her work, rest, regeneration and so on. The concept of «local urbanization» serves here as an example, the meaning of which is the formation of a special manor-urban area, which still combines advantages of rural and urban life. Instead, a different approach to the formation of the concept of «ideal city» will take into account the phenomenon of deurbanization, idea of the rejection of urban lifestyle and return to natural, environmental environment, located outside the city.

References


