Socio-Cultural Problems of Sustainable Urban Environment

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Abstract. Urban environment is a complex concept that includes material structure (buildings, constructions, transport, industry, utility lines, etc.) and natural environment with a variety of anthropogenic factors. Consistent patterns and directions of development of the urban environment are interrelated with philosophy, religion, science, aesthetics, socio-economic relations, natural and climatic characteristics and culture of a particular country. According to the methodological principles of anthropologism and historism, the authors understand the urban environment as a continuum of coexistence, communication, interactions, relationships and needs of different nature and level, as a socio-cultural space of human life. Leading research workers from different scientific branches present the urban space in contemporary anthropological versions of ontological theories as a unique space of human existence. Being a symbol of culture, the city, as the mechanism of its conversion to real forms of life, developing a socio-psychological community and the human's personality. Urban environment designers try to form the ambience under the influence of processes taking place in society at each historical stage. At the same time, the urban environment has an impact on the social well-being, worldview, attitudes, behavior and culture of the citizens. Therefore, the urban environment must meet the functional, aesthetic, spiritual, cultural human's needs, promoting to the creation of favorable conditions for his life.

1. Introduction

The urban environment is a bearer of cultural relations between people and the ambience. The urban environment bears the imprint of the activities of the people's community: any change in the cultural life of citizens corresponds with the transformations in the urban environment and these changes can be compared with other projects that take their birth in the administrative, economic, and social spheres of urban life [13].

The number and area of cities increases revealing and exacerbating problems. The achieved level of urbanization, the development of science and technology, a grand scale human activities, adopted by industrialism the thesis that the greatest value for the society are: buildings, constructions, industrial objects, vehicles, etc. led to the unprecedented magnitude of the negative impact on the nature, the emergence of large-scale environmental crises. The physical destruction of great outdoors begins with the physical spread of cities as a total "swelling" into the surrounding nature [15].

Because of anthropogenic loads many valuable landscapes in the suburbs died: deteriorating of water, air, chemical and mechanical composition of the soil. Highly urbanized environment affects negatively the health of people, causing physical, mental fatigue and, as a consequence, a disorder of the nervous system, which cannot cope without medical intervention.
The system of relations between human societies with nature is a complex self-organizing system with strong feedback, but some researchers tend to characterize it as self-destructive and buckling. Consequently, the task of a reasonable (noospheric) person is to move the system of relations "society – nature" to sustainable development, meaning greater development and minor destruction of the nature. This would ensure the co-evolution, co-development of humanity and the biosphere [9].

The task of a sustainable urban environment culture formation is to find the optimal ways of the city's environmental organization, contributing to the reconstruction and development of harmonious relations between nature and human society, turning modern anthropogenic landscapes into a qualitatively new space – cost effective, environmentally safe with a high aesthetic potential [1].

One of the ways of creating a sustainable urban environment is an aesthetic beautification of the environment for effective human activity that is carried out by means of landscape design. It also determines the specific tasks of landscape design: the solution of the environmental, ethical, and aesthetic issues of the urban environment [9]. The landscape design specialists always deal with natural objects, namely the complexes of natural factors that form the habitat of all life on Earth in all its diversity. The space where people live and act is object of landscape design. We use any small or big areas for work employment, for receiving funds for life, for recreation, for science, nature study. These are the three main forms of land’s usage or the nature objects by a human.

2. Methodological foundations of the formation of the urban environment

In conditions of a highly urbanized city environment in the last decade of the twentieth century to the present time, many attempts of the architects to incorporate nature in the residential environment of the city are contradictory: as if all were for the connection of nature and architecture, and in fact, there is a destruction of nature. Almost everywhere, the historic environment in peripheral areas of cities is being destroyed. With the villages, natural realities are being wiped off the face of the earth: the trees are being cut down; natural waters are being filled with soil, increasing the areas for the urban development.

The Russian philosopher A. S. Akhiezer characterizes the urbanization of the country "by the formation and increasing the spread of urban lifestyle, urban culture" (Akhiezer,1969). Ignoring this fact has led to the technocratic bias in the formation of a sustainable environment in the cities of Russia, which contributes to the serious environmental and social problems. An increasing number of specialists in the formation of the urban environment come to the conclusion that the basis of prosperity is the private culture of citizens. It is noted that nano-technologies are emerging in the cultural university towns and can not appear in towns. The people of Japan drew attention to the fact that the quality of production of any industry depends on the aesthetic education. Therefore, learning from the experience of the 20-ies of the last century (Russian VKhUTEMAS, the Bauhaus German), made it into the public domain.

The impact of urbanization on the environment is very diverse. Being global, this problem can be solved if all aspects will be taken into account when exercising any particular urban setting. In urban areas in the relationship between man and nature two directions are manifested. First, the city with its highly-density development and a concentration of industrial enterprises has a destructive ability in relation to the natural environment. Secondly, the scientific-technical and socio-cultural level of development of large cities can be a fundamental basis for the improvement and protection of the urban environment, increasing its resistance. Citizens' culture is manifested in the ability of the urban community to restore the broken, maintain existing and create new conditions for the stability of the urban environment.

Without transformation of nature, the society does not exist. But by transforming nature, people should not weaken its generating force. Only the creative transformation of nature is a way of revealing the essential forces of man, the realization of his nature and culture. A love towards the nature and the creative transformation allow harmonizing the relationship between a man and nature.
In the ecological aspect of creative change, human cultural activity aims to harmonious integration in the natural environment [10].

The person constantly evaluates the qualities of the environment, the possibility of orientation and identification with a specific place of particular importance. This is reflected in the need for full information where the person is, which designers call a creation of a specific spatial image. Therefore, the main task of landscape design includes the formation by means of nature clearly recognizable environment, which has, along with the aesthetic appeal, original placement and interaction of natural components.

Each of the place has aesthetic value structured by means of converted natural features (terrain lines, plant composition, and a variety of water devices); provide people with the necessary signs of orientation in urban space and creating definite material basis for fixing in the memory of visual impressions. The role of the category in the socio-cultural disclosure of the personal feelings and the description of a certain type of behavior in a specific part of the urban environment is the most important for the choice of qualitative transformation means. The most effective feeling of space with the typical components of nature occurs in the case when their placement and relationships meet a specific plot, offering one of the schemes of environmental behavior. Aesthetic impact of each landscape element should be present for social and cultural regulation of human behavior, motivation, movement, observation, or action [12].

The current practice of open spaces beautification in the city often leaves unresolved questions of the organization of the environment perception process from the point of view of cultural-emotional responses of a person. The conversion of the means of landscape design to the residents is in the decoration of each environmental piece including natural accent that distinguishes this fragment from the others due to the impact on psycho emotional state of a person.

Architects, and designers associate everyday life with the perception of so called "nonarchitectural spaces" [11], where the perception of the environment is either a continuation of a comfortable state of being inside the object of architecture, or becomes a source of discomfort from contact with something half-assed and unfinished in the urban environment. The lack of equipped places for recreation in the natural environment, the predominance of grey concrete and asphalt surfaces, dull kind of haphazardly planted many years ago vegetation - all it adds to the human condition-negative emotions.

One of the most common problems of the modern city in our country is the lack of artistic expression and artistic intent, which is to say, its brand. Culturally artistically depleted urban environment does not cultivate and does not contribute to the formation of artistic taste of contemporary citizens.

One of the greatest challenges of creating a sustainable urban environment is to create for the people the enabling conditions of life: creating comfort, a favorable microclimate, and aesthetically impressive urban open space. The problem of preservation, reconstruction, creation of "free spaces" (parks, urban reservoirs, springs, gardens) becoming very serious. These territories are not free from building site. All these shape our behavior, mood, taste, the culture of thinking, attitudes, understanding. Person needs to see around himself grass, water, light, bright colors, interesting aesthetic forms, because he himself is a part of nature. It can constitute the quality of life when you want to go out in the yard, in the street, in the city, to admire everything around you, to communicate with friends, to see beauty, to live in it and with it [4].

Urgent need for building a sustainable urban environment - the creation of multi-level linkages between population and the nature in which social, biological and cultural needs of the person can easily develop. A reflection of the landscape's current state is the motivation of its conversion, which include information, individualization, community, health, wealth, spirituality and beauty. The growth of the cultural level of the people improves the queries in unique natural objects. The solution of these socio-cultural problems is possible by increase of a sustainable urban environment culture, using the best world trends in landscape design.
The problems of interaction of man and nature increase in proportion to the acceleration of scientific and technological progress and the transformation of the urban environment. The conflict between the intention of a person to protect nature and its intensive use makes constantly look for ways to resolve this problem taking into account fact that natural resources are deplete. Urban environment, becoming more artificial and often uncomfortable, loses components of nature. Therefore, a sustainable urban environment requires using modern trends of landscape design.

Creative activity for formation a sustainable urban environment, consisting of natural (relief, climate, water resources, vegetation, stones) and artificial elements (small architectural forms, sculpture, decorative coatings, lighting) is landscape design. Consideration of landscape design as one of the means of preventing the further degradation of the urban environment scientists associate primarily with disadvantages as a functional disorder, and aesthetic expressionless through the rational use of natural landscape components resources.

After events happened in the early 60-ies, ideas about the nature and functions of architectural activity have radically changed, the process of urban design has acquired environmental focus, replacing the concept of "object" to the notion of "environment". Mass consciousness is forming a new attitude to the aesthetics of the urban environment. The citizens see the beauty in the ratio of buildings and spaces, appropriate to the city – from the basic conveniences of using transport to generating high spiritual values [16]. The environmental approach takes on a new meaning, the efficiency of urban spaces use, focusing on the spiritual needs of man.

Approach formulated in the 70s in the last century by the Russian scientists A. E. Gutnow, I. G. Lezhava, V. L. Glazychev determined the increase of the role of landscape design in creating a sustainable urban environment [7, 8]. It means a transition to the interpretation of entire spaces of the urban environment, the revaluation of its impact on residents, increasing their culture. Designers and architects synthesized a concept of "environment" using notions of environmental activities, environmental behavior and environmental understanding, revealing the specifics of how people interact with the environment and the motivation of their intentions according to their cultural transformation. Satisfied with the urbanization the person starts to feel sharp need for the return to nature up scaling efforts for protecting it.

Among the areas of improving the quality of the urban environment by means of modern trends of landscape design, it is worth noting the following ones:

- the transition to a holistic interpretation of the urban space;
- effective use of landscape components of the urban open spaces;
- consideration of human needs to ensure the necessary level of comfort;
- the achievement of a functional order, the visual expression of landscape objects in the urban environment;
- improvement of the urban spaces environment;
- creative transformation of nature;
- formation of awareness of the urban space;
- improvement of individual culture, the formation of a new worldview, a new co-evolutionary interaction with the environment.

Using the latest trends of landscape design is possible to achieve functional order of the urban spaces. Regulatory influence of design on the usage of open spaces reduces to a minimum the chaotic influence of humans on their close environment, providing stabilization of the environmental processes and the maintenance of the urban landscape natural components.

Responding to the problems of ecological reconstruction and aesthetic upgrade of the urban open spaces, the increase of the natural ingredients means the imposition on the existing city's component an additional cultural layer with a predominance of aesthetically transformed nature. The sense of creating such a layer is to change the emotional, aesthetic, functional and environmental qualities of the urban environment, meet dynamic social needs. The feature of new cultural layers in the historical
development of cities gains in changing their aesthetics. Additional natural components in the urban open spaces become an important tool for their structural and artistic imagery transformation. Identifying of clear horizontal and vertical lines with clear geometry, natural forms contributes to the formation of the most expressive image of the city, creates an emotionally positive human perception of the urban environment [8].

Today, traditional attitudes and methods of the urban environment objects formation have undergone major changes. A number of factors causes these changes connected with the social life:

1) an increase in social welfare, the success of culture and education have resulted in increased number of specialized facilities and the range of features of the urban environment;
2) scientific and technical progress, the success of the engineering and construction business have led to modernization, new methods of functional-spatial solutions formation (office atriums, shopping arcades, large sports complexes);
3) appeared and established new forms of culture and public consciousness, changing the aesthetic orientation of the broad masses (the rock-culture, "technisation" of external forms, kitsch as a form of mass culture, abstract art), which led to an unprecedented design solutions and upgrading old ones (audio-visual show in the monuments of architecture and history, discos, auto – motorcycle rally, races, etc.). All this has led to a new spirit of communication, its democratization, the dominance of the new civilized forms in their spirit of freedom, fairness, respect for traditions and innovation, the priority values of each personality, its active involvement in environmental processes [5].

The humanistic approach to the organization of the urban environment determines quality of the modern city, by its orientation to the real needs of different categories of residents with different capabilities (including disabilities). Attention to the consumer, the active introduction of natural components with their detailed study and respect for historical-cultural heritage and ability to work in the context of any building, skillfully, humanely to combine old and new in architecture - this is a guidance of modern landscape design.

The modern urban environment contains many unresolved social and cultural problems: the lack of a common (philosophical and cultural) principles and laws governing the formation of the urban environment; growing environmental pollution; aesthetic inexpressiveness; functional disorder; violation of architectural harmony with the person’s needs; elimination of the functional domestic spaces; the destruction of the historic environment in peripheral areas of the city; the erosion and the disappearance of the spiritual fulfillment of the urban space; the substitution of natural elements of the environment; impersonal open spaces; the prevalence of utilitarianism and asceticism in shaping the urban environment; irreversible changes in the chemical and mechanical composition of soils; replacement of the yard by not authorized car parkings etc.

For the solution of modern problems is necessary to develop the concept of culture creating a sustainable urban environment by landscape design methods taking into account a holistic interpretation of urban space; the arrangement of the boundaries between vehicular and pedestrian spaces; efficient use of all components of urban open spaces; consideration of human needs to provide comfort; the achievement of the urban spaces’ functional order by the visual expressiveness of the open spaces; the creative transformation of nature; the urban space recognition. The urban environment should actively contribute to the responsible education and high personal culture.

To build a sustainable urban environment is necessary to use the following methods of landscape design.

**Visual expansion of space.** Architects associate this effect with an increase of the park spaces without any fences; the design's radial avenues and alleys cannot end with review objects opening of natural distant landscapes.

**Planned change of a landscape.** Important and unusual aspect of landscape parks is that they transfer their effects from the sphere of reason and knowledge in the area of human senses. The character of park landscapes should evoke certain associations and to make an echo in the visitor's
feelings. It is valuable that the mood created by the landscape matches with the mood and movements of the human soul. In landscape parks, the foreground takes the element of movement: the perception of landscape while walking; movement or stillness of water, the effect of the fragility of reflections.

**The diversity of the composition.** A garden of any size is a stream of not duplicated species, causing a change of feelings, experiences, emotions in the soul of the visitor and the desire to continue the walk.

**Imitation of the natural landscape.** To achieve artistic expression of small gardens one can use the techniques of imitation of the natural landscape. Landscape object in miniature can imitate "wet tropics", "the forest of the midland"swamp garden", "micro landscape desert with cacti", etc. Garden, perfected according to specific aesthetic criteria, should inspire philosophical reflection of man about the meaning of life, world, etc.

**Integrating of architecture with the environment.** Dissonant architectural components of monotone surfaces neutralize inclusion in their structure of natural ingredients, which is a positive impact of the visual environment and contributes to the capacity of the biosphere.

**Renovation of historic landscapes.** Historic landscapes should preserve natural components, combined with the contemporary interpretation of the geometric surfaces drawing which meet new society's needs in the harmonization of the environment.

**The use of architectural styles.** Subject-spatial environment of the garden is formed with the use of certain architectural styles (Renaissance, Baroque, classicism, modern, etc.), which is achieved by including in the planning structure decorative sculptures, small architectural forms that has the largest creative influence on visitors.

| Social and cultural problems of the urban environment | Methods of the landscape design for forming the stable urban environment |
|------------------------------------------------------|-------------------------------------------------------------------------|
| - the absence of general principles and laws governing the formation of the urban environment; | - visual space expansion;                                               |
| - aesthetic inexpressiveness;                        | - planned change of a landscape;                                       |
| - functional disorder;                               | - imitation of the natural landscape;                                 |
| - non-observance of architectural harmony with human needs; | - the integration of architecture with environment;                    |
| - elimination of functional space yard;              |                                                                         |
| - the destruction of the historic environment in the peripheral areas of the city; | - renovation of historic landscapes;                                  |
| - the erosion and disappearance of the spiritual fulfillment of the urban space; | - the use of architectural styles;                                    |
| - substitution of the natural elements of the environment to the artificial ones; | - the creation of "the place spirit";                                 |
| - impersonal view of open spaces;                    | - the diversity of urban nature                                       |

**Creation of a "spirit of place" (the recognition of the urban spaces).** In his study the Norwegian theorist and architectural historian, Christian Norberg-Schulz reveals the philosophical aspect of the environment as the impact on human [12]. Revealing the concept of "spirit of place", the author describes the importance of man’s environment through the orientation in space. Person perceives the environment as something individual because of the otherness of the landscape environment components. Creation of a "spirit of place" helps to fill urban space with spiritual moral content and create conditions for the full-fledged life of citizens.
The diversity of the urban nature. A composite feature and functionally meaningful introduction of artificial nature forms the expressive space, thus helps to overcome the sense of man's alienation from nature in the urban environment.

3. Conclusion

The cultural heritage of society fits into the artificial environment created by man, and determines perception, worldview and behavior of people. Differently organized human environment inevitably affects behavior, emotional state, perception and understanding of space and its culture. Residents meeting the city fill and endow the environment with their senses, emotions, soul, mind, attitude, extracting it from things they find interesting and valuable. This environment, marked by the presence of human values and transformed by him, scientists used to call the human environment, in respect to the city – urban environment. The urban environment has a direct impact on social well-being, social relations, shaping behavior and culture of citizens. At the same time, the urban environment is a reflection of the population's lifestyle in each historical era, contributing to the cultural integration of the population.

The modern urban environment should be a harmonious, socio-cultural space for better organization work and rest of the population. The transformation of the urban environment in general is connected not only with the economics, but also affects the ideological field, because we are talking about new man, the education of certain aesthetic tastes for beauty and harmonization of the surrounding space. The urban environment as a system, social space shapes the worldview of the person, aims to improve his culture.

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