The Formation of the Urban Environment in the West Siberian Oil and Gas Region: Problems and Challenges

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Abstract: The article deals with the problems faced by the person in relation to the culture of creating a sustainable urban environment. The urban environment is seen as space of human existence, influencing its spiritual and physical health. All the experts involved in the urban environment, think about the culture of its formation, unfortunately, only from a departmental point of view. Differently organized human environment inevitably affects behavior, emotional state of a man, his perception and understanding of space. The cultural heritage of society fits in the space of an artificial environment created by a man, and determines the behavior of people. For the solution of problems of formation of the urban environment, it is necessary to apply a set of interrelated technical, social, environmental, aesthetic and other measures. In this capacity, landscape design as a set of methods has to build a sustainable urban environment to ensure harmonious living. Current trends, methods, and techniques of landscape design are to create sustainable environment for a person – creative, spiritual, comfortable, attractive, safe, harmonious.

1. Introduction
Social settings of the urban life are the most important modern research objects. Analyzing the city life, we essentially study the society’s life in general, because the large part of the population is citizens or preparing to become citizens. Being a symbol of culture, the city is a mechanism of its conversion to real life-, a socio-psychological community- and of a human personforms.

The urban environment has a direct impact on social well-being, social relations, forms of behavior, the townspeople’s culture. And at the same time, the urban environment is a reflection of the lifestyle of the population in each historical era, the social world, contributing to the cultural integration of the city residents.

At the same time, the urban life brings its own contradictions. These include the problem of the organization of the urban spaces, which runs the whole life of the modern citizen. Modern cities produce many acute social problems related to inequality, the rising cost of living, crime, worsening traffic problems, increasing resource consumption, pollution, nature destruction in the city, etc. Different populations show differential requirements for the urban environment organization, wanting to form it according to our preferences, tastes and interests. In this situation it is necessary to understand that the urban environment can contribute to feelings of harmony, comfort, satisfaction, person-environment, and vice versa, may cause an alienation feeling that leads to social anomie and the destruction of the traditional cultural code of the society.

In these conditions the special importance has the determination of the optimal ratio of the primary nature in the cultural landscape — a robust strategy and a systematic organization in interactions of the society with the natural environment.

The city attractiveness is determined by the absolute advantages of the urban life, which increases the pace of socio-cultural development of the modern society, but the urban life brings its own contradictions in it. These include the problem of the urban spaces organization, which runs the whole life of the modern citizen.
2. Methodological bases of the formation of the urban environment

The formation of the Tyumen region as the object of oil and gas civilization occurred as the result of the industrial development. The concept of "development" can be found in studies of different subject orientation. It permeates many aspects of culture. There is a reason to consider the development as the essential trait of Russian culture. Along with the usual combinations of "new industrial development", "development of new territories", found their full right the following expressions: "development of new materials and technologies", "space", etc. Today researchers even say about the development of the world by man that is the concept of "development" to which is given a special philosophical meaning.

Intensive industrial development of the West Siberian oil and gas province has transformed the landscape of the sparsely populated areas in the Tyumen region, led to the formation of cities. For a short historical period, there was created a unique civilizational complex for the extraction and transport of hydrocarbons. Distinctive features of this complex are: the predominance of the oil and gas extractive industry, with its reference to a particular place, a utilitarian attitude to the natural landscape, a special practice of the design and construction of oil and gas production enterprises and residential complexes. Thus, methods of work organization apply in other spheres of life. Even the place of residence is, as a rule, the departmental settlement with production projected at it by the hierarchy. About it in his works says a well-known Tyumen scientist Ganopol'skii M. G.: "This unity of man and technology, both rooted in both the natural and social environment in oil and gas industry, allows us to consider the Tyumen region as the object of oil and gas civilization" [5, P. 207].

The urban settlement was formed in the Tyumen region for three-four decades in the new industrial development in the sparsely populated, and in some places and uninhabited space. The development of oil and gas fields in Western Siberia caused a real demographic explosion. The population of the Tyumen region increased from 1965 to 1990 2.5 times, and in the centers of oil and gas production in Khanty-Mansi (KhMAD) and Yamalo-Nenets (YNAO) region — its growth amounted to, respectively, 9.2 and 7.6 times. The process of urbanization was rapid: during 25 years have grown 16 new cities in the 1990's and innoughties — six [6]. The design was consistent with the matrix of geological exploration of the territory. People were considered as a quantitative resource for the construction and further operation of production facilities.

Hydrocarbons arteries are an integral part of the industrial landscape of the Tyumen region, destroying its natural components. At the same time, a place of life and work is specialized; it is closely intertwined with daily household and a high degree of responsibility for the results of labor. From social well-being of these places depends a lot of things, including energy and environmental security not only of our region, but of the whole country.

The problem of retaining people in the North was difficult. The low survival rate is a result of underdeveloped social infrastructure. That eventually turned into huge losses for the territory, people and ultimately for production itself.

The experience of creating WSOGK once again convincingly demonstrated that the real development of the region cannot be reduced to "pure" economics, especially in its sectoral understanding. The North could be easily depopulated, and it was necessary to develop it comprehensively, not turning into a technological Playground" [7, C. 207].

Settlement of the Tyumen North demonstrates the imperfection of its current structure. It is primarily the fragmentation and different levels of sophistication of those fragments. Unfortunately, when building the cities of the North of Tyumen was not fully exploited neither domestic nor foreign experience.

Handicap provisions can be seen in the capital of WSOGK. Tyumen is a city which was not looking into the future like newly built young cities of the Tyumen North, it does not live its glorious past. It is made up of different pieces, fragmented in time and space. The space of the city is not connected, needs to become the whole unity.

The other thing is more important. About the consciousness of the townspeople says the Tyumen philosopher M. G. Ganopolsky. The cultural landscape of Tyumen Michael Grigor'evich describes as
the satin of different manners: "Its special temper had recently not only every district, but almost every route connecting it with the urban transport. Cultural life of the city in its everyday life is not able to withstand this stream of morals..." [4, p. 204] environment inevitably affects the behavior, psycho-emotional state, perception and understanding of space and its culture. Residents, coming into contact with the city, fill and endow the environment with their senses, emotions, soul, mind, attitude, extracting from it what they find interesting and valuable. This environment, marked by the presence of human values and transformed by them, is called the human environment, in relation to the city – the urban environment. The urban environment has a direct impact on social well-being, social relations, shaping behavior, and the culture of townspeople. And at the same time, the urban environment is a reflection of the population lifestyle in each historical era, the social world contributing to the cultural integration of the population.

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

Rapid urban growth in the twentieth century, the increasing complexity of functional and spatial structure of the urban centers brought with them problems of human orientation in the urban space. High-rise development centers as a whole sets the dilemma of psychological and physiological comfort/discomfort of the person in the subject-spatial environment of the modern city. The wide spread of industrial methods of construction based on the model design during the second half of the twentieth century has become one of the causes of the destruction of the unique architectural ensembles of the cities and natural landscapes in appearance of dullness and monotony of the urban environment, reducing its aesthetic qualities. Particularly acute raised the issues of preserving the historically valuable environment of the city and its artistic expression. In the process of urbanization continued to increase the isolation of man from the natural landscape. Particular difficulties were compounded by the fact that along with the process of urbanization has been actively implemented technicalization, increasingly penetrating deep into the human subject environment, thereby violating the ecological balance of anthropogenic and natural components, leading to a shortage of the latter. And today on the background of this man-made world more and more we can talk about the environment of the spiritual. Incurred to the XIX century landscape architecture, as a kind of panacea for "diseases of urbanization" today is already unable to cope with the task of maintaining the ecological equilibrium of the human environment, the affected "man-made metastasis" in the post-industrial society. There is an urgent need to find new means of solving this problem. Urban environment, as a structural component of the reproduction of society and as they are generated by relations of the subject and its relations, can only coexist in this tandem. The degree of this interaction, including its transformation, depends on the measure of its meaningfulness, the culture of its formation. Consequently, the environment appears as an objective reality, which includes the set of methods and forms.

The urban environment is a synthesis of architecture and landscape design that should be considered as a new artistic reality of our being which needs to be culturally and architecturally designed. This required a new kind of creative activity – landscape design, which is a specific activity involved in the design of open objects environment. The meaning of landscape design of the urban environment - drawing up of the emotional-technological scenario that determines the efficiency and artistic focus of everything permanently happening. In this regard the professionals’ attention should be drawn to those elements of the urban environment which must satisfy aesthetic, functional and cultural needs, to promote the creation of favorable conditions for their life.

Seriously not doing a conversion of the environment using modern techniques and means of landscape design, a person runs the risk to "preserve" him in the past. Cultural history says that
ongoing developments in international practice offers a wide range of modern technologies for landscape arrangement and makes a new meaning in the interpretation of the urban environment.

3. Ways of solutions of the problems of forming a harmonious urban environment

The urban environment is determined by a set of cultural parameters of human life. The formation of the urban environment occurs as a result of changing human culture, i.e. together with changes in the needs and preferences of a person associated with quality, level and way of living. Versatile culture of human and society as a whole, defines today the possibilities of urban development and reasonable transformation of the urban environment methods of landscape design.

The urban planners, designers have a massive and responsible task - the city entirely woven out of the problems and contradictions that needs to be created harmonious and comfortable, with a full-fledged urban environment. Any change in the city requires a reliable scientific basis. New connections that are created by a man must be closed to ensure the permanence of the basic parameters of the planet Earth system that affect its environmental stability. Therefore, at the regional level, each municipality should use the principles of ensuring the competitiveness and sustainability improvements.

In these conditions the special importance should be paid to the determination of the optimal ratio of the primary nature with the cultural landscape. A sound strategy and a systematic organization in interactions of society with the natural environment - a new stage of environmental management. In modern conditions a special value of all forms of activity should have in the aesthetic reconstruction of the natural environment. It is primarily the culture of the clearance space, increasing areas for parks, the development of the art, of creating gardens and parks, recreation and small groups. All of the above listed activities and processes create individual artifacts are only a small portion of those activities on the culture of the environment, which are called landscape design. Landscape design is humanistically directed activity related to the spirit of the times through the medium of subject – semantic, emotional. Landscape design of the surrounding space, as the object of intellectual attention, the object with content, with its own meaning. Today the principles and technology of landscape design are formed and perfected. Professor G. Knabe says that "the design organizes the spatial environment that gives to it a cultural meaning" [8]. In order not to be "conquerors" of Northern spaces and not be in "the graveyard of his victories" it is necessary to understand the current trends in the field of landscape design for the radical transformation of the urban environment in the interests of the individual: the transition to a holistic interpretation of the urban space; efficient use of the landscape components of the urban open spaces; consideration of human needs to ensure the necessary level of comfort; the achievement of functional orderliness, visual expression of landscape objects urban environment; improvement of environment of urban spaces; creative transformation of nature; the formation of the urban space recognition; improvement of personal culture, the formation of a new worldview, a new co-evolutionary interaction with the environment [2].

The main task of a contemporary man, as the main task of the landscape design is to make the Earth a beautiful home. You must remember the F.M. Dostoevsky's words: "Beauty will save the world!" But this will not happen by itself. A focused, organized work is needed throughout the country, on all landscape objects. It is clear that highly qualified and socially responsible professionals in the field of landscape design are necessary. Residents should relate to the urban environment not as to something ready and given, but as to a space on which it is possible to influence in accordance with nature. No system procedures by itself, without the creative activities of citizens, cultural relations, cultural behavior, cannot make a qualitative change in the structure of the urban environment.

It is essential to change the environment into an object that, by increasing in it the artistic-figurative contents, must promote the humanization, humanitarization, ecologization of culture at all levels – from the artistic image of a single recreational facility to figurative contents of the ecological landscape system of the urban environment.

Socio-cultural potential of a landscape is composed in its possibilities for the conservation of cultural values of open spaces of the urban environment and the introduction of technical innovations.
in the sphere of human culture. Therefore, the landscape design appears as a specific kind of activity developing its own cultural principles and techniques of project activity for building a sustainable urban environment [3].

The authors propose a matrix model of the urban environment formation using landscape design methods

| Factors of sustainable urban environment formation | Social and cultural problems of the urban environment | Modern trends in the development of the sustainable urban environment | Principles of the sustainable urban environment formation | Landscape design methods for building a sustainable urban environment |
|----------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------|
| 1 | 2 | 3 | 4 | 5 |

Socio-cultural: -socio-demographical, aesthetic, -ethical; -traditional innovative; -historical; -humanistic; -emotional-psychological; -natural-climatic; -environmental and town-planning; -technical-economic; -normative-legislative

- increasing environment pollution; -aesthetic inexpressiveness; -functional disorder; -violation of architectural harmony with the person’s needs; -elimination of functional yard spaces; -the erosion and disappearance of the spiritual urban space fulfillment

- the achievement of the functional orderliness of visual expression, improvement of the urban environment landscape features; -creative transformation of nature; -formation of awareness of the urban space; -individual improvement of culture, the formation of a new worldview, a new co-evolutionary interaction with the environment

- ecological stability; -aesthetic improvement, diversity; multi-level vertical structure; -complexity (the unity of the natural and built environment); -humanization of the urban environment; harmonization; environmental object’s integrity; bionic principles

Visual expansion of the space; planned change of a landscape; imitation of the natural landscape; integrating of the architecture with the environment; renovation of historic landscapes; creation of a "spirit of place"; the diversity of urban nature

Giving to the landscape objects certain aesthetic and functional properties, the designer "projects" the person who will live in this environment; creates a culture of cognition, thinking, understanding, attitude to the environment and further the translation of the formed values. The urban environment formed by the methods of landscape design undoubtedly becomes more humane, sensitive to a person, his relationships with people, nature and the world around him. Value responsiveness, sensitivity, humanity, willingness with the data of the cultural tradition and natural environment – this is what is valued now in the concepts of any kind [10, p. 63].

There is no coincidence in the philosopher's words by Jean Baudrillard in his work "System of things" [1], where he considers design as an approach, as a principle, which "can apply to everything, anything... in the end, on far-reaching social processes. This is the formation of broadly understood environment: open valued behavioral, structural... And the main object of formation is the man himself". Design, including landscape, is directly related to the structural, functional, process relations, which transform the system into a coherent unity which is able to satisfy the material, social and spiritual needs of the person. Meeting these needs is a powerful motivational basis. "The motivational bases, in turn, provide the work efficiency (economic, social, environmental)" [9, p. 57].

4. Conclusion

Landscape design, being philosophically significant effect, it contributes to the design of the urban environment as a system, socio-cultural, holistic, dynamically evolving object of intellectual attention and values including the main value - the person.
This implies important socio-cultural functions of landscape design – improving the quality of life, cultural production and consumption, harmonization of the relations of production, of the aestheticization of existence, creation of favorable psychological climate for people. Man vivificates when he is surrounded by harmony. Not only a man influences the urban environment, but the environment is able to shape the meanings, feelings, moods, desires, goals and values. This is dedicated to a new direction in science - philosophy of design, which considers design as a way of thought, action, as a way of ordering the world in a holistic, harmonious structure and the solution of universal problems of essence and existence of a man. But in general, the nature and content of the design philosophy is advanced and spiritually ascending reproduction, preservation and comprehensive development of society and its culture on a planetary scale.

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