The Communicative Environment of a Large City as an Evolution of Its System of Open Urban Spaces

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Abstract. The types of communication in a modern urban environment are considered, the specifics of the forms and methods of organizing urban communication spaces are analyzed, a typology of existing open and other public open spaces as an environmental resource for transforming the planning structure of a modern large city in the context of changing humanitarian components is provided, the development potential, the main directions, the design methods and current scenarios of the development of communicative spaces in the process of their adaptation to environmental communication elements of a large city are evaluated in the article. It is concluded that the methodology of the designing of communicative spaces is not strictly formalized, does not include strictly regulated stages of designing, and it is necessary to develop a flexible system of “informational” and “active” scenarios of the formation and development of urban communicative spaces in the conditions of a modern urban environment.

1. Introduction
The concept of the “open” space conditionally includes territories not occupied by capital structures of various functional orientations. The main types of open spaces can be conditionally divided according to their function in the structure of the city, to their planning characteristics and territorial localization [1, 2].

Spaces of the cities are not only physical, but also social spaces, mastered by their inhabitants and endowed with both individual and group meanings. Communicative function is one of the most important functions of urban space, being based on the conditions of residents' awareness of their involvement and inclusion in the urban space [3, 4, 5, 6, 7, 8, 9, 10], as well as the implementation of communicative and interactive practices in the urban community [11]. The formation and transformation of urban spaces is ongoing and has some kind of problematic character [12, 13]. In sociological studies of the architectonic of modern cities such current trends as the loss of organic solidarity, disunity, and blurred social identity of citizens are noted. Modern urban planning is determined by a number of financial, political, aesthetic, pragmatic functions and intentions. And a much smaller role is played by the tasks of creating a comfortable, open, accessible for perception living environment. The processes of development and appropriation of the city by its inhabitants make it possible to make spaces comfortable for the society, filled with social interaction and activities. In these conditions public spaces become a key guide of communication and information exchange [14]. The tendencies indicated above are reflected in the processes of development and diversification of public spaces by continuous changes and complications of their internal organizational structure. The most complex and dynamic elements
of the city’s open space system are communicative spaces: shopping and entertainment centers, malls, “forums”, complex crossings, open vestibules, elements of large transport complexes, avanspaces of cultural objects, public gardens, and central squares. Their socio-communicative function combines such different in form and content objects that go beyond the strictly limited typology.

The current state of the urban planning of Volgograd combines the heritage of the city of the Soviet era with qualitatively new objects of the urban environment with socio-communicative content. In the conditions of a spontaneous economic market, “fast” shopping centers, objects built for the World Cup (2018), the much-needed and overdue transformations of the Central Embankment and separated landscaped areas appeared. The relevance of the research topic is determined by the need of evaluation of the compliance of these objects to the needs of modern citizens in open socio-communicative spaces.

2. The social aspect. Experience review

Under the communicative space should be understood the forms and methods of organizing the internal and external space of the urban environment, reflecting certain norms of consciousness of social structures and rules of behavior in society, modern ideas and needs for organizing the social communication. At the same time, the communicative spaces of the city reflect current social needs and the current level of public consciousness.

Investigations of the space of relations regarding the ways and means by which people in cities connect (or do not connect) between themselves and the urban environment through symbolic, technological and material means. J. Aiello and S. Tosoni identify three most relevant directions of urban communication researches: the city as the media, the city as the message (content), the city as the context of communication [15]. When studying the city as a context of communication, the attention of researchers is focused on the media practices presented in the city. The city as a message is viewed from the position of information about the city and its life (political, economic, cultural, social), which is directly owned by the inhabitants who produce it. Studies of the visual urban environment, smells, sounds paint a picture of the city as a complex media.

L. Valle distinguishes three types of social communications in an urbanized environment: communication through cities, communication about the city, communication in the city [16]. The first type determines how the citizen perceives and identifies the city, himself and others through it - this is intrapersonal communication in the city. The second type involves the formation of the image of the city in the media - urban media communications. The third focuses on how people interact with each other within the city - interpersonal and group urban communications. In studies of the promotion and revitalization of urban spaces T. Gibson and M. Laws focus on the following aspects: the production of urban communications - specific practices for the formation of urban images and meanings; in the broad sense of the media text of a city; in the context - urban narrative in everyday practices of urban communications [17].

Researches by scientists from the Urban Communication Foundation are devoted to the elaboration and development of the scientific-applied concept of the "communication cities". The Fund’s attention is focused on the communication environment of the city, which includes three groups of elements: places for interactions, interaction infrastructure, legislative and political regulation of communication [18]. In this way, communicative studies of urban space have interdisciplinary character, not limited by a rigid methodology. They are implemented at the intersection of sociology, philosophy, technical sciences, management, architecture and urban design. To date, a large amount of urban communications research has been accumulated in world practice. At the same time, the question considering the individual elements of urban communications in their continuous relationship remains open, that is the development of an integrated socially-oriented approach to the urban communication space, taking into account the individual logic of each city. A need for the formation of an interdisciplinary model of urban social communication appears, a meta-model with a flexible structure and individual features of a separate urban space. This problem is especially urgent today in Russia, where the transformation of urban centers is one of the main political and economic trends. And, unfortunately, the fact that the city is a vital world for a person is not always taken into account.
3. The typology of open communication spaces
The typologization of modern open communication spaces can be carried out on various grounds. They can be short- and long-term use, have open or closed character, be organized and spontaneous. The following types are distinguished within the framework of the functional approach [19]: 1) Functional and recreational spaces (galleries, parks, recreation centers and boarding houses, hotels, catering establishments); 2) Sports spaces (sports, fitness buildings and objects, sports complexes, playgrounds); 3) Educational spaces (museums, libraries, historical, architectural and natural monuments, ethnographic objects, centers of excellence and crafts); 4) Entertaining spaces (squares, transition zones, theaters, concert halls, cinemas, attraction zones).

In the conditions of the transformation of the modern city, its public spaces have become an integral socio-cultural unit that provides wide opportunities to choose leisure, life and culture institutions to fulfill the needs of all categories of citizens. Art halls for exhibitions of photographers-beginners, anti-cafes that create a cozy home atmosphere, or other “non-standard” places where people get a charge of positive emotions, feel more free and relaxed, have the opportunity to create or choose a hobby circle, are gaining more and more popularity. The city is forced to adapt to the pace of life and the interests of various social groups. In 20 years the city park from a place of solitude has turned into a center for a diversity of recreation types, personification of the unity of diverse urban communities. So, in the Central Gorky Park in Moscow there are dance venues for older people, a club of jazz and orchestra music lovers, bike, segways, scooters and roller skates rental for young people, multimedia venues.

4. Perspective directions of the formation of the communicative spaces of the city
One of the directions of the formation of a flexible socio-cultural urban environment at present time is a “cultural zoning”, which involves the allocation of quarters and districts that are special in terms of the cultural specificity and differ in the level of cultural activity and in the suitable organization of urban space [20].

Large spaces in front of major trading objects have a certain potential. At the moment, almost in front of each of the shopping and entertainment complexes of Volgograd, local spaces with a predominance of artificial (or closed) objects and pedestrian spaces are organized: SEC Aquarelle, SEC Park House.

The next type is spaces that are dependent on architectural objects and, due to their insignificant spatial dimensions, do not have the potential for the self-development into a complex spatial structure. For this type, it is advisable to create local recreation islands, shielding them by the landscape design from traffic, organization and more efficient use of space by highlighting "green pockets". It is possible to use a transformable environment depending on seasonality, time of the day, eventuality (holiday events), taking into account the climatic features of Volgograd city to create wind and shadow comfort.

Perspective directions of the organization of communicative spaces are the use of lighting visual structures that add contouring, plasticity, dynamism, flowing, capacity and depth to the space, and the use of the potential of the urban underground spaces (parking lots, underground passages) as unique static and dynamic structures for intersecting traffic flows of people and vehicles communications.

The methods of modeling the communicative spaces are plastic and adaptive to the changes in the social layers of the most active citizens - the “consumers” of the benefits of a modern city. The basic categories of a system of communicative spaces are conceptual, and in the design aspect they require specific means of spatial implementation. The modern "informational era" leads to the development of new spatial and visual communication tools that create visual effects of transforming an open-type communicative space into a space that is perceived as closed, limited, and vice versa. A sharp increase in the importance of the information component in modern society has seriously affected all spheres of life, including the design of the urban environment, and has become an instrument of semantic and decorative transformation of space.

5. The designing scenarios of the communicative spaces
The development of urban communicative spaces should be based on the use of modern information and communication tools and scenario approaches to their designing, allowing mobile organization of
communication spaces, taking into account socio-cultural trends in the development of society. To date, compositional and lighting techniques are the carriers of visual communication and information. The compositional logic of the development of space allows setting imaginative characteristics, navigating in an unfamiliar environment. The following scenarios can be distinguished in the design of communicative spaces of the urban environment:

- light score scenario (light scenario) - is implemented by placing light sources and control points for these sources, which allows adjusting the levels of brightness, emotional and functional effects;
- coloristic scenario - more dynamic one, implemented at the level of architecture through the use of colored light technologies, temporary decor elements and equipment, projections;
- acoustic scenario - is implemented on the basis of the architectural component, the decoration materials, and the process component (musical composition in space), taking into account its central and peripheral parts, correspondence to the place, time and activity (“singing fountains”, acoustic galleries);
- plastic scenario - involves the use of architectural means (structural elements of the floor, paving, directions of the laying of tile structures), spatial special effects and spatial extension that organize the character of the movement of people’s flow (quickly, slowly, “glide” over the surface or vice versa - walk cautiously and uncertainly afraid to stumble);
- informational scenario - is carried out by the placement and concentration of “reference points” and “access points” in the space, fixed by constructive, coloristic, architectural and decorative techniques, means of decorative art and informational designing elements;
- scenario of transformations - includes transforming, mobile elements of equipment, covers, draperies, "costume" elements in the interior of the space.

Also, “active” scenarios stand out in the designing of modern communication spaces:

- scenarios of “points of attraction” and “mise-en-scenes” - are drawn through the use of expressive forms in space, color, light, acoustic accents and information dominants;
- the scenario of "holidays" and "everyday life" - is implemented by lighting and acoustic solutions, accent placement, information support, transforming equipment and elements, has functional varieties: servicing, recreational, commercial, transporting, the concept of the "street cafe";
- “daytime” and “nighttime” scenarios - a dynamic solution designed through the transformation of “mise-en-scenes” and “points of attraction” in space in the light and dark time of the day;
- functional scenarios - associated with complex technological processes that permanently or constantly occur in the interior of an urban environment (a stable scenario of movement in the underground metro or a permanent scenario - a city concert);
- communication scenario - provides communication between the individual elements of communicative spaces: includes architectural means (corridors, passages, galleries, stairs), mechanical means (escalators, elevators, travelators), entrance groups, light elements of communicative connections, places for free communication, informational communications (telephones, Internet terminals).

Scenarios of the fairs, festivals, business and trade forums on city spaces should be included in a separate group of communication space designing tools. Today, the development of “flat” open trade spaces, that have an advantage over shopping centers and malls, is more perspective. As an example, it could be given the reconstruction and development of the territory of Tsaritsyn's Bazarnaya Square (currently it is the square in front of the Central Volgograd Market). The specifics of designing such communicative spaces consists in a sufficient part of improvisation: the organization of a commercial and communicative area provides the installation of standard pavilions designed by tenants in a freely chosen style and concept (street cafe, Asian cuisine cafe), and on weekends mobile constructions allow to organize fair events and food court, street food festival.
6. Conclusion
This way, the above system of scenarios for designing communicative spaces in a city in addition to visual means involves the use of scenographic methods, which are based on directing, and the main environment-forming components are special equipment and visual and communication technologies for organizing and designing communicative spaces. On the basis of "active" scenarios, various forms of activity of citizens are organized (viewing street shows, fairs, dance groups, consumption of goods and services, catering products, communication) in accordance with the needs.

Based on the foregoing, it can be concluded that the design technique of communicative spaces is not strictly formalized, with toughly regulated design stages, but represents a hypertext - a visual interpretation of the main project strategy and its filling in the form of blocks, where the elements are not presented in a linear sequence, but are a system of graphs, transitions and logical connections filling the space. This approach allows providing freedom of creativity in the design and visualization of the communicative spaces from the point of view of maximum consideration of technical and technological requirements, social standards and regulation of the architectural environment. At the same time, the areas of application the designing of the communicative space can be expanded and refined, be “returned” to the site at different stages of project analysis.

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