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FACILITIES OF CITY DESIGN: SMALL ARCHITECTURAL FORMS

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Abstract. The background and basic functional principles of the means of urban design forming have been considered in the article.

Key words: urban design, city environment, outdoor furniture, visual communication.

1. Introduction

The line of planning and design in the improvement of environment is caused by the need to develop and systematize the elements that form a comfortable city design, on the basis of humanization.Unfortunately, the underlying factors of influence on a citydesignforming are absentin most cities of Ukraine. Therefore, the main means of urban designhave been defineddue to the successful examples and investigations.

1.1. The purpose of the article – high lighting the means of urban designforming and the factors that influence its creation as well.

1.2. Analysis of researches and projects

N. V. Anisimova [3], V. T. Shimko [6] A. I. Urbach [4] and otherconsidered the factors of urban design. Some theories of the city design can be found in these works, but they don't contain thereasonable conclusions about the measures that affect the formation of convenient citydesign.

2. Basic Theory Part

Small and large architectural forms are considered to be the main elements of a comfortable city design formation. Historically, the first notion that appeared in the realm of the architectural formwas the one which interpreted the elements of street furniture and equipment, as the individual details of architectural spaces of the city. But later, theorganization highly comfortable urban environment through individual architectural compositions and works appeared to be impossible. So, the idea of integrated approach to urban designformingarose in the big cities. In the most of big cities with wide-ranging building process administration developed the comprehensive programs of the public areas improvement. The implementation of these programs includes using the modern small and large architectural forms of high-quality and other elements of a comprehensive improvement in the design and implementation of the boldest design projects of urban environment (Fig. 1).

Outdoor furniture and equipment, signs and advertising, retail storefronts, "super-graphics" facades and road surfaces, sculptural shapes, pictures and other objects of monumental and decorative art and urban design, being a subject-saturating factor of the cityenvironment and forming a, so-called, "urban orchestra", are becoming an integral component of the spatial environment of a modern city, defining the conditions of comfort and convenience, figurative art quality, having a significant and, sometimes, critical influence on the impression of perception, on the formation of not only separate and specific architectural ensembleimage, but of a city as a whole (Fig. 2).

In the 1960-70sthe architects, dealing withthe improvement of urban areas began to use the term "a small architectural form", which defined the elements of a, so-called, subject cityfilling. The notion "a small architectural form" traces its roots back to an architectural ensemble. Designing a palace the past masters worked on all the project details from the facades and interiors up to the form the door handle, as well as adjacent park, including the project of garden house and bridge over the pond. Later, this "ensembleprinciple" was used in the Soviet architecture of the, so-called, "Stalin classicism" epoch. According to this principle, the benches, street lamps, vases, sculptures and othersubject forms were the constituent elements of an overall composition and the stylistics of an architectural ensemble. They are presented to a viewer as the facade decoration details, hence the term "small architectural forms" with a lot of decorations in the form of ornaments, moulding and warrants. Completed, as a rule, of the same materials asthe architectural facades, and, therefore, usually massive and heavy, they, together with the objects form a single art-style complex, that is, an architectural ensemble [1, p. 24].



Fig. 1. Architectural forms at "NewCulturalCentre", 2011. Architect: "FÜNDC". Madrid, Spain [7]

Facilities of city design: small architectural forms

In the second half of the twentieth century, due to the development of industrial design, the situation in the realm of the objective urban spacesfilling began to change radically. Instead of veneer boardwalk kiosks and telephone booths "artisanal" the industrial production forms of telephone boxes, vending machines and multifunctional space moduleswere introduced using the latest, at that time, materials and technologies, and in consequence of it the archaic small architectural forms were replaced by modern outdoor furniture and equipment. That is whya patio furniture became less massive and heavy. This was due to the properties of the new forms of subject as mobility and variability. At that, the design of industrial objective forms didn't contradict the principle of architectural ensemble, but in case of a successful design promoted the composition, stylistic and semanticpreservation of a spatial ensemble holistic structure, itsreinforcement, and, sometimes, allowed to form it anew. A brilliant example a pedestrian streets design can be historic center of many European cities (1970–1980 s), where thestreet furniture and elements of visual communication together with a coloristic decision and landscaping improvement formed an original street style (corporate identity) as a unique spatial ensemble worthremembering. This became a revolutionary moment in the history of the management of city object-spatial environment.



Fig. 2. Design SpaceCity waterfront, 2008. Architect: ConsortiumDaoustLestage + WilliamsAsselinAckaoui. Quebec, Canada [8]

At this time, the architects give the definition of "visual communication" as a system of visual signs and graphic solutions. It has the task to solve the problem of orientation, regulation of human behavior in specific subject-spatial situations, providing a necessary light comfort and emotional mood in the environment. Visual communications include advertising, information boards, pictography, super graphics, font combinations, color zoning system, etc.So, the design of visual communications is emphasized be at the turn of an industrial, graphic and environmental design [2, p. 25].

Visual communication of a city objective spatial environment organization solves the following problems of the urban environment:

- Improving human orientation in urban spatial structure of complex urban planning formations and thus providing human a psychological comfort of a human stay in an urban environment;
- Overcoming a language barrier in the large international community centers using a universal language of graphic icons;
- Forminga clear functional and spatial structure [3].
- Thus, during the organization of city spatial environment a certain synthesis of the design and urban planningtools was taking place. The facade architecture of the twentieth century was significantly impacted by the graphics and substantive industrial design as well. Moreover, this effect manifested itself in the two aspects:
- the methodology of architectural formation;
- art and composition solution of the urban facadesarchitecture

The wide spread of new forms of substantive content of the spatial environment of the city, that is, sustainable outdoor furniture and equipment, and the use of composite design techniques have led to the fact that urban design objects were used as a kind of architectural detail of the city facadearchitecture. Various technical devices – the industrial design objects as well as the items of street furniture and visual communication are considered to be such details.

If technical progress and spreadofa functional style in architectural forming led to the synthesis of industrial design and architecture, which is manifested in the use of technical devices – a product of industrial design, architectural facades in the composition of urban development, the popularity of architecture design method of "corporate identity" and "ensemblity "as a guiding principle of architectural design would lead to the use of elements and forms of outdoor furniture on the facades of buildings – a kind of synthesis of architecture design of the urban environment. It began to manifest itself in 1960 in the process of pedestrian streets and urban centerareas management. In particular, in the nomenclature of the street lamps there appeared the onesintended for being installed on the facades. As a rule, they were designed in a "brand" stylelike the street stand lamps. Attached shop windowsthat together with remote storefronts and kioskscreated the unique multiobjective set – ensembleappeared in the pedestrian streets [4, p. 5].

Just the pedestrian streetshave established the qualitative criteria of a comfort perception of the urban environment, having become a kind of ideal urban space in 1960–1970's, which shouldn't be lower than the interior at its level. The outdoor furniture and equipmentseemed to be kind of interior space and pedestrian streets of the city and its substantive content. The phenomenon of pedestrian streets can be considered to be the first prototype of a modern "high-quality, comfortable space" of the city, built according to the principles of ergonomics and technical saturation.

In the late 1970's – early 1980's the projects of artistic and monumental decoration of the cities began to spread in theSoviet Union. Their authors understood the artistic and monumental decoration of the city as solvingthe complex of issues aimed at improving the ideological and political, architectural and artistic as well as functional and utilitarian content of spatial environment using a wide arsenal of tools of monumental and decorative art, architecture, landscaping and urban design [5]. According to the works of E.Shimko and M. Volkovit is necessary one should adhere to the following fundamental tenets of Urban Design to achieve a similar effect:

- The objects of the monumental architecture and decoration tools should create a single set of mutually complementing each other in spatial components of the city, forming a multi-level ideological and artistic as well as spatial system. Thus, all the issues of design and implementation of urban design elements should be considered on the basis of the place and role within the system.

- The organization of such single complexes depends on ageneral urban setting and the nature of city fragments that include them. At that, the objects of the monumental architecture and decoration tools perform not only the ideological and artistic, utilitarian and decorative functions, but they can substantially correct the architectural and aesthetic quality of urban environmentdue to their spatial characteristics (Fig. 3).
- The system of monumental architecture objects and decoration of cities should be considered in the process of its development not as separated, that is, in direct connection with the development of the city as a whole and its individual elements; its formation should promote the emergence of artistic and compositionally completed urban ensembles at all stages of city development [6].



Fig. 3. Social rehabilitation of depressed regions in the project "Superkilen", 2012. Architect: Topotek 1 + BIG Architects + Superflex. Copenhagen, Denmark [9]

3. Result and Discussion

Urban design from a professional point of view should be considered as art design synthesis of architecture and urban planning. This synthesis is the organization of subject-spatial environment of the city at different levels – from the individual forms of subject filling the urban environment that creates an environment of architectural objects to the level of these spatial structures management and the city as a whole.

The design of the city as an independent design and artistic activity emerged in the second half of the twentieth century. It has a separate object of project activity and the arsenal of the research and design methods. At that, the architecture and urban design drew on such methods and features as ensemble character of general approach, the aspiration to unique solution of the composition, imagery and artistic expression. Urban Design includes the development of all components of the city, such as buildings, public spaces, streets, transportation and a landscape as well.

References

- Minervin G. B., Simko V. T., Efimov A. V. i dr. Duzajn. Illustrirovannyj slovar-spravochnik / Pod obschej redakciej G. B. Minervina i V. T. Simko, Arhitektura-S, Moskva, 2004.
- [2] The same.
- [3] Anisimov N., Prikhodko G. Y. Kulturolohycheskuy analysis organization predmet no prostranstvennoj sredy goroda: Voprosy kulturolohyy, 2012, No. 4, 66–70.
- [4] Urbah A. I., Lin M. T. Arhitektura gorodskih peshehodnyh prostranstv, Strojizdat, Moskva, 1990.
- [5] Mihajlov S. M., Grigorev O. D. Proektirovanie kompleksnogo hudozestvennogo i monumentalno dekorativnogo oformlenia krupnogo goroda: "Sovremen. sostoan. i tendencii razvitia bolsih gorodov v SSSR i za rubezom", MGCNTI, Moskva, 1987.
- [6] Simko V. T., Volkov M. M. Realizacia idej monumentalnoj propagandy v gradostroitelnom proektirovanii: Ucebnoe posobie, Izdatelstvo MARHI, Moskva, 1983.
- [7] New Cultural Centre by Fündc [Electronic resource]. Mode of access: http://www.archdaily.com.
- [8] Promenade Samuel-de Champlain/ Consortium Daoust Lestage + Williams Asselin Ackaoui+Option aménagement [Electronic resource]. – Mode of access: http://www.archdaily.com.
- [9] Superkilen Topotek 1+BIG+Superflex [Electronic resource]. Mode of access: http://www.archdaily.com.

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ЗАСОБИ МІСЬКОГО ДИЗАЙНУ: МАЛІ АРХІТЕКТУРНІ ФОРМИ

Анотація. Розглянуто передумови і основні функціональні засади засобів, за допомогою яких формується міський дизайн.

Ключові слова: міський дизайн, середовище міста, вуличні меблі, візуальна комунікація.