

However as a result of the conducted research was supplemented with construction of dots and line segments on the picture plane perspective itself in such a way how they are seen by the observer.

It allows to demonstrate the connection between what is depicted in perspective and the mechanism of obtaining the image itself in the maximal understandable form.

As far as analysis of the training works performed by students shows, such a supplement significantly improves efficiency of comprehending of one of the key topic of the course.

Conclusion. Hereby the studying process of graphic disciplines requires the teacher to permanently search the most demonstrative and effective learning tools. Wherein according to the educational standard of the speciality it's mandatory to follow structure and content of disciplines, successful mastering of which is required for future art teachers in there further learning and professional activity.

1. Alchimeonok, A.A. Perspective: workbook for students of day and correspondence forms of education art-graphic faculty in the field of: 1-03 01 03 "Fine arts and computer graphics"; 1-03 01 06 "Fine arts, drawing and folk crafts" / A.A. Alchimeonok. – Vitebsk, VSU named after P. M. Masherov, 2016. – 59 p.
2. Perspective: Typical curriculum for the discipline for specialties: 1-03 01 03 "Fine arts and computer graphics"; 1-03 01 06 "Fine arts, drawing and folk crafts": TD-A. 536 / type. – Approval date 04.02.2015. – Minsk: Ministry of education of the Republic of Belarus: Educational and methodical Association for pedagogical education, 2015. – 11 p.

ANALYSIS OF A TRANSPORT STOP DESIGNED IN THE FRAMEWORK OF THE INTENSIVE "UNOVIS. NEW UTOPIA"

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The synthetic nature of the formation of the transport environment relates it to special, medium forms of design, which in all cases affect almost all sectors of society, secondly, the design and means of all types of design are the same in a single object - environmental, industrial, graphic (corporate identity), and also the same landscape, engineering and architectural [1].

Transport stop is an integral part of the daily life of citizens, performing a lot of functions. The appearance of the stop is an aesthetic and functional accent of the urban environment, which determines the urgency of designing a harmonious and ergonomic stop.

The purpose of the study is to analyze the design of the stop being developed as part of the "Unovis. New Utopia."

Material and methods. The study is based on the analysis of educational projects of students of VSU named after P.M. Masherov specialty "Design", as

well as materials published in scientific and specialized literature. The main research methods are systematic approach to the research problem, comparative analysis and synthesis.

Findings and their discussion. The first stage of design work, that has the aim of transforming the problem into the principles of its solution, is a pre-project analysis. During the pre-project analysis, factors were studied that affect the ergonomic and functional design of stops. Depending on their location (urban-type settlement or regional city), they can be differ in capacities, differ in design, and made of different materials. At this stop come such modes of transport as buses, minibuses, trolleybuses. People can spend various times at stops from 1–2 to 25–30 minutes, waiting their transport. The climate of Belarus is temperate continental, which implies the presence of heavy rainfall, and wind, and the scorching sun. Bearing in mind the changing weather conditions, it is important to apply various methods of protection from the weather.

It is also important to consider the specifics of stop users and their goals. As the stop taken for improvement is located near the station, the majority of users are visitors from other cities and towns, guests from other countries. Therefore, it is necessary to keep in mind the linguistic and psychological aspect. A new unfamiliar place can cause stress and impede adaptation and spatial orientation.

In the course of the work, a survey of local residents was conducted in order to study the current state of existing models of stops through a survey. As a result of the interview, the following facts became known. The main complaints are the lack of a good opaque roof and walls, which will protect against bad weather conditions while waiting for transport. It was pointed out that the benches were not comfortable for sitting enough, due to the lack of a backrest for the seats and taking into account people different in constitution. And also not ergonomic placement of the electronic schedule is noticed, which is located too high.

Keeping in mind these shortcomings, the wishes and portability of users include an opaque roof, large side walls, comfortable benches with a backrest suitable for both short and tall people, an electronic schedule at eye level.

Based on the pre-project analysis, the concept of stop was developed that taking into account the opinion and needs of people and modern technologies. At the heart of a figurative solution are the ideas of Suprematism. The stop, made in the style of minimalism, has simple concise forms, light colors. Orange was used as an accent color, as a color symbolizing continuous movement, as well as shades of orange are an excellent antidepressant.

The main functional and technological moment was the integration of an electronic tablet, in which a city map, timetable and arrival time of the transport, route and weather forecast for the next hour were placed simply and conveniently for use. The aesthetic solution of the tablet fits harmoniously into the plastic of the stop, being a constructive and semantic dominant of the stop complex.

A bench back was also added that meets the wishes of residents, made of practical material in accordance with aesthetic requirements.

It was decided to add a second side wall to protect against rain and wind. But in order not to disturb, not to burden the image of a light, dynamic form, the side wall was made of plexiglass.

Conclusion. The result of this work was the “STOP” project, which took into account the shortcomings of existing stops, wishes of users, and based on the principles of ergonomic and functional design, an aesthetically attractive and multi-functional stop was developed.

1. Minervin G. B. Design.Illustrated Glossary / G. B. Minervin, V. T. Shimko, A. V. Ephimov: by G. B. Minervin, V. T. Shimko. – M.: Architecture-C, 2004. – 288 c.: ill.

FIGURATIVE FORMS IN ARCHITECTURAL BIONICS

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Tracing the entire history of human development, we see that man changed externally and internally, and as far as possible went from the origins of wildlife, changing the natural habitat to artificial. Considering himself a Creator, he is fenced off from the environment by all sorts of buildings, erects walls of concrete, designs high-rises and glass skyscrapers. But no matter how hard man tried, in the construction, he still had to take as a basis natural structures and forms.

“Bionics is the science of using knowledge about structures and forms, principles and technological processes of wildlife in engineering and construction” [1].

One of the branches of bionics is architectural bionics – it is a kind of innovative style that takes all the best from nature: forms, contours, structure, relief, explores the principles of shapes, as well as the interaction of architecture and the world around us.

On the basis of examples of various forms and formations of architecture and analysis of the use of the structure of natural material, it is necessary to investigate biological systems and underlying principles, as well as to check whether such solutions can be applied in the creation of architectural structures.

The purpose of this study is to determine the typology of the formation of the main natural forms used in architecture.

Material and methods. The source of the actual material for this study was the structure of famous architects from around the world, which were used in the creation of natural forms. Basically, the research method is descriptive based on the analysis and observation.

Findings and their discussion. Architectural bionics does not involve the complete copying of forms, but only the use of the principles and laws of formation in nature. Researchers A. Guillot and J. Meyer distinguish the following natural forms:

- cone-shaped designs;