

**FEATURES OF THE FORMATION OF ENVIRONMENTAL
EDUCATION AND ENTERTAINMENT COMPLEX BASED
PLANETARIUM**

Abstract. The article deals with the issue of environmental educational and entertainment complex which is taken as a basis for a planetarium. The study was conducted on an analysis of prototypes and studies state standards developments relevant character. Powered suggestions for improving some aspects of the formation the space of Kyiv Republican planetarium. Discovered the features of the formation environment of educational and entertainment complex at the planetarium.

Keywords: educational and entertainment complex, space, ergonomics, aesthetics, design, lighting, technology, reconstruction.

Statement of the problem . Scientific and technological changes taking place nationally in the context of general civilizational transformations caused by a wide spread of new educational technologies based on the use of modern training equipment capabilities and significant expansion opportunities and needs of an individual , personal development [4]. There is a need to restructure space in all public educational institutions of nature , its focus on personal development in terms of the introduction of the latest entertainment technologies in the design environment.

This is the impetus for the creation of conditions for solving the problems of information perception in schools such as the planetarium , which leads to reorganization of space in more appropriate , deepening into the vortex of knowledge and enjoyment of science activities.

Analysis of recent research and publications. The latest research on this topic should be noted publications distributed at the event , which is annually held international conference union association planetarium International Planetarium Society Conference, which discussed to improve the work and organization of spatial data room facilities. In particular, last year, she had presented a report on

changes in the principle of building interiors research facilities with entertainment area of study. The author spoke PhD in the design of public institutions Ralph Landua .

Unfortunately, the domestic space in this issue deals with a small number of scientists and yet there are no obvious examples of works on the subject.

The wording of Article goals . Explore principles of formation of space systems based planetarium aimed at education and entertainment. Identify ergonomic shortcomings and suggest your own design solution of the Kiev Planetarium .

The main part. Traditional theatrical performances during this period are opposed not only new types of mass action, which are of political and propaganda nature , but also the spectacle , pursuing research and educational purposes. As a "scientific spectacle " is considered a planetarium [2].

Yes, the theater of the culture ministry goes to serve science. In this theater of man , armed with devices that extend her sense of perception, seeing the complex mechanics of the movement of the heavenly bodies , which helps her to forge a scientific outlook.

State building design standards systems based planetarium :

- territory building complex must zonirovat , dividing it into a major astronomical , economic and, therefore, the prospect of the complex - back area;
- in the central (core) zone located main building complexes planetarium ;
- in the area Astronomical Observatory freestanding complex astronomical site with models, mock-ups and devices to demonstrate ;
- economic zone located in : film library building , warehouse equipment, and raw materials for training workshops, models and mock-ups ;
- reserve zone is assumed for possible expansion of the complex ;
- systems in areas and buildings should include planetariums unloading pad in front of the building and around it ;
- the principal's office and mechanics must have a direct connection with

vestybyulnoyu group.

Organizing educational and entertaining process in astronomy , you must use a variety of techniques including visual (use of devices and models, audiovisual training) and practical exercises (exercises , observation) . The practical part of the program is mandatory and an integral component.

Thus , the system of credit astronomy education is a key element in the establishment and maintenance of educational and entertaining environment. Learning environment is defined as an artificially constructed system , the structure and composition of which is the attainment of the cognitive process.

For the purpose , content and selected technology education and entertainment, material objects that form of credit astronomy study , can provide an environment to design real-world objects and processes of the objective world or their artificial model prints that help to plunge into the maelstrom real emotions. In the latter case, the learning tools of astronomy forming material of flexible simulation environment for the modeling and display of certain situations , objects and processes [2].

The following analyzes several examples to illustrate exploring facilities given directly, which would be more immersed in the essence of the problem.

Hayden Planetarium (Fig. 1), is considered the best educational and entertainment complex modernity. He won in the category "Best Design 2000" by the magazine Time. The planetarium is a huge sphere placed in an even more huge glass cube . Inside the planetarium theater is located at 432 odd place where viewers can make a virtual space travel .



Fig. 1, Hayden Planetarium, the project

Another example of educational and entertainment complex is a newly renovated Moscow Planetarium (Fig. 2). During the renovation, the building area has been increased by 6 times , which greatly expanded the space for the imagination of visitors. Indeed , the room is striking in its ambitious space futuristic setting. Analyzing the formation environment of the planetarium , you will notice a good combination of its entertainment and educational sides. The complex includes a domed hall , 4d cinema , museum exhibits, experimental and entertainment area and a cafe.

But there are disadvantages , due to the fact that the complex has recently returned to work , there is a problem with the large influx of visitors, causing crowding in the narrow aisles and around the exhibits.

Московский планетарий открывается

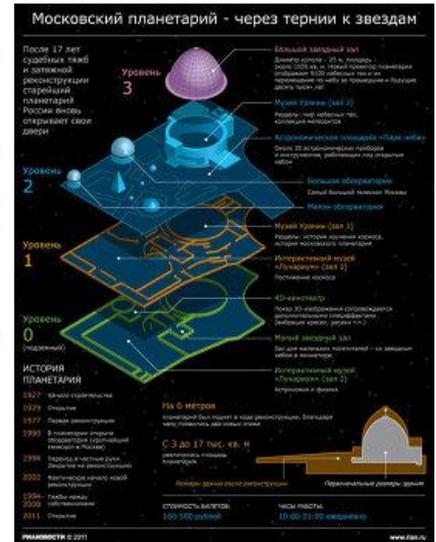
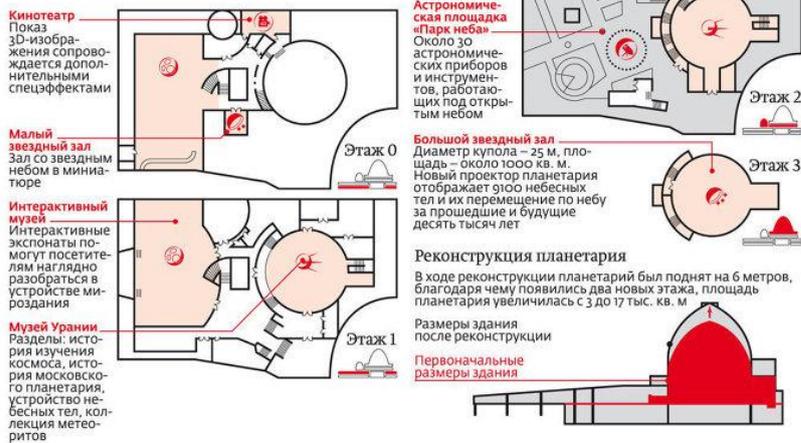


Fig. 2 Plan and zoning Moscow Planetarium

In the hall of Kyiv Republican planetarium was also reconstructed (Fig. 3). Given these changes, a survey was conducted among visitors updated planetarium.

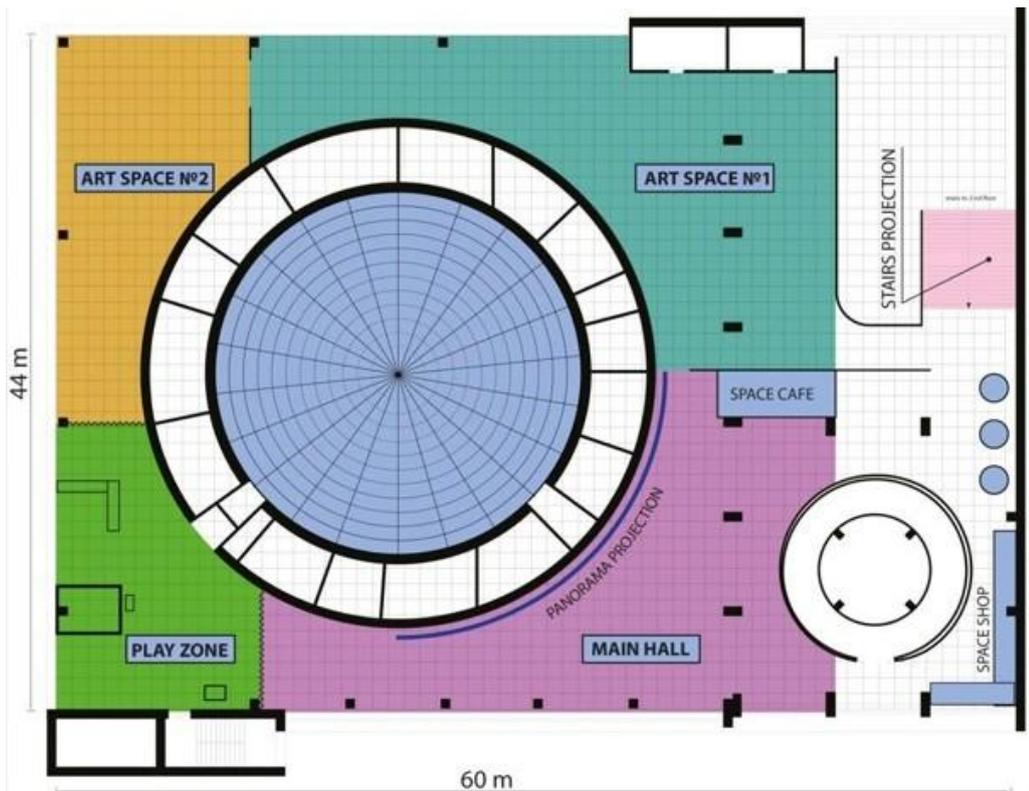


Fig. 3 present the formation of space Kiev Planetarium

The study revealed a number of shortcomings that affect the overall impression

- entrance lobby of the planetarium dull and does not call to visit the

complex, which reduces the flow of people . The aesthetic appearance of the entrance spoils advertising, which remained on the facade of buildings since the holding of trade fairs in it ;

- materials used in the reconstruction of short-lived and quickly lose their shape ;
- room lighting is too dim and detrimental effect on vision. Windows that face the street , sealed and do not let the sunlight , thereby significantly reducing the interior space ;
- dome chair in the room is not comfortable, which leads to a distortion of posture, especially in children who often visit all facilities of this nature ;
- door to the dome of the hall alone, which is unacceptable given by the rules of fire safety and ergonomic standards;

In view of the existing problems , it is suggested to pay attention to proposals to improve the perception of educational and entertainment complex and partial pereoblashtuvannya it as of mid- and outside :

- input group must meet the basic ideas of the institution, therefore, proposed to stylize it under a set of stars of the Milky Way , which is supposed to envelop the entrance to the planetarium crescent ;
- materials should be used in the reconstruction wear , as an establishment that has a high number of visitors , undergoes rapid loss problems of appearance. Covering the walls and floors, respectively , have been adapted for cleaning and should not leave for signs of sloppy human activity;
- a dark room as a center of Kiev Planetarium , should illuminate through both covert and open lighting. And because the institution is directly related to the stars , you can use light-emitting diode technology , " Sky ", which is made to the interior atmosphere of the night and galactic depth [3];
- seat domed hall should be designed in accordance with ergonomic requirements to be moving back and provide reclining torso of man. It is

also proposed to create a zone , which would allow visitors to lie down on comfy cushions and watch the star of the action on the screen;

- passage to the dome of the hall should be expanded . It is also proposed to create a partition in the middle , which would split the flow of people and reduced the crush .

Conclusions. The analysis led to the identification of features forming environment of educational and entertainment complex at different levels: three-dimensional , planning (functional zoning), the conceptual interior design (building a game scenario, technical content , ergonomic shaping and decorating).

Feature shaping space planetarium is that it must be infinite in knowledge for visitors of different age groups , to open up new opportunities in teaching , enhancing understanding of the universe and our place in it.

Developing and saturating the space with new trends transformation , the planetarium will be interesting environment for children. The elements of play in interior design will allow to easily perceive and remember new information. The increasing complexity of technical features of design objects , will improve ergonomics , creating a more comfortable and convenient environment.

Prospects for further research. Based on the identified features of the formation environment of educational and entertainment complexes, may rethink the design concept of the interior of Kiev and other planetariums.

It is also necessary the study of environment and development planetarium environment improvement options, namely the creation of open educational space.

Literature

1. *А.П. Александрова.* Проблема круга и шара. // Зодчество, 1998. № 11-12, С. 203-207.
2. *Новикова Е.Б.* Интерьер общественных зданий, художественные проблемы / Е.Б. Новикова.- М.: Стройиздат, 1984.- 272 с.
3. *Назаров Ю.В.* Из истории светового дизайна / Ю. В. Назаров. - М.: Светотехника, 2001.

4. Педагогічні технології у неперервній професійній освіті: Монографія / С.О. Сисоєва, А.М. Алексюк, П.М. Воловик, О.І. Кульчицька, Л.Є. Сігаєва, Я.В. Цехмістер та ін.; За ред. С.О. Сисоєвої. – К.: Наук. світ, 2001. – 319 с.

5. Сильвия Лотт. Эффекты освещения: яркость - не единственный фактор, определяющий восприятие света //BuIthamp magazine. - 2005, №1. - С. 11-15.

Анотація.

Гнатюк Л.Р., Гузь О.І., Гупаловская С.Б. Особенности формирования среды навчально-розважального комплекса на базі планетарія. У статті розглянуті питання організації середовища навчально-розважального комплексу за основу якого взято планетарій. Дослідження проведено на основі аналізу прототипів та вивченні державних стандартів забудов відповідного характеру. Приведено пропозиції щодо поліпшення деяких аспектів формування простору Київського республіканського планетарію. Виявлено особливості формування середовища навчально-розважального комплексу на базі планетарію.

Ключові слова: навчально-розважальний комплекс, простір, ергономіка, естетика, дизайн, освітлення, технології, реконструкція.

Аннотация

Гнатюк Л.Р., Гузь О.И., Гупаловская С.Б. Особенности формирования среды учебно-развлекательного комплекса на базе планетария. В статье рассмотрены вопросы организации среды учебно-развлекательного комплекса за основу которого взято планетарий. Исследование проведено на основе анализа прототипов и изучении государственных стандартов застроек соответствующего характера. Приведены предложения по улучшению некоторых аспектов формирования пространства Киевского республиканского планетария. Выявлены особенности формирования среды учебно-развлекательного комплекса на базе планетария.

Ключевые слова: учебно-развлекательный комплекс, пространство, эргономика, эстетика, дизайн, освещение, технологии, реконструкция.