

UDC 316

## Cultural aspects of interaction between science and society: the example of natural science museums

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### Abstract

The article shows that museums perform an educational function, providing an opportunity for learning and popularizing science. They host exhibitions, lectures, tours and other events that help people understand science and its importance. In addition, science museums preserve collections, artifacts, and research that are of historical and scientific significance. They also conduct their own research and preserve the results for future generations. No less significant is the fact that science museums are places for entertainment and active recreation. They offer interactive exhibits, music concerts, theater productions and other events that attract visitors of all ages. The social function of a science museum is that they can strengthen connections in a community by creating a place for communication and social contact. They also contribute to the development of tourism and the economy of the region. Science museums therefore play an important role in society by providing access to scientific information and knowledge.

### For citation

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### Keywords

Interaction between science and society, natural science museums, popularization of science, access to knowledge, science, museum work.

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## Introduction

Science for society is often an institution that does not directly relate to social relations, which leads to a decrease in the overall level of education, loss of interest in science and, consequently, limited reproduction of scientific personnel, a decrease in the prestige of this type of activity. All this gives rise to problems such as misunderstanding of scientific research by society. Often scientific discoveries and research do not reach a wider audience due to the complexity of the material or lack of communication from scientists. This causes distrust of science and experts to grow in society. In modern society, disputes and conflicts often arise between scientific facts and personal beliefs, which can lead to denial of scientific evidence.

## Main content

To solve this problem, there are forms of dialogue between science and society, the form of which can be a museum space. The interaction between society and science is one of the most significant problems of modern society. Science helps society solve problems and create new technologies that improve people's quality of life. Society, in turn, supports science by providing it with financial and other resources necessary for research. Museums play an important role in preserving scientific knowledge and passing it on to future generations. They can also stimulate cognitive interest and professional orientation of pupils and students. In addition, museums can serve as venues for scientific conferences, exhibitions and other events that promote the development of science and attract public attention to scientific achievements.

Currently, various forms of scientific museums of a wide range of profiles are most actively developing in all countries of the world. These include traditional nature museums and science museums.

Museums provide visitors with a unique opportunity to get acquainted with the history, culture, and scientific achievements of mankind. They are often implemented in an active form. They play an important role in the preservation and transfer of knowledge and experience from one generation to another, forming a stable cognitive interest and a culture of knowledge. Education is one of the main functions of museums.

Various educational programs can be targeted at different age groups, interests and needs of visitors, but in most cases, they are aimed at visitors in the most active stage of the formation of cognitive interest – middle school students and are significant tools for career guidance. Museums offer educational programs, displays, exhibitions, lectures, seminars, conferences, and other events that help visitors deepen their knowledge and understanding of the topics represented in the museum collections.

Museums can provide access to collections and archives to researchers and scholars. Museums also conduct their own research on various topics related to their collections, and in many cases are the only source of information on scientific topics. It can be said that museums play a big role for scientists and researchers.

Most museums strive to ensure that their exhibits and programs are based on research and evidence to ensure the accuracy and integrity of the information they provide to visitors. It is clear that some museums may be designed to present historical or cultural aspects without the use of scientific data, such as a "one-piece" or limited-collection museum.

Museums can help people understand complex scientific concepts and technologies and show how they are applied in everyday life. Science museums play an important role in the dialogue between

science and society, as they are places where scientific knowledge and achievements can be accessible and understandable to wide audience.

Museums can also provide opportunities for educational programs that help pupils and students develop scientific skills and interest in science. Science museums can stimulate interest in science in children and young people, which can lead to more people interested in science careers.

Scientific conferences, exhibitions and other events can help scientific researchers communicate with a wider audience, exchange ideas and experiences, and attract new specialists to the scientific field. They promote the development of science and attract public attention to scientific achievements.

Today there are many types of science museums in the world. Museums dedicated to various sciences, such as biology, geology, astronomy, and physics, are combined into natural sciences. Where various technologies and innovations in the field of mechanical engineering, aviation, and electronics are demonstrated – technical museums. Medical museums present the history of medicine and its achievements, as well as exhibits related to disease and treatment. History museums display historical artifacts and items associated with various eras and cultures. Nature museums are dedicated to different types of animals, vegetation, and ecosystems. Archaeological museums display artifacts and objects from ancient civilizations and cultures. Ecology museums are dedicated to the study of the environment and its protection, as well as exhibits related to environmental issues. Space museums are dedicated to space exploration and feature exhibits related to space flight and exploration. Demonstration of various scientific and technological achievements and innovations takes place in science and technology museums. Existing mathematician museums present mathematical concepts and theories and their applications in various fields.

Many science museums around the world offer many interactive exhibitions that allow visitors to learn more about science, technology, innovation, and the environment. In addition, the museum hosts lectures, events and educational programs for schoolchildren and students, making it an excellent place for learning and development. They allow visitors to immerse themselves in various topics and learn more about scientific discoveries and achievements.

The museums of anthropology and ethnography contain exhibits that represent various cultures and ethnic groups of the world. In the museum one can see collections of folk costumes, religious objects, weapons, jewelry, household items and much more. The museum also hosts temporary exhibitions and events focusing on various topics in ethnography and anthropology. The museum also has separate rooms dedicated to the cultures of various peoples and regions of the world.

The exhibition of nature museums includes collections of scientific exhibits dedicated to nature, science, and technology. In the museum one can see collections of minerals, plants, animals, as well as exhibits related to astronomy, physics, chemistry and other sciences.

## **Conclusion**

Thus, museums perform an educational function, providing opportunities for teaching and popularizing science. They host exhibitions, lectures, tours, and other events that help people understand science and its importance. In addition, science museums preserve collections, artifacts, and research that are of historical and scientific significance. They also conduct their own research and preserve the results for future generations. No less significant is the fact that science museums are places for entertainment and active recreation. They offer interactive exhibits, music concerts, theater productions and other events that attract visitors of all ages. The social function of a science museum is that they can strengthen connections in a community by creating a place for communication and

social contact. They also contribute to the development of tourism and the economy of the region. Science museums therefore play an important role in society by providing access to scientific information and knowledge.

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## Культурологические аспекты взаимодействия науки и общества: на примере естественнонаучных музеев

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### Аннотация

В статье показано, что музеи выполняют образовательную функцию, предоставляя возможность для обучения и популяризации науки. Они проводят выставки, лекции, экскурсии и другие мероприятия, которые помогают людям понять науку и ее значение.

Кроме того, научные музеи сохраняют коллекции, артефакты и исследования, которые имеют историческое и научное значение. Они также проводят собственные исследования и сохраняют результаты для будущих поколений. Не менее значимым является и то, что научные музеи являются местом для развлечения и активного отдыха. Они предлагают интерактивные выставки, музыкальные концерты, театральные постановки и другие мероприятия, которые привлекают посетителей всех возрастов. Социальная функция научного музея заключается в том, что они могут укреплять связи в обществе, создавая место для общения и социальных контактов. Они также способствуют развитию туризма и экономики региона. Таким образом, научные музеи играют важную роль в обществе, предоставляя доступ к научной информации и знаниям.

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#### **Ключевые слова**

Взаимодействие науки и общества, естественнонаучные музеи, популяризация науки, доступ к знаниям, наука, музейное дело.

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