Impact Factor:					
	ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 1.582	РИНЦ (Russia) = 3.939	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

SOI: 1.1/TAS DOI: 10.15863/TAS

International Scientific Journal

Theoretical & Applied Science

p-ISSN: 2308-4944 (print) **e-ISSN:** 2409-0085 (online)

Year: 2023 **Issue:** 05 **Volume:** 121

Published: 08.05.2023 **http://T-Science.org**

Issue Article

Alisher Fayzievich Ismailov
State Museum of the History of Uzbekistan, Academy of Sciences of Uzbekistan
Scientific secretary,
doctor of philosophy (PhD) in pedagogical sciences, senior researcher.
Tashkent, Uzbekistan
alisher.ismailov.1981@mail.ru

FROM THE HISTORY OF THE FORMATION OF SCIENCE MUSEUMS

Abstract: *This article analyzes the formation of science museums and their difference from traditional museums. The real emphasis in science museums is determined by the development of science.*

Key words: *Museion, Science Museum, enlivenment, museum of traditional objects, entertaining science, touch with your hands!.*

Language: *English*

Citation: Ismailov, A. F. (2023). From the history of the formation of science museums. *ISJ Theoretical & Applied Science, 05 (121),* 49-51.

Soi: http://s-o-i.org/1.1/TAS-05-121-9 ***Doi***: crossref https://dx.doi.org/10.15863/TAS.2023.05.121.9

Scopus ASCC: *1202.*

Introduction

It is known that the museum is derived from the Greek word «Museion», which means a place dedicated to the muses. In ancient times, some art monuments were collected in temples and various exhibitions were organized. The impetus for the development of museum work began with the emergence of collecting experience in people and the preservation of original objects from nature not as a totalitarian economy or valuable item, but as a documentary memorial with a high aesthetic value [1,15]. Therefore, museums are the most important part of the cultural life of society. They play an important role in preserving historical memory and continuity between generations, and in conveying spiritual and cultural heritage. Museums represent a certain phenomenon of science, culture and public space, reflect their level of development. Studying various aspects of the history of museum work can help you understand the particular inclinations and hobbies of a particular era. Thus, by collecting and preserving relics of different periods, museums themselves are, in a sense, relics of the period in which they were created [2].

Historically, such important changes in human societies have been reflected in the representation of natural and cultural heritage in museums. Museums have even directly participated in the formation of historical and semiotic systems for their interpretation. Museums have been criticized as institutions that endlessly reproduce taxonomic ensembles and deform various social forms and multiple systems of knowledge. Such convergent historiography has neglected the various calendar systems by which other societies not only measure time but also vitally construct their sense of reality. By establishing chronological structures that are temporal in Western history, museums have come to be seen as teleological time machines [3,70-72].

Materials and methods

Speaking about scientific and technical museums, it should be noted that due to historical reasons, there is a significant difference between the understanding of their functions in Russia and in the West. A comparative analysis conducted by L. N. Bakayutova shows that museums in Russia and the Soviet Union solved the problem of spreading «the idea of technology and technological development as a decisive means of achieving common welfare» in society. Unlike local museums, European technical museums established in 1910-1920 relied on different conceptual approaches in their development and pursued other goals. In them, the museum was considered as an institution that shows how

technology played a role in the life of society at different historical stages [4,96-102].

Thus, solving the problem by simply copying the world's models turned out to be futile. However, turning to their experience was not ineffective. Nowadays, there are a lot of science and technology museums in the world, especially in developed countries. As noted by V. M. Grusman, museums of science and technology are among the factors that make it easy to «revive» time, «bring historical events or events closer to the spiritual life of modern society.»

It is worth noting the museums where various objects related to the history of the development of science and technology have been reconstructed. First of all, if we emphasize about British museums, their themes are related to the period of the industrial revolution. For example, former textile manufacturer Richard Arkwright's factory in Cornwall now introduces visitors not only to originals, but also to models of the first automatic looms, one of the symbols of the Great Industrial Revolution - the working principle. Such museums not only preserve historical memory, but also adapt it to mass visitors and help them directly enter this period [5,96-102].

In the last three decades, science museums have been transformed from a «traditional museum of objects» into an environment that interacts with the general public, on the one hand, to promote the specifics of scientific knowledge and, on the other hand, to discuss the public image of science [6,716-718]. We are talking about solving a difficult creative task - to turn the museum into an area of «entertaining science» for children and adults, while preserving the scientific and educational content. Thanks to this approach, their audience is steadily growing: in 2005, according to the Association of Science and Technology Training Centers, 41 million people from 96 countries visited them [7,64-70].

Digital technology development is no longer just an option, but a necessity, and museums are constantly creating and implementing new concepts related to this issue.

In short, museums are being reborn as experiential spaces rather than as educational spaces that deliver knowledge [8,412-417]. That is why, recently, the desire for mutual relations between a school and a social and cultural institution such as a museum has increased, showing the inseparable unity of culture and education. Representing the environment for the implementation of changes in education through culture, the museum is a natural partner of the school in the humanitarian development of scientific and technical achievements, overcoming the scientific direction in education.

The difference between science museums and traditional museums is that scientific and educational centers are interactive, their main principle is «touch with your hands!» can emphasize that [9,64-70]. Arguably, it's a place where people of all ages can read at their own pace to satisfy their curiosity; using their feelings and emotions to ask questions and get answers also explains what they have learned to others.

Mutual relations between the school and the museum can be considered as a separate direction of development. Today, this problem is extremely important, clearly revealing old and new contradictions in pedagogy and museum policy [10]. Processes of humanization of education show interest in museum pedagogy as a field of scientific and practical activity of a modern museum that helps to solve these problems.

That is why the museum is a complex and multifaceted phenomenon. In the culture of Western Europe, the museum not only performs the functions of collecting and storing artifacts, but also reflects a certain socio-cultural situation in all the diversity of scientific, aesthetic, pedagogical, ideological, recreational, and economic aspects. In the second half of the 20th century, the problem of the museum became particularly acute, which was primarily due to the fact that the traditional forms of the end of the 19th century and the beginning of the 20th century did not correspond to the changed cultural situation [11].

In the 19th century, museums dedicated to the history of science or its separate branches, the interrelationship of science with technology, nature and man appeared. This indicates that science has become the subject of museum activity. The world's first science and technology museum-conservatory of arts and crafts was established in 1799 in the building of the monastery of St. Martin de Champagne in Paris. It is based on the collections of cars and models collected by the great engineer and inventor Jacques de Vaucaison and the Royal Academy of Sciences.

However, the widespread use of science and technology museums began in the second half of the 19th century, when the industrial revolution spread throughout Europe and the United States. The developing large-scale industry needed qualified personnel, educational institutions, laboratories, experimental workshops and museums were needed as centers for the dissemination of knowledge about advanced techniques and technologies. In order to stimulate industrial and commercial activities, national and world exhibitions showcasing the achievements of scientific discoveries, engineering and design thinking began to be organized regularly. Later, their exhibits often served as the basis for creating museums [12, 216-217].

Studying the history of the Academy of Sciences in Uzbekistan helps to understand that it is a leading organization in the field of science and shows the importance of preserved academic traditions [13, 88-95]. Today, this topic is of particular importance due to the reforms being implemented in the organization of scientific activity in our country. Reference to the

history of the Academy of Sciences complements the history of the Academy of Sciences and promotes the role of the higher scientific institution of Uzbekistan in the field of science. These aspects definitely show the need to establish science museums in our country.

Conclusion

So, the important difference between science museums and other forms of museums is that activities such as education and popularization of knowledge are considered as secondary, complementary functions of the museum. The real emphasis was determined by the development of science, and education and enlightenment were seen as derivatives of this process.

Each of the museums is unique and unrepeatable, at the same time, there are similar features in the composition of their collections, scope of activity, legal status and other characteristics, which allow to divide all the diversity of the museum world into certain groups, in other words, carry out classification. One of the most important classification categories is the profile of the museum, that is, its specialization.

Science museums are institutions that present scientific works and information to the public. The mission of a science museum is to educate the public about science and its role in society, and to provide visitors with experiences similar to those experienced by scientists and engineers. The latest technologies are often used to enhance the excitement and fun of science. The importance of science can be seen in the fact that it is open and encouraged by the participation of all.

References:

1. Ismailova, Zh.Kh., & Mukhamedova, M.S. (2013). *Zamonaviy Jahon of the Museum of the Shunosliga*. Tashkent: «Munis design group».
2. Ivanova, E.A. (2002). *Formation and development of the Rumyantsev Museum as a Russian public, scientific and cultural center, XIX - early XX centuries.* Dis.cand. ist. Sciences. Moscow.
3. Bernice, M. (2005). Memory, History and Museums. *Museum international*. № 227 (Vol. 57, № 3, 2005). UNESCO 2005.
4. Lagushkin, S. G., Sidorchuk, I. V., & Ulyanova, S. B. (2015). The concept of the museum scientific and educational center for the history of technical education. *Questions of museology*. 1 (11) / 2015.
5. Lagushkin, S. G., Sidorchuk, I. V., & Ulyanova, S. B. (2015). The concept of the museum scientific and educational center for the history of technical education. *Questions of museology*. 1 (11) / 2015.
6. Koliopoulos, D., & Filippoupoliti, A. (2013). Science & Education (Contributions from History, Philosophy and Sociology of Science and Education). Published online: 6 September 2013.
7. Meet, Z.A. (2007). Foreign Museums of Science and Scientific and Educational Centers. «MUSEUM» No. 3/2007.
8. (2021). *Whether con-uk. New world, new museum - the role and function of the museum in modern times. Zamonaviy duneda museumshunoslikning dolzarb masalalari. Khalqaro ilmiy-amaliy anzhuman tuplami.* (pp.412-417). Tashkent: «LESSON PRESS».
9. Meet, Z.A. (2007). Foreign Museums of Science and Scientific and Educational Centers. *«MUSEUM»* No. 3/2007.
10. Vvedensky, O.V. (2002). *Use by the teacher of the cultural potential of the natural science museum.* Dis.cand. ped. Sciences. St. Petersburg.
11. Bezzubova, O.V. (2003). *Museum as an instance of artistic, scientific and ideological discourses.* Diss. cand. Phil. Sciences. St. Petersburg.
12. Yureneva, T.Yu. (2004). *Museum Studies: A Textbook for Higher Education*, 2nd ed, Moscow: Academic Project.
13. Ismailov, A. (2021). Some Comments About The Real Members Of The Academy Of Sciences Of The Republic Of Uzbekistan - Academicians. *Zien Journal of Social Sciences and Humanities*, ISSN NO: 2769-996X Date of Publication:21-11-2021A Bi-Monthly, Peer Reviewed International Journal [88]Volume 2, pp.88-95. https://zienjournals.com