Study on the Social Education of European Museums

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Abstract: As a non-mandatory learning place, museum is different from school education in terms of educational model and function, but its education function cannot be ignored. Through the overall analysis on the characteristics of European museums, their theoretical basis, and their function of social education, this paper aims to illustrate that European museums generally show the following four characteristics: providing interactive and diverse educational programs; marketing education programs in the whole visiting process; emphasizing diverse educational cooperation model; paying attention to all-round experiential learning. It is of great significance for other countries to learn from the advanced experience of European museum education, carry out practice of the social education of museums well, and realize the all-round development of people.

Keywords: European, Museums, Social Education, Characteristics.

1. Introduction

When it comes to education, we usually think of school. Most people are also used to measuring education and learning according to school standards. In fact, school education is only one basic forms of education, which is a narrow interpretation of the concept of education. In general, we refer to this narrow definition of education as "formal education", and regard the opposite, non-school education, as "social education". Museum education is one of the manifestations of social education. It has been 269 years since the British Museum with the mission of "education" first appeared in the world. The museum gradually turned its initial attention from the collection to people and even the whole society. For example, "Night at the Museum", which is increasingly popular and influential in Europe, is a kind of large-scale nighttime cultural activities which under this background. How to integrate better into society and serve the public is an important challenge for museums in the process of realizing its social education function and enhancing its social value.

The European Federation of Museums has recently published a report, Four Core Values of Museums, which illustrates the importance of museums by presenting excellent examples of museums across Europe in terms of their collections, social, educational and economic function. The report emphasized that "museum is educational institution", and the federation believes that museums can influence people largely. Museums, as educational institutions, provide formal and informal education for people of all ages by motivating and attracting them to visit. Museums enable individuals to grow in an environment full of confidence and innovation, and help them to understand the world and the regions they live in. The report also argued that "museums can change lives". Museum serve the people, and all its work concentrates on people. To be truly responsible for people of the past, present and future, museums must work together with the communities they serve and the individuals of those communities. Museums can enhance the social stability and become places where different cultures meet and talk.

In Europe, more and more museums take public education as their central task. Their ways of implementing education are becoming more and more diverse, the educational services provided are becoming richer, and the relationship between schools and museums is becoming closer. However, there is little discussion and studies on the social education function of museums in China, and the popularization of art education is also neglected. Therefore, study and analyze on the characteristics and experience of the social education of European museums has a reference value for that of Chinese museums, and is of great significance to improve the artistic and cultural accomplishment and comprehensive quality of the public.

2. The Definition of Museum Education

The traditional education is generally divided into three dimensions: school education, family education and social education. Art and culture education in European museums is no exception. In the process of carrying out art education, the "combination of exhibition and education" provided by museums, social education places, is taken as the base of art education. In the process of linking museums education together with school education and parent-child activities of family education, art education is unified within the scope of the three dimensions, thus, the museum education, family education and school education supplement each other, forming a complete education system, fully develop students' comprehensive qualities, and make them improve themselves constantly, become a modern citizen with the basic qualities. And museums take this opportunity to improve their artistic accomplishment and comprehensive humanistic quality.

International Council of Museums (ICOM) illustrates, "museum should seize every opportunity to develop its function as an education resource for all levels of the people. An important function of the museum is to attract more visitors from all classes, different communities, areas and groups, and provide opportunities for the general community, special groups, supporting their particular needs and goals". Thomas Ford, from the American Capital Museum, said "the so-called museum education is to allow visitors to visit freely, compare, ask questions and learn by themselves, while the museum provide the most appropriate educational services according to the needs and interests of each visitor". Hooper Greenhill, a British museologist, believes that the museum itself is an educational institution, and all activities of the museum have an educational purpose, including collection of
materials (such as paintings, specimens, historical artifacts, etc.), exhibition design, special activities and the arrangement of teaching conferences.

The three definitions above interpret people's understanding of museum education from different perspectives respectively. The definition of ICOM only describes the ethical standards of museums and illustrates the importance of museum education, but it does not refer to the specific educational functions of museums. Thomas' definition emphasizes more on self-learning and educational services. Greenhale's definition identifies the specific educational programs that museums provide.

From the analysis of the definition of museum education, we will find it is difficult to find a comprehensive definition. One of the reasons is that in the past, no matter for education or for learning research, it was oriented to narrow sense of school education. Nowadays, relying on its abundant physical education resources, museum education has gradually developed into the second education system except school education, but it is not a simple extension of school education. Its fundamental differences in ideas, situations, materials and educational methods determine the uniqueness of museum education. Therefore, the author agrees more with Thomas and Greenhale's point of view, that is, to define museum education by the collection of educational services and educational programs.

3. The Theoretical Basis of Museum Education

We can't talk about museum education theory without mentioning George Hann. Hann believes, "to develop the theory of museum education, three problems need to be solved, two theoretical problems and a practical problem: theory of knowledge—epistemology; theory of learning and theory of teaching. Among them, Epistemology and theory of learning represent the theoretical structure of museums as educational institutions. Theory of teaching determine how they can be applied to practice.

Theory of learning and epistemology can be interacted and juxta positioned to create four main teaching theories: teaching and explanatory model, stimulus and response model, discovery learning model, and constructivism model. These four instructional theories constitute the four main models of museum education in Europe and around the world.

3.1. Teaching & explanatory model

Teaching and explanatory model is similar to traditional school education. The teaching course is divided into different stages according to the subject structure, and teachers follow the rational teaching process from simple to complex. The "teacher" in a museum is not necessarily a person; texts, audiovisual products, exhibitions or any kind of pre-prepared and designed materials can be regarded as the "courses" of museum education.

This type of mechanical learning, with emphasis on memorization and fixed teaching procedures, is still popular in schools and museums today. Natural History Museum, for example, presents biological samples based on their evolutionary history. Since the founded of the Natural History Museum and the Science Museum in London in the 19th century, these traditions have been fully embodied in the world's great classical museums.

3.2. Stimulus & response model

Stimulus and response teaching is the core of early behavioral psychology. The stimulus-response approach states that learning is the result of continuous stimulation, enhancement and response. It belongs to the traditional educational thought "teacher teaching, student learning", similar to teaching and explanatory model, the difference is the stimulus-response model emphasizes teaching methods and training.

For example, some interactive projects in museums require the audience to answer questions on a computer screen with buttons, which are taught in the stimulus-response way. Such dynamic exhibits began to appear in the early 20th century under the influence of the progressive education movement. Some industrial museums in Europe are the representative of applying this new educational idea.

3.3. Discovery learning model

Discovery learning was put forward by American psychologist Bruner in 1960s. This learning method believes that learning is an active process. In the process of active learning, the learner's mind and external information constantly interact and change. This kind of theory was applied in the establishment and development of the early American "science center". At that time, University of Colorado physics professor Frank Oppenheimer criticized the "passive educational approach" of traditional museums and personally founded the famous "San Francisco Exploratorium", whose "hands-on" philosophy marked the beginning of the use of learning methods in museums. Many museums have educational areas such as discovery rooms and discovery corners, where visitors can explore and research, often under the guidance of staff members. The focus of the activity is to guide the visitors to explore and ask questions, rather than passively get direct conclusions.

3.4. Constructivism model

The constructivism model, also known as inquiry-based didactics, corresponds to the constructivism educational theory formed in the late 1980s, which is a step advanced of the discovery learning model. Constructivism learning theory holds the idea that teaching does not mean imparting knowledge to students in the form of end products, but let students acquire knowledge actively through their interaction with the external environment. The learning theory of constructivism can be summarized into one sentence, that is "take the student as the center, the teacher in the whole teaching process plays a role of organizer, instructor, helper and promoter, and makes use of learning environment elements, such as situation, cooperation, conversation, to incentive the students' initiative, enthusiasm and creativity, eventually realize students' understanding of the current knowledge, effectively achieve the goal of construction.

Constructivism theory requires museums to plan, design and hold exhibitions or other activities with audience participation, so that people can not only participate in and hands-on, but also minds-on during the process, so as to have a thorough understanding of the relevant content. In the late 1990s, museum education entered into the "era of constructivism", which provided the best educational places for the scientific education reform—"learning by doing", which is now popular all over the world.
4. Characteristics of European Museums

4.1. Large quantity, rich collections and high value.

In Europe, Germany alone has more than 3,000 museums of all kinds, not including the numerous cathedral-style, castle-style and palace-style museums everywhere. Italy, an ancient European civilization, also has more than 3,000 museums of all kinds, with a collection of 5.1 million archaeological relics, 25 million natural science exhibits, 2.02 million works of art, 280,000 ethnographic exhibits, and 3.85 million books and archival materials. 26 million people visit the museums every year. Its capital city, Rome, is full of places of interest and historic, with more than 70 museums that house unparalleled art treasures. Among them, the ancient Roman temple museum collecting art exhibits from A.D 1471, is the earliest art collection museum in the world. France is a country worthy of the name of museums. With a population of 65.63 million in 2022, it has more than 4,000 museums of all kinds, including more than 1,100 state-level art museums, which receive 46 million visitors every year. The capital city Paris has 80 museums, among which the Palace of Versailles is the grandest royal court of the European continent, it’s also the location of the national history museum of France, collecting the precious treasures of the royal families of previous dynasties and many decorative murals, oil paintings, statues, etc. The Louvre is the largest art museum in the world, with a history of more than 800 years. It is one of the three major museums in the world, together with the Metropolitan Museum in the United States and the British Museum in the United Kingdom. In short, the European museum industry is characterized by large quantity, large scale, rich collections, and extremely high value.

4.2. Diverse forms and content.

First of all, European museums have a variety of forms. Europe is dotted with museums in various forms, including national, provincial and municipal-level. There are also museums founded by local governments, churches and associations, and private. Second, the classification forms of museums are diverse. In Europe, there are museums of historical, educational, cultural, religious and military themes, as well as scientific, agricultural, industrial and commercial ones. There are also astronomy, astronautics, geology and mineralogy, oceanography and other themed-museums. In addition, there are biological, botanical, anthropological and folklore themed ones. There are also museums honoring for historical celebrities, great men, historical objects, cultural relics and so on. The exhibits vary from ancient to modern, from domestic and local to foreign. Third, the collection items and styles are various, as large as ships, planes, cars, as small as coins, bird eggs and toys, which are dazzling, colorful and diverse.

4.3. Indoor and outdoor museums coexist.

In Europe, there are not only a large number of man-made indoor museums, but also many open-air museums on display. These two types of museums have the same function but different styles, which bring different feelings, interests and reflections to visitors. In the suburb of Genenhof, northern Germany, there is a windmill museum, covering an area of 70,000 square meters, where displays 28 windmills of different sizes collected from all over the world. The open-air museum received 70,000 to 80,000 visitors every year. Definitely, the oldest and grandest open-air museum in Europe, is in Rome, the capital of Italy. There are more than 400 churches, 70 museums, places of interest are everywhere in Rome. Among them, the most famous place of interest is the Colosseum built in the 170s AD. This building is 57 meters high, 187 meters in diameter at the wide part and 155 meters in diameter at the narrow part, and can hold 45,000 spectators.

4.4. Advanced management and first-class service.

The management and service of museums in developed European countries are at the leading level in the world. In terms of management, European countries invest a large number of human, material and financial resources, focusing on the development, protection and utilization of cultural relics and historic sites. Firstly, they attach great importance to the development of cultural relics and historic sites. Museum collections in developed countries are rich and famous, which is closely related to the government, local governments and individuals who attach great importance to the development and excavation of cultural relics and historic sites. The excavation of Pompeii in Italy, for example, is a typical example. When it comes to museum services, European countries are also at top level. First of all, they set high standards and strict requirements for the quality of staff. There are strict regulations on qualification, learning, ability, profession level and so on. Staff members generally need to pass strict examinations, screening and training before they can get on duty. Some special positions require special professionals to hold a certificate. Secondly, they constantly optimize service quality. Museum staff pursues the ideas of "people-oriented" and "good faith" "the audience is God", adhere to the optimization service, creating famous brand effect, do what the audience think, help what the audience need, win acclaim from the audience with the workstyle of honesty, credit ethics and the warm and thoughtful service attitude. Thirdly, European museums pursue the modernization of service facilities. With the rapid development of modern science and technology, network, informatization and modernization of management and service of museums have been widely implemented in developed European countries. Visitors can not only see and hear, but also consult questions, search materials and collect information. In terms of logistical information, the facilities are also very advanced and complete.

5. The Characteristics of Social Education in European Museums

Museums are the epitome and important symbol of European civilization, and belong to the organic component of education, science and culture industry. The educational development provides intelligence and talents for the development of museum industry; cultural prosperity provides connotation and inside information for the development of museum industry; and scientific progress provides means and motivation for the development of museum industry. Only with the development of education, cultural prosperity and scientific progress can museums develop rapidly and flourish. All these depend on the governmental attention. As mentioned above, the
development, utilization and protection of cultural relics and historic sites in developed countries are the direct attention and importance of the government to the museum industry. The government attaches great importance to the development of education, science and culture, which is more important to the development of the museum industry.

As a non-mandatory study place, the museum exhibitions have the education function which cannot be ignored, but the public have different education background, experiences, interests, characteristics, even different languages, through comprehensive understanding and analysis, museums refine the education object, divide them into different levels and groups. Thus the "audience" is no longer a vague concept but a complex group composed of many individuals with distinct personalities. In order to enable audiences with different cultural needs to find their own learning programs in museums, the museums have designed different educational projects for different groups, providing various types, forms and attractive educational programs. In addition, the time and space of museum specimens or exhibits are quite different from real life. Therefore, the information conveyed by specimens will often be biased, omitted or even misread in the process of being transformed into the information received by the audience. These "disturbances" in the process of information transmission need to be eliminated or transformed by means including educational programs. At the same time, the exhibition of the museum needs a long period transformed by means including educational programs. At the same time, the exhibition of the museum needs a long period from the initial planning to the final completion, and the display of any scientific research outcomes will produce a necessary guidance to the audience when they are confused.

5.1. Providing interactive and diverse education programs

In museums, the relationship between educators and educates has changed. The one-way communication process conducted by educators is no longer the only educational means. The independent choice of educates has gradually expanded, and the interaction between museum visitors and staff has attracted more and more attention.

When planning educational programs, European museums take full account of the cognitive needs of educational objects in various aspects, such as experience, practice and exploration. Accordingly, educational programs have broken through the traditional model of "explanation & brochure", and turned to designing educational activities such as lectures, courses, scientific activities and summer camps for different audiences, forming lively and interesting educational programs of different types and levels. Each program can form a complete series of its own, and can also be combined into a certain "educational menu" for self-selection, combination or adjustment to adapt to the different educational objects, teaching objectives and teaching methods. During the implementation of the educational projects, museum educators will not interfere too much in the learning or thinking process of the audience, but give necessary guidance to the audience when they are confused.

5.2. Marketing education programs in the whole process

Since the 1980s, museums in European countries have been committed to the humanized exploration of museums, so that museums can meet the needs of the audience from all aspects. The theme of exhibitions has turned to be diversified, and the means of exhibitions have gradually moved towards specialized and a technical. In the 1990s, large-scale special exhibitions became popular, and museum exhibitions began to combine a variety of educational programs throughout the whole process. By means of mass media, community relations and other ways, museums have closely interacted with the public, and received very good results.

In fact, the educational process of museum is not limited to the exhibition hall. Visiting a museum is a decision made by the audience, which depends on various factors. Therefore, attracting the audience to visit the museum should start from the decision-making process before the visit, during the visit process and till the end of the visit. The educational activities of European museums are planned throughout the whole process to help the audience understand museums more comprehensively and coherently.

Take Spanish National Museum for example, although its publicity materials and fixed display are often difficult to update, flexible education project is an important way to attract audience. The museum usually posts the current and approaching education projects on the Internet, enable the audience learn about the information of exhibitions at home, and attract them to visit. In this way, museum education programs break the limit of time and space. At the same time, the publicity of museum education has been further expanded by means of network communication.

European museums do not equate the process of audiences' visit in the exhibition hall to the process of receiving education, which limits the time and space for the educational function of museums. Instead, while planning educational activities, European museums consider expanding educational activities in time and space and marketing educational projects in the whole process.

5.3. Emphasizing diverse educational cooperation model

Most museums in Europe try their best to make full use of the unique advantages of their own physical resources. Through their brand effect and influence, they integrate external resources, build communication platforms and cooperate in various ways to enhance their competitiveness.

Taking the Palais des Sciences in Paris as an example, it actively cooperates with schools, research institutes, families, communities and other institutions in the organization of educational activities, forming a diversified model of educational cooperation and realizing the sharing of educational resources. According to the information provided by the Education Department of the Paris Palais des Sciences Exhibition, there are rich academic resources, experts and scholars, college students, documents and archives, experimental specimens in universities, research institutes and other scientific research institutions that can help the museum to plan and implement educational projects. The Palais des Sciences also designs a series of projects based on the characteristics of its collections and hires researchers from universities and research institutions, and use their findings in the development of the museum's educational programs.
This kind of diverse cooperation model also lays the foundation for the development of educational activities in the Palace of Science. The permanent exhibitions of the Palace of Science are usually complemented by short and exciting educational demonstration projects carried out by professionals. This is the most dynamic form of educational activities in the Palace, with good teaching effect and popular among the audience. There are 58 professional demonstration halls with 45 professional teachers, most of whom come from all walks of life. They arrange nearly 30 wonderful scientific demonstrations every day.

Such a diverse model of educational cooperation is conducive to the integration of educational resources of museums; the design of different educational promotion projects transforms the museum education from extensive to refined; it also helps to establish a perfect education network inside and outside the museums. On the one hand, the public participate in the museum, on the other hand, museums integrate into the society, thus forming a complete, three-dimensional, interactive museum education service system eventually, and giving full play to the social education function of the museum.

5.4. Paying attention to all-round experiential learning

The so-called experiential learning is mainly attributed to educator John Dewey's "learning by doing" and social psychologist David coober's "educational model based on the experiential learning circle", the cognitive psychologist Piaget's epistemology of occurrence, and the theories of other scholars. Experiential learning focuses on providing real or simulated situations or activities for visitors, so that visitors can fully participate in the activities to gain personal experience, feelings, exchange and share information, and then summarize and upgrade the theory or results through reflection, and finally apply the theory or results into further practice.

Taking Van Gogh Museum in Netherlands for example, it provides extracurricular art education projects for elementary school students which are different from that in schools education. There is no speaker teachers and explanation, students are encouraged to involved themselves in the process of artistic experience spontaneously, in the educational form of work room to create arts by hands and minds, and acquire art education in entertainment. The Van Gogh Museum's after-school art activities include "Camille's Peepshow," a program that encourages children to use computer software to modify art works, and "Coloring games," an educational program that examines children's cognitive sensitivity and perception of colors. These education programs are based on school art education, further invoke children's imagination and practical ability. After having a basic understanding of the exhibits in the museum, students involve themselves in the project of interest, improve their vision, observation and creative ability in the process of similar games; when cultivating their creative thinking, they reflected it into their hands-on creations, and further cultivate themselves into teenagers with comprehensive humanistic quality.

6. Enlightenment

Since its establishment, museum has been shoulderering the mission of social education. During the development of the museum for more than two hundred years, its educational function has been changing constantly. Compared with western developed countries, the social education function of Chinese museums has not been given full play. To investigate and analyze the current situation of European museum social education is of great significance for China, draw lessons from advanced museum public education experience and further develop practical activities of museum education so as to realize all-round development of human being.

1. With the establishment of large and medium-sized modern museums in succession, Chinese museums have come close to western museums in terms of architecture, equipment and exhibits. However, most museums still fail to regard public service and educational function as their core work, let alone clearly state their educational mission. Although some Chinese museums are trying to launch different education programs for different groups of people, they are still in an extensive development stage, and have not formed a scientific and complete education system, let alone perennial classic education programs. The museums have not formed the big educational concept--- "museum education is everyone's responsibility". Most of the time, education has not really become their central work, and other departments are not active and fully involved in the cooperation, thus resulting in the museum's educational resources, especially human resources, have not been fully integrated and utilized. Museum and the outside (including school, community, media, public interest groups, universities and other scientific research institutions, foundations, news media and other museums or other institutions of education) cooperation did not carry out or are under exploring, even if there is cooperation, the diversity, durability, deepness and effectiveness are not enough.

2. At present, although Chinese museums have entered into the information era, the means of educational science and technology level is not high, the information update of website construction is not in time, the content is not rich, the audience interaction is not thorough, the network education has not been popular, the development of network education projects for teenagers is not scarce. Many museums haven't built their own websites. There is a lack of the awareness of using interactive websites to expand the impact of publicity, and cooperation with other institutions to build educational websites has not been carried out.

3. Policy support and professional training should be provided to accelerate the transformation of educational personnel. From the perspective of the quality and structure of the social education team, although there has been some progress, the entry threshold of educators is generally low, and there is no excessive requirement on whether their major is related to the field of education or museum. There is no professional and fine division of labor according to the type of audience and job position of education personnel specialization, ignoring the learning and training of museum science, pedagogical theories, psychology, etc., resulting in low professional quality and theories of educational workers of Chinese museums, knowing little about the development situation of international museum education. For a long time, most museums in China have formed a single educational mode mainly by preaching. This kind of passive didactic mode is just the indoctrination of knowledge, which is not conducive to stimulate the audience's interest and mobilize deep thinking.

4. Select key projects and break through the bottleneck of education work by concentrating on the existing advantages.
According to the current situation of the staff and educational work of Chinese museums, it is not suitable to spread out and promote widely. Instead, we should choose projects with strong social demand or mature operation of museums as the focus of breakthrough, such as museum-school cooperation programs, teacher training programs, volunteer programs, etc., fully integrate and make use of tangible and intangible educational resources through the existing personnel advantages, to further expand, carefully construct educational programs and courses in the museum, and make them normalized and classical. Spread gradually and form the education strategy for different groups of people. At the same time, we should cooperate with more organizations outside the museum to carry out multi-party and multi-form cooperation, constantly innovate the education method, and make extensive use of high-tech education means and network, so as to expand the education publicity and improve the education effect. Thus, the museum education will be changed from extensive to intensive, and finally establish a perfect, multi-level and interactive museum education system.

7. Conclusion

Nowadays, more and more European museums regards social education as their central task. Their ways of implementing education are becoming more diverse, the educational services are richer, and the relationship between schools and museums is closer. European museums generally show the following four characteristics, providing interactive and diverse educational programs; marketing education program in the whole process; emphasizing diverse educational cooperation model; paying attention to all-round experiential learning. Study and analyze the characteristics and good experience of the social education of European museums has a reference value for Chinese museums.

In recent years, the report of Chinese governmental set forth and implement the idea "promoting free access to art museums, libraries, cultural centers and museums to enrich the spiritual and cultural life of the people", and the development of Chinese art museums and the promotion of public education have received strong support. We should draw lessons from European museums and their successful experience of public art education and philosophy, give full play to the function of the museum education, strengthen citizens' comprehensive ability, improve the construction of public cultural service system, make China's national museum truly become an education base, which improves the national aesthetic ability and the comprehensive qualities, making due contributions to the "all-round development of human beings". Individual citizens, families, schools and public welfare institutions, including museums, which should undertake corresponding educational functions, consciously pay attention to the "all-round development of people". The social education of museums is not only the responsibility of schools, but also the responsibility of the whole society. Museums and other aesthetic education, art institutions should bear the important responsibility of popularizing humanistic quality education and improving the comprehensive quality of the whole nation.

References