

THE SELECTED ARCHITECTURAL SOLUTION OF MODERN MUSEUMS IN CHINA IN THE ASPECT OF MANIFESTATION OF TRADITIONAL CULTURE

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Abstract

In the developed countries of the world, the interests of society are increasingly becoming oriented towards acquaintance with the cultural characteristics that characterize the identity of a particular region. The result of interaction with national traditions, as components of culture is clearly demonstrated by architecture. In relation to China, its rich cultural heritage has become a source for creating unique modern museum structures. This paper analyzes a number of design solutions of museum constructions in the PRC, which clearly represent actual ways of rethinking of cultural traditions. Using the example of the Ningbo History Museum, the Xinjin Zhi Museum in Chengdu, the Folk-art galleries for China Academy of Arts and the Museum of Handcraft Paper, professional methods that determine architectural nature of museum structure are systematized. At the same time, they act as carriers of local features expressing “the spirit of the place”.

Keywords: Architecture; Design; Museum; Wang Shu; Kengo Kuma; Culture; Traditions; Regional features.

1. INTRODUCTION

Every year the desire of mankind to preserve and pass on the baggage of cultural heritage to future generations is manifested in various fields of its activity. The cultural heritage, as defined by the International Council on Monuments and Sites, can be represented in both tangible and intangible components [1].

Thus, one of the aspects representing cultural heritage is the environment created artificially by man: objects

of architecture, city landscapes, etc. The value of a national culture lies in its specificity, in the uniqueness of its features, in its ability to see the world from the position of its place in it. Today, problems of space and place are becoming especially relevant. More and more often the question about the importance of space experience for the formation of personal and cultural identity arises [2].

The meaning of interaction with national traditions as components of culture is that they must be enriched

and supported in the present in order to be the basis for development of culture of future generations. The development of this process is clearly demonstrated by architecture. Very often a form of architectural objects translates moral and cultural values of society.

The approach based on lessons of local architecture, allows us to form objects of architecture and design within the framework of modern concept of sustainability. Analyzing traditional and folk architecture, we turn to the concept of a place, based on the fact that all cultures have a deep-rooted connection with the place. All places/contexts are made up of many factors that come together in a single whole. These factors include topography, geology, climate, vegetation, history of mankind, culture, local natural materials, trees and plants. When these factors are harmonized, folk/traditional architecture gains organic unity and a sense of place [3].

Famous Finnish architect Alvar Aalto pointed out that “The architecture associated with the land on which it is created always has a local character. But at the same time, its forms represent not only local national features, but also reflect the impact of international processes taking place throughout the world ... in the aggregate, a result that organically combines national and international is created, so it meets requirements of modern world in which these concepts are difficult to divide” [4].

In relation to China, its rich cultural heritage at the present stage has become a source of national pride. Since the late 1980s, the concept of cultural heritage has expanded significantly, which included individual rural buildings and entire villages, as well as industrial facilities. China’s cultural heritage is essential for its modern development. It is a catalyst for regional development and tourism. But cultural heritage also becomes the basis for creating the country’s authority on the world stage [5].

An important aspect for a public building is the connection with the place where it is located, ethnic flavor of the city where it is built, the country where it is located, where it should preserve the “spirit of the place”. And in this context, it is valuable to study the architecture of modern museum structures built in China, as their design experience shows the ways of modern rethinking of cultural traditions.

The so-called “place identity” implies many different characteristics. Among them there are both material and symbolic components, which are fixed by the human memory. In the aspect of our research, it is important to note that “the identity of a specific place

becomes interesting when it brings about a certain experience, evoking associations or memories” [6].

The role of museum architecture in modern cultural space is very significant and multifaceted. On the one hand, architecture has unique ability, in its specific language, to fix the perception of museum that has been developed in cultural consciousness and to reveal hidden algorithms of artistic thinking of the era. On the other hand, appealing to architecture is extremely important because over the past 10–15 years, there has been a real “boom” in the field of museum construction throughout the world. And although this process did not stop throughout the entire 20th century, especially now many cities consider projects to expand and rebuild existing museums radically, create new museums that store and represent art of different periods from ancient to ultramodern.

Attention to museum architecture is also due to other motives. In today’s world, ideological message about conciliar mission of modern museum, about special semantic load of this cultural institution has not lost its relevance. That is why museum projects attract attention of architects around the world and provide them with the opportunity for conceptual, personalized expression. According to renowned architect and theorist Charles Jencks: “People continue to come to museums in search of originals ... As a result of reproduction, the meaning of cultural symbols, as relatively solid landmarks among global variability, not only decreased, but, on the contrary, increased” [7].

The organization of new museums is a response to specifics of development of a modern society focused on consumption of not only material wealth, but also products of cultural industry. The relevance of their creation is seen in the fact that modern possibilities of organizing a museum environment form a multi-functional object. Modern museum not only solves problems of conservation, research and representation of exhibits, but also contributes to economic development of regions, thanks to its spectacular attractiveness. The museum, as an object of urban infrastructure, is becoming one of its most important components in China, designed to reflect nature of time, shape urban space, and also express the spirit of nation and its culture [8]. Modern China is characterized by the rapid pace of formation and construction of museums. In 1949 there were only 25 museums in the country. But the desire to become one of the world leaders in the number of museums per unit of population led to the so-called “museum boom”. According to the plans of The National Cultural

Heritage Administration's, by 2020 in China it is planned to create one museum for every 250,000 inhabitants [5].

The current stage in the development of museums in the PRC is marked by construction of large, so-called complex museums. Also, since the beginning of the 2000s, an increasing number of museums display local culture and history. Corporate museums are created to show the history of a private or state enterprise. Scientific, technical and industrial museums are formed [8]. Design practice shows that rapid pace of museum construction in China has also brought significant architectural and design achievements. Expressive architectural and artistic solution of a number of new museum structures is marked by the author's rethinking of cultural traditions and their professional use in volumetric, spatial, constructive and decorative development.

2. MATERIALS AND RESEARCH METHODS

Over the past 20 years, so-called "museum boom" has been defined in the territory of China which is marked by active construction of new structures. Attention paid to museum constructions in China is confirmed by construction of objects whose architecture and design have been recognized by well-known international awards. Examples of museum structures designed and built during the specified period were taken for the analysis. Architectural and design solution of selected museum buildings should not have represented a direct compilation of techniques characterizing traditional buildings of specific regions of China. The presence of such professional techniques in design solution that would reflect the concept of rethinking of cultural characteristics of a particular place was the specific selection criterion.

In the process of analytical work, a number of scientific methods were used:

- analysis of literary sources and graphic materials to study the assessment of impact of cultural characteristics of individual regions on design solution of modern museums located in this area;
- structural and analytical method for identifying features of regional culture and determining the degree of influence on architectural and design solution of the museum structure;
- a method of compositional analysis to describe three-dimensional organization of museum structures and design solutions for its interiors.

3. ANALYSIS

A striking example of rethinking the heritage of the past in the solution of modern architectural structures is the Ningbo Historical Museum, designed by famous Chinese architect Wang Shu (2003–2008). Ningbo is an important port city on the southeast coast of China, an economic center in the Yangtze River Delta. It is a historical and cultural center located in a region that characterizes prehistoric culture of China. The city began foreign trade in the 7th century, and today, with its deep-water port, Ningbo is considered to be the engine of economy on the east coast of the country.

The museum building is located in a typical urban landscape for modern China: boulevards with trees divide the district into clearly distinct quarters: residential, commercial, and government. The museum stands in front of the municipal office building next to the park and it is perceived as a sculptural object in the landscape. This area acts as the center of a new business district in Yinzhou, but surrounding neighborhoods remain somewhat underdeveloped, waiting for tenants and activity [9]. In China, expansion of a city usually occurs through relocation of municipal buildings. And more recently, this area in Yinzhou, surrounded by mountains was a crop field. Dozens of old villages were completely destroyed to the ground, for construction of two buildings of government administration. Therefore, the architect set himself the task of creating an object aimed at reflecting natural environment, local history and customs as much as possible [10]. Architectural works of Wang Shu are multi-component objects that use materials which were left over from removal of old buildings. All of that combining modern and traditional methods developed jointly with local craftsmen.

In the shaping of museum building, the author drew inspiration from surrounding mountain landscape (Fig. 1). Monumental architectural form, of course, has a connection with the style of brutalism in architecture: in the lower part of the building there is a simple rectangular block, and as it develops to the top, this integral volume breaks into four parts. The dynamics of "breaking" forms are emphasized by inclined planes of facades. Breaking lines run at specific points, forming optimal dimensions of spaces of exhibition galleries, auditoriums or cafes in the interior. However, these sections perform another important function: by dissecting a single ideal building shape, the architect creates a human scale on functioning roof that is typical for a traditional Chinese village located on this territory in historical

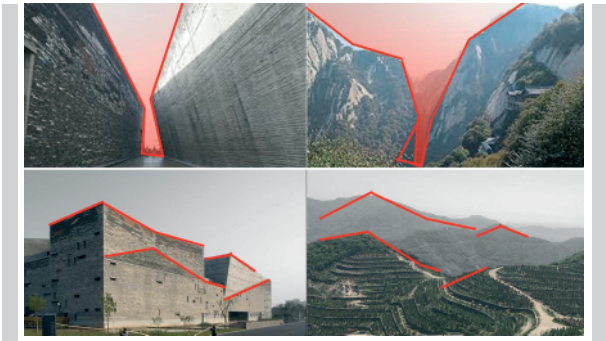


Figure 1.
The Ningbo Historical Museum. The shape of the museum building reflects the nature of the outlines of the nearby mountains

past period. And rectangular niches randomly scattered on the walls evoke associative memories of small caves in the Chinese mountains where Buddhist monks live [11].

A fundamental technique that establishes a connection with cultural tradition is the emphasis on formation of both facade and interior enclosing surfaces. External walls of the museum are made in two different ways. Large sections of the facade are assembled from fragments of various sizes, shapes and materials. Twenty different types of gray and red bricks and tiles left over from fifteen destroyed villages demonstrate “archaeological” layer on facades of the museum building. Very ancient materials were used to solve them. Thus, gray brick belongs to the Ming dynasty – it is more than 400 years ago, and some even date back to the Tang dynasty – 1500 years ago [12]. These wall structures were created on the basis of borrowing the local construction technology “Wapan”. This is a dry masonry technique that allows you to use a wide selection of local materials for construction. According to Wang Shu “only the craftsmen in this area know how to do this. But if we don’t use it in modern architecture I think the craftsmen will forget how to do it. When we started, many couldn’t remember, so we had to use photos and teach them again... We call this a «no memory area». In this huge district I found only one traditional village that was intact, and maybe next year it will also be demolished. There is no tradition here. I designed this to try to bring their memory back” [12].

This approach to design solution is justified by a special author’s look at the museum structure. According to the architect, the first thing that a history museum should demonstrate is traces of time to look into the past. In an interview, Wang Shu said: “... these are not debris ... these are history, time and

experience. Many people have touched these bricks...” [13].

Some sections of the walls are made of a mixture of cement and bamboo. Its imprint is visible on the gray planes of the building. This decision emphasizes the connection of architecture and nature. Bamboo has a special place in Chinese culture. It is known that the Chinese poets drew inspiration during the contemplation of a bamboo grove. In cultural tradition, bamboo is perceived very symbolically: a young bamboo has feminine grace and flexibility, and a mature bamboo has a masculine fortress. The strength of bamboo, its elasticity, and resistance to rotting made it an ideal material for creating everyday objects and for using in the construction of traditional buildings.

In interiors of a museum, bamboo also found application as a material used for decorating ceilings and railings on stairs. But the most expressive are concrete surfaces of walls in public areas, the relief of which bears traces of formwork made of bamboo. The use of this region-specific material, combined with natural and artificial lighting, forms a rich and personalized atmosphere in museum interiors. The author’s concept of Wang Shu is that widespread use of recycled materials, saving resources reflects traditional Chinese virtue. As a result, the use of local traditional building system Ningbo allowed new museum building to integrate into texture and color of natural landscape and save the cost of recycling old materials. Such an author’s decision allowed contemporaries to unwittingly witness disappeared story that spans many hundreds of years [14].

Thus, architectural and design solution of the Ningbo History Museum demonstrates the integration into modern building of architectural and construction elements that are carriers of regional identity of Chinese architecture. According to the author, for a tradition to remain alive, it must be updated, and not be immobilized in repetition [10].

Also, an approach based on the use of local materials and technologies is demonstrated by works of Japanese architect Kengo Kuma. The four-storied building Xinjin Zhi Museum in Chengdu (2011) looks invisible on the background from surrounding mountain landscape thanks to dark gray material of facades. The architectural and design solution of the museum building is based on the author’s concept of “let the building disappear”. It provides for organic dissolution in each other of an architectural object with surrounding nature, when a combination of heaven, earth and water should take place, which, in accordance with the content of the religion of

Taoism, is a manifestation of nature and balance [15]. The planning solution is arranged in such a way that the flow of visitors is directed along a zigzag path up. According to the author, this is the path to silence, organized by upward movement from darkness to light and should be associated with a walk in the garden. To do this, the lower tier of the gallery is darkened and during the gradual rise up gallery receives natural light through continuous glazing along the outer wall, and already in the upper tiers the state of openness is enhanced by atrium solution of the space. The final point of the exhibition offers a view of the park with famous Taoist mountain, where there are many temples and religious sites. Planning organization of the viewer movement through the exposition is organized in rhythmic pattern of turns of interior spaces, revealing surrounding landscapes from different angles. The author connects such a solution to structure of the museum with tonal rhythm of Chinese poetry, in particular poets Du Fu and Li Bai, who lived here and wrote many poems about Chengdu [15].

Special technique used by the master in design solution of facades made it possible to create a unique lighting atmosphere in exposition spaces. Ceramic tiles, mounted on stretched metal strings in front of the front glazing, visually make facade weightless. They filter direct sunlight, so that interiors receive soft diffused lighting, harmonizing dark and illuminated spaces. Such curved gray terracotta tiles have been used in local construction for more than seven hundred years. But unlike the museum in Ningbo, not authentic tiles are used here, but specially made for this project using traditional craft and local clay. Thus, Kengo Kuma's solution to facade as "breathing particles" allowed architecture to blend in with local history and nature [12].

According to the architect, it is very important that art galleries engage in a certain interaction with local residents, so that they can become a place of communication and art exchange, because such activities make them more viable [15]. Therefore, the context of place and time which is expressed by using products and materials traditional for this region (tile) becomes fundamentally important for the author.

Another interesting example of focusing on the use of natural materials in exhibition halls, as well as integrating architectural volume into the landscape is demonstrated by the Folk-art galleries for China Academy of Arts, developed by Kengo Kuma & Associates, a Japanese company led by Kengo Kuma. The building is located on the site of a former tea

plantation on the Academy campus in Hangzhou on the east coast of China. The museum combines a total of seven exhibition galleries with places for research and workshops for traditional crafts. The leading concept of the design decision was the embodiment of the idea of harmony with the environment to form a new relationship between the viewer and the work of art. For this, a variety of open exhibition areas have been created in the museum building [16]. To integrate the building with an area of 5,000 square meters in a hilly landscape, the museum was divided into separate volumes. In plan they represent geometric derivatives of parallelogram and volumetric compositions of them gradually rise along the slope to the forest peak of the hill. Architectural shell of the museum gives an impression of a complex of small houses with pitched roofs that stand tight next to each other, so the overall silhouette has a zigzag line, and the entire volume is perceived as a small village (Fig. 2, Fig. 3).



Figure 2.
Repetition in the structure of the museum building of local relief

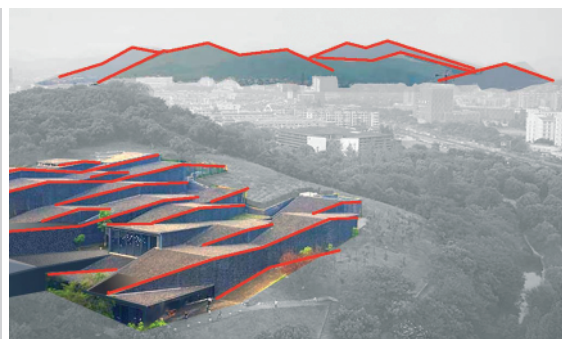


Figure 3.
The Folk-art galleries for China Academy of Arts. In the form of the roofs of the museum building, one can see an appeal to the outlines of the local mountains

In design solution of the roof and facades local tiles remained from destroyed residential buildings is used. Vertical planes before glazing are shaded by a screen in the form of a stainless steel grid, in the cells of which a tile is inserted. Its dimensions are different, and this fact helps the museum building to merge with surrounding landscape.

Elongated interiors of exhibition halls have continuous glazing along the long side, opening a view of either picturesque surrounding landscape or courtyard. But fundamental thing is that the barrier to natural light is a suspended tile, which scatters it and creates a play of shadows in the interior. The color scheme of the interior is determined by the use of natural materials such as wood and granite. In some rooms walls and the floor are made of cedar wood, in others the wood on the floor is replaced with granite, but in general, interiors create a warm and natural background for the presentation of exhibits.

A particularly striking example of preserving local traditions and promoting the development of the local community is the construction of the Museum of Handcraft Paper (2008–2010, designed by the TAO architectural bureau) next to the Xinzhuang village located near Gaoligong Mountain [17]. This village is known for having a long history of hand-made paper production and the museum was designed as an object where cultural exchanges take place. The exhibition presents history, culture, crafts and paper products. The principal emphasis in the concept development of the museum was focus on continuation of traditional skills and culture through the design and development of paper products, expansion of the use of handmade paper.

The district where is the museum has significant geographical features and culture. Therefore, architectural and design solution was focused on the fact that the construction work on its building will also become a part of the process of conservation and development of local traditional resources. According to authors of the project, construction technology is the most important starting point in revealing regional nature of construction. The museum's architectural solution is based on a traditional system of wooden structures using local materials such as wood, bamboo and volcanic stone.

The museum consists of eight wooden blocks connected to each other by passages. Its three-dimensional solution is integrated into surrounding landscape and adapted to the scale of rural buildings, avoiding sudden sensation of excessive volume (Fig. 4, Fig. 5). The museum's interiors give the



Figure 4.
The Museum of Handcraft Paper. Adaptation of the architectural solution of the museum building to the scale of rural buildings

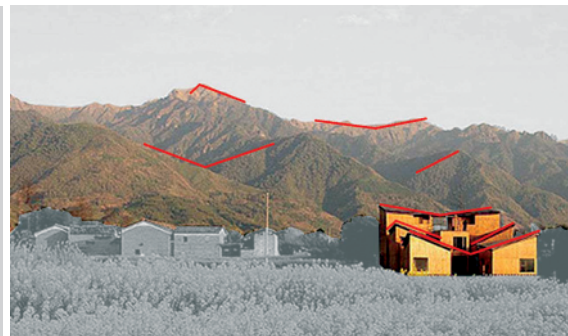


Figure 5.
The Museum of Handcraft Paper. Integration of the architectural solution of the museum building into the surrounding landscape

impression of constant interaction between internal and external spaces.

This technique is focused on the formation of inextricable link between architecture, paper making process and environment. The height of the museum complex gradually decreases from east to west, thereby conveying features of the terrain. Sloping roof of the museum building forms an artificial landscape that echoes surrounding mountains and rice fields.

An important feature of this building is that it was completely built by local artisans based on local technologies. The authentic construction method is typical for pre-industrial era and it is based on the use of local materials (spruce, bamboo, volcanic stone and handmade paper). It is characterized by simplicity and durability. The influence of natural factors (sun, rain) on such materials makes its changes in their appearance. This allows the building to convey a sense of time by integrating it into the environment.

Handmade paper is also used for wall surfaces in interiors. It is attached to wooden modular frames with a size of 45 cm by 45 cm. This white paper on

walls forms a soft and warm atmosphere of the museum space.

The whole village, together with the museum, forms a larger museum – each household can show visitors paper, and the museum represents a concentrated village space. Thus, organization and construction of the museum has become a process of preserving and rethinking the local building tradition.

The next example is Mu Xin Museum of Art in Wuzhen. It was designed by students of the famous Chinese architect Pei Mingming, Okamoto Hiroshi and Lin Bing from the American studio OLI Architecture and opened in 2015 [18]. Its exposition is dedicated to artworks of famous Chinese poet and artist Mu Xin. He was born in Wuzhen, but he was forced to emigrate to America in his mature years. According to the authors, architectural design of the museum was greatly influenced by the features of urban landscape in Wuzhen. It's a very ancient city founded at the end of the 9th century. Distinctive feature of this city is that urban buildings are located above the canal system which is connected to large rivers. In ancient times, such canals were used instead of roads. There is a part of the Beijing-Hangzhou Canal here, the longest canal in the world. Therefore, Wuzhen is rightly called “Venice of the East”. The city has not undergone major changes over the past thousand years and it is one of the most important cultural values of China. Traditional urban buildings with light gray wood or stone facades and dark tiled roofs are more than one hundred years.

Thus, the concept of design solution is interpretation of historical cityscape in a modern museum building (Fig. 6). According to the architect, Okamoto Hiroshi, the fundamental task was to convey a sense of local traditional folk language without any stylization [18]. This was facilitated by the place where the

museum was located; it is a coastline of Yuanbao Lake with access to the water.

The architectural solution of the museum is a series of discrete volumes “worn” on an elongated composite axis. Minimalistic concrete cubic volumes seem to float above the lake reflecting on its surface. The scale of the museum building is determined by surrounding historical buildings. The buildings have two floors above ground level. The third floor, necessary in some cases, is located underground. Some exposition spaces are designed as “spill over” from one to another, while others are connected by so-called “streets” – passages.

The movement around exposition galleries is organized at different levels with intersections of crossings and intimate spaces. So, it creates a sense of a travel around traditional Chinese village.

A long bridge leads to the main entrance preparing the audience for a meeting with unusual world of an artist and a poet. In interiors of communication areas large panoramic window openings and roof lights give soft natural light and provide a visual connection with natural landscape and artificial garden. In contrast with light facades darkened lighting environment is intentionally created in galleries representing art and poetry of Mu Xin. This conveys the artist's preferences in organizing his workspace. Such a division allegorically demonstrates access to another world, the world of Mu Xin.

Laconic style of architectural volumes formation is complemented by texture of their surfaces. Concrete museum walls are covered with horizontal linear recesses both inside and outside. These are traces of the expressive natural texture of the formwork of pine boards. Effects of light on these surfaces associatively resemble watercolor painting of Mu Xin. It is important to note that when using concrete for facade surfaces architects carefully achieved its light gray shade, which is typical for historical building of the city. Such natural materials as walnut and Mongolian black granite are used in interior design.

Architectural composition of the building forms an expressive artistic image. In the day time the museum is perceived as a boat floating on the lake and night illumination turns the building into illusion of a fishing bonfire on a river which creates a special poetic landscape.

Thus, analysis of a number of examples in the field of modern museum architecture in China revealed a number of design approaches by means of which the features of local culture in architectural buildings are

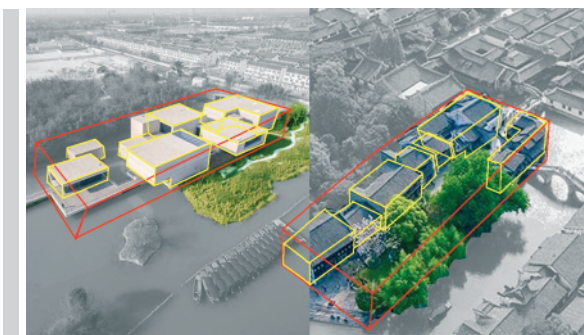


Figure 6. The Mu Xin Museum of Art in Wuzhe. The architectural form of the museum building is an interpretation of the quarters of the historical part of the city

conveyed. Among the leading approaches, it is necessary to highlight the organization of the architectural form, the use of local materials and technologies, which is manifested in the nature of the facade and interior surfaces. It should be noted that the architectural volumes of museum structures, in which regional features are manifested, tend to be subordinate in

scale to the surrounding landscape or local buildings. An important aspect is close cooperation with local materials by determination of their role in new construction, development of construction methods that include traditional technologies typical for this region. The final summarized results of the analysis are given in Table 1.

Table 1.
Architectural and design techniques for creating museum buildings in China, demonstrating a professional rethinking of regional and cultural features

Object	Form making and scale	Local materials and nature of enclosing surfaces	Traditional technologies	→	Religious teachings, cultural traditions
Ningbo Historic Museum	<ul style="list-style-type: none"> - cracks in a monolithic form that resemble surrounding mountains; - enlarged scale providing communication with surrounding landscape; 	<ul style="list-style-type: none"> - brick and tile from villages destroyed in this place; - bamboo for formwork; 	<ul style="list-style-type: none"> - local "wapan" technology based on the use of building materials from destroyed buildings; 	→	<ul style="list-style-type: none"> - resource saving as a traditional virtue;
Xinjin Zhi Museum in Chengdu	<ul style="list-style-type: none"> - spiral shape organizing upward movement; 	<ul style="list-style-type: none"> - tiles made according to traditional technology; - use of natural water surface near the building; 	<ul style="list-style-type: none"> - traditional technology of roof tiles production; 	→	<ul style="list-style-type: none"> - clear stagnant water, in Buddhism symbolizes contemplative perception;
Folk-art galleries for China Academy of Arts	<ul style="list-style-type: none"> - resembles the relief of a hill on which the building is located; - a block model with individual pitched roofs interprets traditional village; - a scale of rural buildings; 	<ul style="list-style-type: none"> - local tiles from destroyed old buildings; 		→	<ul style="list-style-type: none"> - relationship with environment, unity with nature that corresponds to Taoism;
Museum of Handcraft Paper	<ul style="list-style-type: none"> - broken roof shapes that are identical to surrounding hilly area; - space-planning solution interprets traditional rural house; - scale of rural buildings; 	<ul style="list-style-type: none"> - local materials: wood, bamboo, handmade paper, volcanic stone; 	<ul style="list-style-type: none"> - the system of wooden structures traditional for this region; 	→	<ul style="list-style-type: none"> - relationship with environment, unity with nature that corresponds to Taoism;
My Xin Art Museum in Wuzhen	<ul style="list-style-type: none"> - parallel epipeps interconnected in sections remind city blocks; - the scale is coordinated with the nature of historical urban area; 	<ul style="list-style-type: none"> - texture of wooden boards on a concrete surface; 	<ul style="list-style-type: none"> - a traditional way of buildings' location on the water; 	→	<ul style="list-style-type: none"> - in Buddhism water surface near the building personifies eternal flow of material world, and its transparency symbolizes contemplative perception;

4. CONCLUSIONS

The study proves that architecture and design of a number of modern museum buildings in China clearly demonstrate organic synthesis of the past and achievements of the present. This unity can be seen in the combination of modern quality of construction with regional nature of buildings, through the use of local resources and appropriate construction methods. It is fundamentally important that a respectful attitude to historical context and prevailing local landscape is not realized through direct quoting of any constituent objects of the past. The most successful architectural works are based on identification of original characteristics of local materials and tactile sensations from interaction with them. Integration of such materials into modern architecture of museum buildings and use of regional technologies are starting points in the search for a solution that allows transferring a special “spirit of the place” in a modern building.

It is revealed that application of local materials is the most relevant technique. It allows designers to convey cultural specifics of the region expressively and ambiguously. At the same time, there is not an exact copying of their traditional application nature, but an orientation toward the search for new ways to work with them. These include the reception of a demonstration of locally-specific materials through the expressive texture of the surfaces of building envelopes. Of course, there is also an appeal to the historically established traditional building technologies of a particular region. This technique becomes a way of reviving cultural identity, which is what museums as social institutions are oriented towards in their ultimate goal.

In addition, the professional method of transmitting regional cultural features is work with an architectural form. And here the predominant orientation is observed not on the identification of signs characterizing a particular historical and cultural object, but on the interpretation of the landscape character of a particular locality. It can be either a natural landscape or a cultural landscape, which is caused by the influence of anthropogenic factor. Eventually, there is an obvious connection between chosen architectural and design techniques in creating museum structures and religious concepts or cultural traditions of locals. Religious teachings of China had the most profound influence on traditions, customs and culture of the people. Desire for harmony and spirituality are the most significant cultural characteristics of this country. Therefore, there is direct correlation

between architectural and artistic image of modern museum buildings in China and spiritual religious teachings that determine cultural identity of the country. So, returning to the statement of Charles Jenks, we can say that the museum becomes not only a repository of originals, but also becomes an object that expressively presents the originals of materials, technologies and philosophy of a certain culture.

REFERENCES

- [1] A Cultural Heritage Manifesto. (2002). ICOMOS. Retrieved from <http://www.icomos-uk.org/uploads/sidebar/PDF/A%20Cultural%20Heritage%20Manifesto.pdf> (Accessed 20 February 2019).
- [2] Rosenberg, N. (2014). National cultures as a challenge of globalization Humanities. *Philosophy*, 3 (31), 110–117.
- [3] Gültekin, C. (2012). Rethinking The Role of Context and Contextualism in Architecture and Design. Submitted to the Institute of Graduate Studies and Research in partial fulfillment of the requirements for the Degree of Master of Science in Architecture Eastern Mediterranean University. Retrieved from <https://pdfs.semanticscholar.org/37fe/e8774fcc33213ad8c7d93e1c9ad21aa61988.pdf> (Accessed 11 January 2019).
- [4] Gelfond, A. (2013). Architectural design of public spaces: training pos. for universities. Novgorod: NNGASU. p.108. ISBN 978-5-87941-891-0 (Accessed 7 January 2019) (in Russian).
- [5] Chua M. Why are huge museums in China virtually empty? Retrieved from <https://www.dw.com/en/why-are-huge-museums-in-china-virtually-empty/a-49738913> (Accessed 11 July 2019).
- [6] Eldemery, I. (2009). Globalization challenges in architecture. *Architectural and Planning Research* 26(4), 343–354.
- [7] Jencks, Ch. (2000). Spectacular Museum - between the temple and the shopping center: Understanding the contradictions. *Pinakothek*, 125–155.
- [8] Wang Jh. (2017). The role of museums in the cultural landscape of modern China. Abstracts of Papers ‘17: Theory and practice of modern science: materials of the international community. *Dnipro*, 73–74 (in Russian).
- [9] Chakroff, E. (n.d.). Amateur Architecture: a New Vernacular? Retrieved from <http://evanchakroff.com/2012/03/11/amateur-architecture-a-new-vernacular/> (Accessed 21 March 2019).
- [10] Scavuzzo, G. (2013). Wang Shu: facades as material and tactile stratifications. *Screenicity journal*, 2. Retrieved from <https://arts.units.it/handle/11368/2733698> (Accessed 15 January 2019).

- [11] Wöhler, T. (2010). A Fortress Besieged by Critical Regionalism. *ORIS*, 61. Retrieved from [http://www.oris.hr/en/oris-magazine/overview-of-articles/\[121\]a-fortress-besieged-by-critical-regionalism,1734.html](http://www.oris.hr/en/oris-magazine/overview-of-articles/[121]a-fortress-besieged-by-critical-regionalism,1734.html) (Accessed 14 January 2019).
- [12] Garth, C. (n.d.). Architecture Wang Shu's Ningbo Museum. Retrieved from <https://cfileonline.org/architecture-wang-shus-ningbo-museum/> (Accessed 29 January 2019).
- [13] Ningbo Historic Museum. (n.d.). Retrieved from <https://en.wikiarquitectura.com/building/ningbo-historic-museum/> (Accessed 1 March 2019).
- [14] Xu, T. (2012). Chinese architects won the Nobel Prize in architecture for the first time. The representative is the Ningbo Museum. Retrieved from <http://news.cnnb.com.cn/system/2012/2/29/007251869.shtml> (Accessed 12 January 2019) (in Chinese).
- [15] Traditional and solemn place: Known Art Museum, which is loved by Kengo Kuma. (2014) (傳統而莊嚴的地方：被隈研吾喜愛的知•美術館原文網址). Retrieved from <https://read01.com/z0ggO7.html> (Accessed 11 January 2019) (in Chinese).
- [16] China Academy of Arts' Folk Art Museum / Kengo Kuma & Associates (2016). Retrieved from <https://www.archdaily.com/782230/china-academy-of-arts-folk-art-museum-kengo-kuma-and-associates> (Accessed 1 March 2019).
- [17] Gao, Li G. Museum of Handmade Paper (高黎贡手工造纸博物馆) Retrieved from <http://www.ikuku.cn/project/gaoligong-shougongza-ozhi-bowuguan-huali> (Accessed 21 January 2019) (in Chinese).
- [18] Shaw, C. Low profile: the Muxin Art Museum is a delicate lakeside addition (2015). Retrieved from <https://www.wallpaper.com/architecture/low-profile-the-muxin-art-museum-is-a-delicate-lakeside-addition> (Accessed 28 January 2020).