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## USING NATIONAL TRADITIONS IN MODERN PUBLIC ARCHITECTURE (ON THE EXAMPLE OF SHAANXI PROVINCE)

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## WYKORZYSTANIE TRADYCJI NARODOWYCH WE WSPÓŁCZESNEJ ARCHITEKTURZE PUBLICZNEJ (NA PRZYKŁADZIE PROWINCJI SHAANXI)

### Abstract

Despite the widespread misconception of foreigners about a rather limited list of iconic elements of Chinese architecture, in fact there was a variety of types of pagodas and temples, historical buildings had different silhouettes, there were many types of roofs, a variety of decor was observed, so even in the case when, say, temples had based on a certain prototype, they differed in appearance.

On the basis of the conducted research, the application of the following principles of using national traditions in modern architecture of Shaanxi province was argued: the principle of standardization of quoted historical forms and the principle of adaptation of historical forms.

*Keywords: national traditions, China, architecture, Shaanxi*

### Streszczenie

Pomimo powszechnego błędnego przekonania obcokrajowców na temat dość ograniczonej listy ikonicznych elementów chińskiej architektury, w rzeczywistości istniało wiele rodzajów pagód i świątyń, budynki historyczne miały różne sylwetki, było wiele rodzajów dachów, zaobserwowano różnorodność wystroju, więc nawet w przypadku gdy, powiedzmy, świątynie opierały się na pewnym pierwowzorze, różniły się one wyglądem.

Na podstawie przeprowadzonych badań argumentowano zastosowanie w nowoczesnej architekturze prowincji Shaanxi następujących zasad wykorzystania tradycji narodowych w architekturze nowoczesnej: zasady standaryzacji przytaczanych form historycznych oraz zasady adaptacji form historycznych.

*Słowa kluczowe: tradycje narodowe, Chiny, architektura, Shaanxi*

## 1. INTRODUCTION

The relevance of the research topic is determined by the Chinese government's line aimed at the revival of national traditions in the modern architecture of this country. However, in most cases, such use of national forms is limited only to simplified concave roofs or design elements.

Using the example of Shaanxi Province, the authors of the study analyzed the variety of forms and decorative methods of historical objects and proved the possibility of applying various modernized national forms.

The objectives of the study were as follows: to analyze the historical architectural heritage of Shaanxi province, to determine its characteristic features, to analyze the signs of national architecture in modern objects, and to provide practical recommendations for the use of modernized Chinese forms.

The tasks of the research led to the selection of the source base in the following areas:

- 1) problems of preserving the historical environment and museumification;<sup>1</sup>
- 2) general aspects related to traditional Chinese architecture and design;<sup>2</sup>
- 3) the relationship between architecture and landscape design in Chinese culture;<sup>3</sup>
- 4) aspects related to the formation and restoration of historical heritage.<sup>4</sup>

Studying the source base proved that the majority of researchers are interested in the historical, architectural, and artistic heritage, while there is a lack of scientific assessment of the phenomenon of the use of national forms. The lack of a scientific basis and practical experience in this phenomenon leads to the fact that such citation takes on an eclectic character, and the list of applied forms is reduced as much as possible.

## 2. PROBLEMS OF USING NATIONAL FORMS IN THE MODERN ARCHITECTURE OF THE SHAANXI PROVINCE

Today, China has actively joined the world trends of globalism and the spread of the so-called "international architecture." Despite the indisputable advantages, this process also had negative consequences of the actual loss of national features in architecture. A situation arose when national features were reduced to the level of design elements and concentrated mainly on public buildings designed to attract tourists<sup>5</sup>.

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<sup>1</sup> L. Pujia, *Cultural heritage and territory. Architectural tools for a sustainable conservation of cultural landscape*, "International Journal of Conservation Science" 2016, no. 7(1), p. 213–218.

<sup>2</sup> Q. Li, *Chinese pavilions*, China Architecture and Building Press, Beijing 2019.

<sup>3</sup> M. Orlenko et al., *The specificity of the restoration and monument protective measures for the preservation of historical Chinese gardens*, "International Journal of Conservation Science" 2021, no. 12(3), pp. 1003–1026; M. Żychowska et al., *The influence of traditional Chinese landscape architecture on the image of small architectural forms in Europe*, "Landscape Architecture and Art" 2021, no. 18(18), pp. 59–68. DOI: 10.22616/j.landarchart.2021.18.06.

<sup>4</sup> S. Wang et al., *Methods for the preservation and restoration of Dunhuang wall paintings: Foreign experience*, "International Journal of Conservation Science" 2024, no. 15(1), pp. 731–748.

<sup>5</sup> P. Spiridon, I. Sandu, L. Stratulat, *The conscious deterioration and degradation of the cultural heritage*, "International Journal of Conservation Science" 2017, no. 8(1), pp. 81–88.

That is why the line announced by the Chinese government for the popularization and revival of ancient Chinese traditions is very relevant against the background of the practical disappearance of signs that express the national style.

Both the appearance of new types of buildings and the development of international trends have affected the reduction of national features in modern Chinese architecture, and to a large extent, this is facilitated by the practice of involving famous foreign architects with a world name in the design of modern objects in China.<sup>6</sup>

It is worth noting that similar trends take place in most developed countries, where the problem of reflecting the features of national culture in modern architecture is urgent.

The consequences of such a problem are the same for different countries – the national character remains only in some objects designed for tourists, and often in the form of design elements – in expensive hotels and historical cities, restaurants of national cuisine, souvenir shops, in the field of entertainment, in park architecture of small forms.

The same trends persist in China, and we note that similar use of national features in modern architecture is also simplified, in the case of China mainly concave roofs, polychrome carved cornices, red pillars-columns, large red lanterns above the entrance, stylized decor used, and in the interiors – screens, paintings, stylized furniture, and sculpture. At the same time, generalized signs of traditional Chinese architecture and design are taken as a model, often without reference to a specific region with its own traditions, including in the outline of roofs, decoration, etc. This is argued by the fact that such objects are designed for tourists, therefore, they should concentrate on those external features that tourists associate with historical China. Here, it is worth mentioning a similar situation with the simplified generalized citation of Chinese forms in the European “Chinoiserie” style in the 19th century.

The analysis of modern objects in China, where Chinese elements are present, proved that such historical citation mainly occurs in such elements as the main entrance, the characteristic roof with curved upward corners, as well as in design elements, such as furniture, decoration, sculptures and carving, etc. (Ill. 1).

Over time, the foundations on which traditional Chinese architecture was comprehensively based were lost, just as traditional materials were in many cases replaced by modern materials and structures.

The same trends can be seen in Chinese restaurants in countries outside China, where the theme of China in its expression turns into a kind of theatrical scenery, where the things that most vividly, in the opinion of a foreigner, express China are gathered under one roof – red lanterns, images of good deities, dragons, lions, the presence of screens, fans on the walls, the use of carved furniture, etc. All these motifs are maximally stylized and simplified, compared to authentic samples.<sup>7</sup>

This indicates the need for a deep rethinking of the semiotics of traditional Chinese forms and the principles of building compositions based on the examples of public buildings of various functional purposes, identifying the most resistant elements to changes and analyzing the possibility of their use in modern Chinese architecture based on national principles.

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<sup>6</sup> Y. Ivashko et al., *The influence of the natural environment on the transformation of architectural style*, “Landscape architecture and Art” 2019, no. 15(15), pp. 101–108. DOI: 10.22616/j.landarchart.2019.15.11.

<sup>7</sup> Q. Li, *op. cit.*; M. Orlenko et al., *Rational and aesthetic principles of form-making in traditional Chinese architecture as the basis of restoration activities*, “International Journal of Conservation Science” 2020, no. 11(2), pp. 499–512.



Ill. 1. Datang Everbright City food stalls in Xi'an, 2017, photo by Y. Ding.

Thus, the problem arises: is it appropriate to combine all the features of traditional Chinese architecture in one modern object, even if in ancient times they were not combined (for example, in the interiors of modern Chinese restaurants around the world you can see Buddhist sculptures, and sculptures of lions, and umbrellas and fans on the walls, and paintings, and screens), will it not lead to the creation of a certain theatrical effect, kitsch, which creates a distorted impression of Chinese culture for the tourist? And again, if we touch on the issues of interior decoration, for example, the interiors of restaurants of national cuisine, then what ancient interiors should be taken as a model, and should the peculiarities of historical regional design be taken into account?

In our opinion, such a simplified approach to quoting historical motifs in modern Chinese architecture hides the danger of creating a tourist with the impression of the uniformity of historical patterns throughout China, if he sees similar national motifs in restaurants in Harbin, Beijing, Shanghai, etc., especially against the background of the ever-widening penetration of modernity in the form of new materials and technologies. In most such objects, the use of feng shui principles is preserved in the paired arrangement of objects, zoning of rooms with the help of screens, partitions made of bamboo or rice paper or silk with story paintings and furnishings, walls and ceilings are decorated with ornaments or story images according to ancient traditions, they use carved or inlaid wooden furniture covered with layers of black lacquer, low sofas with pillows.

The influence of modern technologies is due to the mass attendance of such institutions, therefore durable materials are used, in addition, sometimes mirror or stretch ceilings are used to modernize the interiors. The analysis of the existing source base identified a range of unsolved questions:

- 1) the scientific interest of researchers is concentrated mainly in the field of historical Chinese architecture, design and art, while there is a lack of comprehensive studies of modern architecture using the national forms of China<sup>8</sup>;
- 2) there is a lack of scientific research that would compare historical examples and modern objects in order to determine their identity and prove to what extent such modern objects retain the regional originality of architectural forms that was felt in ancient objects;
- 3) despite the wide fame of Shaanxi Province and the capital city of Xi'an as the personification of the area of concentration of outstanding artifacts, few studies trace how national motifs are implemented in the modern architecture of Shaanxi Province and whether they differ in imagery from modern objects outside the province;
- 4) it is not determined in which public buildings historical citation occurs most often and which techniques are used.

### 3. CHARACTERISTIC FEATURES OF THE TRADITIONAL ARCHITECTURE OF SHAANXI PROVINCE

The main elements of traditional buildings of Shaanxi province with different functional purposes were analyzed<sup>9</sup>. The conservatism of the widespread type of multi-tiered pagoda in Shaanxi province is argued. The main period of the maximum activation of the pagoda construction process was determined – these are the periods of the Sui dynasty (581–618), the Tang dynasty (618–907) and the Song dynasty (Northern Song: 960–1127, Southern Song: 1127–1279), which indicates that the main flowering of pagodas falls on the period between 581 and 1279, that is, from the 6th to the 13th centuries. In later centuries, this type of construction gradually lost its relevance in Shaanxi province, so we do not have a sufficient number of pagodas of the Yuan (1271–1368), Ming (1368–1644), and Qing (1636–1912) eras

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<sup>8</sup> G.Y. Zhu, *Hand-painted Chinese royal buildings and classic gardens*, Tianjin University Press, Tianjin 2010.

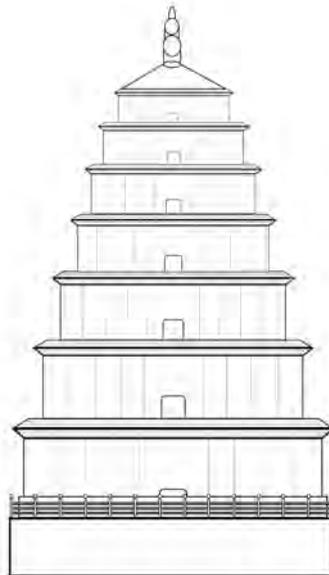
<sup>9</sup> Y. Ding et al., *Specificity of the construction of historical temples of Shaanxi Province as the basis of their preservation and restoration*, “International Journal of Conservation Science” 2023, no. 14(2), pp. 435–452.

when the main focus is on the construction of temple pavilions without pagodas. Therefore, it can be argued that there is a shift away from the construction of pagodas in the early periods towards the construction of temples in the later periods, and certain generalized types of temple pavilions, which were simultaneously used in Taoism, Buddhism, and Confucianism, were gradually formed, the pavilions somewhat resembled palace and residential pavilions.

And here we are talking about the phenomenon when the temple structure gradually loses the distinctive features of a cult building (the presence of pagodas), instead, it acquires the features of residential architecture. In some cases, it is impossible to determine from the facade whether it is a temple of Buddhism, Taoism, or Confucianism, moreover, mosques have the same facades.

The characteristic compositional and morphological features of pagodas of the Sui, Tang, and Song periods were analyzed and the most characteristic type of pagoda of Shaanxi province was formulated, which is an emphatically elongated structure, completed by a four-sloped roof with a spire or a bathhouse with a spire, mostly with square plans of the lower and upper tiers, where the angle of inclination to the central axis of the external walls varies – from small to more significant, with 7–8 tiers, the height of which is quite small, but sufficient for the arrangement of semicircular or rectangular window openings in the walls, and the tiers prospectively decrease upwards both in terms of dimensions in plan, so and in height (Ill. 2). A typical pagoda of Shaanxi Province has an emphatically more massive lower tier with a semicircular entrance and is practically devoid of external decoration (Ill. 2).

Shaanxi temple types of different periods were analyzed and systematized. The dominance of two types of temple pavilions derived from Xingjiao Temple and Hu County Huayang Temple is argued.



*Giant Wild Goose Pagoda*  
(*Da Yan agoda*)

Ill. 2. The façade of Giant Wild Goose Pagoda (Da Yan Pagoda), drawing by Y. Ding.

Based on a comparison of the shaping of later Ming and Qing temples, it is argued that Xinjiao Temple became the model for eight temples in the main Ming period, and Huayang Temple became the model for four temples in the main Qing period when the prototype was repeated almost without modifications.

Several examples of temples have been identified, which are successively connected with the formation of small architectural forms – tiered pavilions. The most common for temples was the division into four parts (roof, cornice, wall, plinth, or podium). The analysis of the genesis of the type of temple pavilion from the Tang to the Qing era proved that the spread of temple pavilions in the late Ming and Qing periods took place against the background of the disappearance of the traditions of building high multi-tiered pagodas, established in the early periods, there was a decrease in the variability of images and a certain eclecticism was felt.

Both in the case of pagodas and in the case of temple pavilions, we can talk about a certain replication of the canonical image, including the division into certain parts, the ratio of parts, the number of tiers, the width-length ratio, etc. This proves that the type of pagoda and temple was much more conservative before changes than small architectural forms-pavilions, where many different modifications were formed.

In historical objects, a harmonious correspondence of the stylistics of individual constituent elements was observed, and traditional building materials and structures were used.

#### **4. MORPHOLOGY OF FORM-EXPRESSORS OF NATIONAL TRADITIONS IN ARCHITECTURE (ROOFS, EAVES, WALLS, OPENINGS)**

The authors of the study analyzed examples of historical pavilions, pagodas, and temples in Shaanxi province and proved that despite the existence of certain “architectural clichés” there were various modifications of the types of pavilions, roofs, silhouettes, etc. This shows that the ancient architecture of China was diverse in compositional structure and morphology of the constituent elements.

Instead, in modern objects with modernized traditional elements, such citation often turns into eclecticism, when traditional forms are combined with modernist architecture or reproduce traditional forms in modern materials and structures (Ill. 3).

It is worth noting that such use of modernized forms, which are personified with national identity, requires knowledge of both national traditions and modern architectural trends so that the object looks quite modern and does not represent a random set of historical architectural quotations without their harmonious combination.

The analysis of the manifestations of the signs of traditional Chinese architecture in the modern buildings of the city of Xi’an proved that there was a simplification of traditional forms along with the preservation of characteristic silhouettes inherent in temples, but taking into account the multi-story nature of modern public buildings.

In hotels and catering establishments, roof forms that do not have such emphasized concave corners are requested. The widespread use of detailed complex cornices, however, compared to historical objects, the plane of the wall, which is practically devoid of decor, is greatly simplified. Entrances in the Chinese style are also not common. Polychromy takes on a more restrained character, especially in hotel buildings. A common technique is to complete an essentially modernist building with a pavilion of traditional outlines on the roof (Ill. 3).



Ill. 3. Scanben Hotel in Xi'an, 2022, photo by Y. Ding.

The function of a modern object affects the degree of use of national features on facades: tourist objects (hotels, public catering establishments) use a greater number of elements associated with China (for example, red lanterns, fans, sculpture), in hotels, banks, in medical institutions, universities, and offices, these elements are used more limited and restrained.

The analysis of public buildings using national motifs proved the presence of two main groups of objects: the first – with greater continuity with historical objects due to a characteristic silhouette, outlines of concave roofs, sometimes multi-tiered, complex detailed

cornices, traditional entrances, windows, and bright polychromy, the second – with the modernization of forms, including the modernization and simplification of traditional forms through implementation in modern materials and structures. A comparative analysis of ancient Chinese architecture and modern buildings to match them according to the developed author's methodology proved that the citation of historical forms followed the path of simplification.

This is because traditional forms are superimposed on buildings of a different functional purpose, for example, on multi-story hotel complexes, banks, and medical institutions (III. 4).



III. 4. Huashan Mountain International Hotel in Xi'an, 2019, photo by Y. Ding.

The second reason is that modern objects are built with modern materials and structures, which also affects the change in silhouettes, scale, shapes, and decor. The further direction of the research is an in-depth study of the reasons for the appeal to national forms in the

modern architecture of China on the basis of formulated methodological approaches and the development of recommendations for the use of national motifs in the modern architecture of Shaanxi province.

## 5. CONCLUSIONS

The following principles of using modernized national forms in the modern architecture of Shaanxi Province were revealed:

**1. The principle of standardization of quoted historical forms**, when certain generalized patterns are created in modern materials and constructions that embody Chinese national identity. A comparison of the use of national motifs in modern public buildings proved that this use followed the path of simplification of elements and decor, in some cases, national forms were stylized according to modern building materials.

**2. The principle of adaptation of historical forms to buildings with a fundamentally different function**, and therefore an architectural and planning solution, which leads to the appearance of a certain effect of decoration. Compared to small-scale historical buildings, modern objects become large-scale by enlarging the articulations of facades, windows, and stylized enlarged decor in modern materials. Catering facilities use a greater number of elements associated with China (for example, red lanterns), in hotels, banks, medical facilities, universities, and offices, these elements are used more limited and restrained (Ill. 5).



Ill. 5. Jinyuan Furun Restaurants in Xi'an, 2022, photo by Y. Ding.

The proposed recommendations for the use of modernized national forms in the modern architecture of Shaanxi Province are summarized as follows:

- departure from the literal repetition of the existing historical pavilions as an accent element on the roof without reference to the modern appearance of the building;
- identification of iconic national forms, characteristic of the provinces of Shaanxi and the city of Xi'an and the modernization of these forms in modern materials and constructions;
- expansion of the variety of cited national elements, not limited only to typical roofs with concave upward ends, red lanterns and fans, use of roofs of different types based on historical samples;
- national features in modern architecture should not acquire the character of archaism, made in modern materials and structures. In our opinion, we should move away from literal copying towards a creative reinterpretation of the historical heritage of Shaanxi Province, when the form looks modern and at the same time contains a hint of historical objects. It can be a silhouette or details.

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