Nauka Science

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Functional and figurative and compositional features of traditional Chinese pavilions

Funkcjonalne i figuratywne cechy kompozycyjne tradycyjnych chińskich pawilonów

Key words: Chinese pavilion, tradition, continuity, composition, planning, landscape

Słowa kluczowe: chiński pawilion, tradycja, kontynuacja, kompozycja, planowanie, krajobraz

Introduction

The Chinese traditional pavilion, as a type of architectural building, appeared even before the eras o the Shang and Zhou dynasties and developed subsequently into many options of buildings with various functions and the ability to adapt to the environment. Numerous examples of pavilions are known: pavilions at palaces, temples and monasteries; for storage of goods or recreation; in the mountains, on rivers, lakes and springs; memorial and mail pavilions.

Identifying the typical hallmarks of all the ancient Chinese pavilions, we can state a harmonious balance with the environment, their landscape-scaled size and the creation of a poetical and philosophical ambience (fig. 1). This explains why the pavilions in the emperor's gardens differed from other types by their luxurious decoration and symbolic icons expressing the high status of the Son of Heaven—Tianzi, and not by the form of roofs or tiers – the natural environment dictated the scale and image of a particular gazebo.

The distinguishing feature of Chinese pavilions is their diversity, the lack of the duplication of images, the singularity of types of roofs formed under the influence of climatic conditions and cultural traditions, and different kinds of plans and decoration (fig. 2, 3).

Specific features of traditional Chinese architecture were highlighted in the publications of O. Belova, N. Vynogradova, N. Nikolaieva, B. Denike, D. Kohan, O. Kolpakova, V. Luchkova¹ and in collective works².

These sources were used as the basis for the analysis of small architectural forms based on the prevailing ideology, philosophy and religious beliefs. Since the architecture of the pavilions was noted for ornate decoration and ornamentation, we used references focused on Chinese decor. The monograph of Qing Li, dedicated to the history and descriptions of ancient Chinese pavilions with dimensional drawings³ was fundamental to our study.

Main section

The most ancient pavilions were strategic structures located at the borders and roadsides and that were used for postal services, and pavilions planned according to the Chinese traditions at the entrance to villages, which simultaneously performed the function of a place for rest and receiving and seeing off honored people.

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Fig. 1. Mid-Lake Pavilion in the Park of Stone Lions, Suzhou, Jiangsu Province; watercolor by P. Chang 2019.

One specific type of ancient pavilions were pavilions on bridges that appeared in South China. however, the exact period of their first appearance is unknown⁴ ubsequently, when stone bridges entered use, such pavilions began to perform the function of a merely decorative element and took on the main role in the composition; and the bridge itself, which caused their appearance, became a lovely additional element. Such pavilions on bridges became widespread in the Sui and Tang era⁵.

The first types of pavilions also included so-called spring pavilions, which appeared due to the functional need to protect a water source from pollution. In this case, we can precisely define the time of appearance of this type of pavilion - during the reign of the Han and Qing dynasties⁶. Given their specificity, a separate monograph was dedicated to their design. During the reign of the Ming and Qing dynasties, there were two main kinds of spring pavilions - with an opening in acute-angled roofs and without it (fig. 4). The arrangement of the hole in the roof, through which the source was illuminated by the sun's rays, was dictated by the rules of Feng Shui and two elements - the negative (yin) and the positive (yang). An underground water source was considered a conveyor of negative yin energy, but thanks to the sun's rays it turned into a conveyor of yang energy. Also, the arrangement of the hole on top provided additional insolation.

For the purposes of time-keeping, instead of clocks, the Chinese used so-called pavilions with bells and

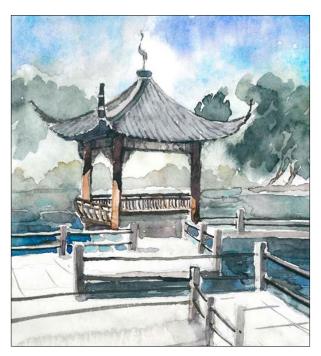


Fig. 2. The entrance Pavilion Jang Hi, the Gùgōng Palace; water-color by P. Chang 2019.



Fig. 3. The Kajwang Pavilion, Hangzhou West Lake, Zhejiang Province; watercolor by P. Chang 2019.

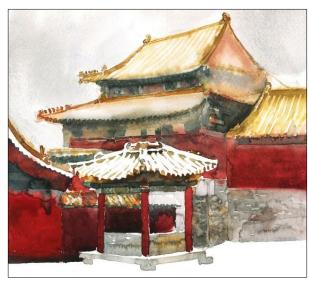


Fig. 4. Pavilion-gazebo over a well, near the Thai Hoa building of Gùgōng Palace in Beijing; watercolor by P. Chang 2019.

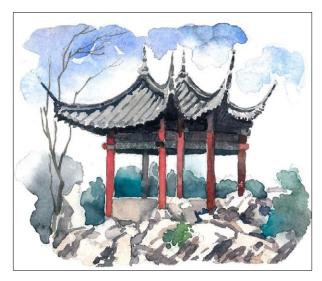


Fig. 5. Double Pavilion in Huzhou; watercolor by P. Chang 2019.

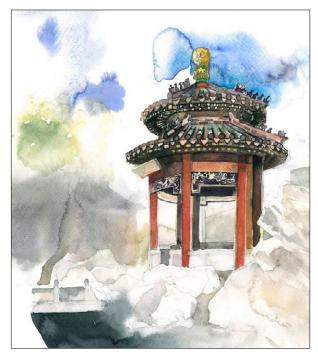


Fig. 6. Biluo Pavilion, Qianlong Garden of the Forbidden City, Beijing; watercolor by P. Chang 2019.

drums; their sound reached 50 meters. These twotier pavilions were built at temples, monasteries, and even in the mountains. Pavilions with drums at market squares signalled the closing of the market.

The so-called pavilion with a flag above the city gates evolved from those pavilions during the reign of the Qin and Han dynasties.

A type of memorial pavilion in honor of an outstanding event or celebrated figure that performed the function of a canopy over a stone memorial stele with an inscription was also widespread.

Pavilions at Buddhist and Taoist temples and monasteries performed ritual functions and were used to consume joint meals inside. A unique landscape sites



Fig. 7. Fragment of a traditional roof with glazed tiles; watercolor by P. Chang 2019.

was chosen for such ritual pavilions, and their architectural forms and scale depended on the surrounding landscape. To enhance the uniqueness of the landscape through architecture, they used original forms of roofs, an expressive silhouette, and sophisticated decoration with symbolic content (fig. 5, 6).

The landscape gardening pavilion, used for aesthetic enjoyment and solitude in nature, appeared later than other types of pavilions. A type of garden pavilion called "floating cups for wine" emerged in the era of the Ming and Qing dynasties⁸.

There are rectangular, round, six- and eight-sided plans of the ancient pavilions; often the original names of the plan shape are used – "Begonia shape", "fan-shape", "plum flower shape". Examples of paired pavilions are known – which were round or hexagonal in plan. Most often, pavilions with a square plan are crowned by an acute-angled roof covered with either glazed tiles, blackened tiles, reeds or the bark of trees (fig. 7)¹⁰.

Based on existing measurement drawings, 42 historical pavilions in different regions of China were analysed – imperial pavilions located in the gardens of palaces, temples, city parks, water, and memorial pavilions¹¹. The analytical tables created by the authors made it possible to formulate certain conclusions. For this purpose, the examples were noted when an ordinary public pavilion had a more complex composition, a more developed upward composition and an expressive silhouette than the imperial garden pavilions.

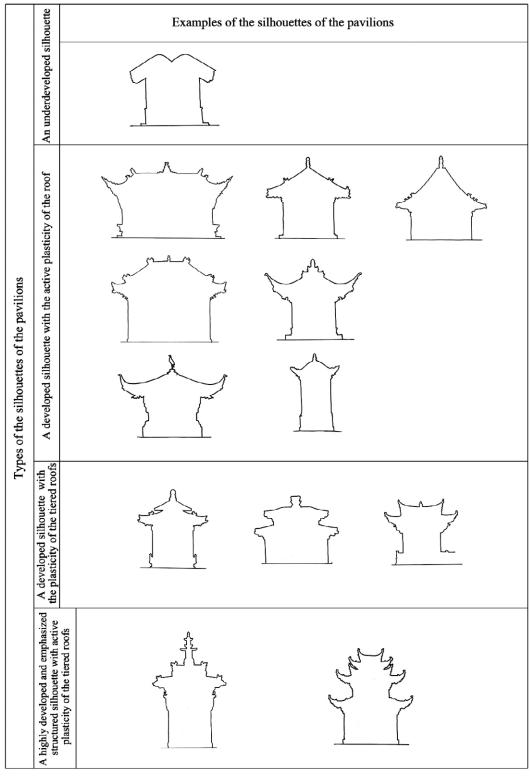


Fig. 8. A comparative analysis of pavilion silhouettes; drawings by P. Chang, conceptualisation by Y. Ivashko 2019.

A comparative analysis of the silhouettes of the pavilions made it possible to distinguish the following four types (fig. 8):

Type 1 – an underdeveloped silhouette.

Type 2 - a developed silhouette with a highly expressive roof.

Type 3 – a developed silhouette with expressive tiered roofs.

Type 4 – a highly developed and emphasized structured silhouette with highly expressive tiered roofs.

Type 1 is represented by 4 structures, type 2 – by 25 structures, type 3 – by 8 structures, type 4 – by 5 structures, which suggests that the silhouette with highly expressive single-tiered roofs was prevalent in gazebos for various purposes; that is, the roof played the main role in creating the distinct image of the Chinese pavil-

The main type		Modifications
Division of the facade into two parts	1	2
Division into three parts	4	5 6 7 8 9 10
Division into four parts		
Division into five parts		14

Fig. 9. The types of horizontal divisions of historical pavilions; drawings by P. Chang, conceptualisation by Y. Ivashko 2019.

ion, and that is why subsequent European structures in the "Chinese style" more often embodied exactly this essential modified feature¹².

The types of horizontal divisions of historical pavilions were also analysed. It was found that all pavilions are subject to the following scheme (fig. 9): their facades were divided into either two, three, four or five parts. The most characteristic feature was the division of the facade into three parts (roof, wall, basement or roof, cornice, wall), which had many varieties. The two-part division (roof, wall) and multi-part division into four to five parts (wall, multi-tiered roof) were less common.

Having analysed the measurements of historical pavilions, we found six main types of roofs in different regions, based on which many variations were created. The authors noted the distribution of twin roofs in the north-eastern part of China, of the expressive concave roofs with a large extension in the east of the country, where their appearance was the result of the need to protect from rain.

Conclusion

The analysis of historical examples of pavilions throughout China proves that they were built based on

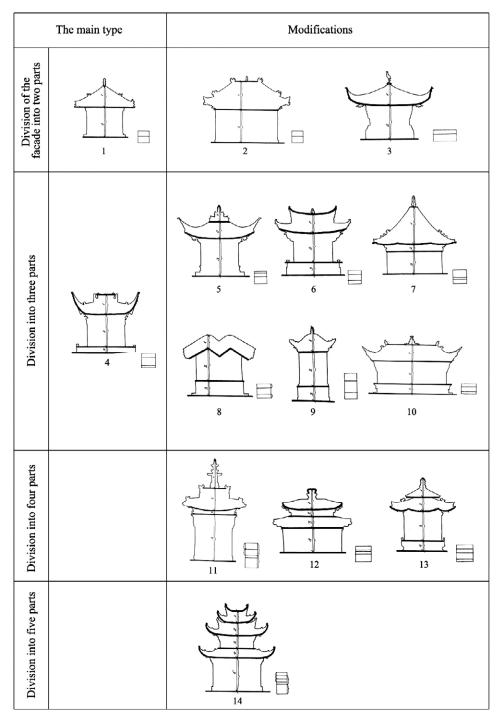


Fig. 9. The types of horizontal divisions of historical pavilions (continued); drawings by P. Chang, conceptualisation by Y. Ivashko 2019.

"the necessary and sufficient principle", that is architects and their clients did not try to make the pavilion dominant in mass and size over the landscape. On the contrary, they organically blended architecture into nature, reinforcing it with romantic names – the Nanlao Spring Pavillion of the Jinci Temple; the Locust Tree Memorial Pavilion; the Mid-Lake Pavilion of the West Garden in Suzhou; the Beihaj Park Five-Dragon Pavilion; the World View Pavilion in West Lake, Hangzhou; the Seven Star Crags Pavilion Group in Zhaoqing City; the Second-best Spring under Heaven Pavilion in Xihui

Park at the foot of Mount Hui; the Watergate Pavilion at Tangmo Village, the Thatched Cottage Tablet Pavilion in Mount Qingcheng; the Tiger Hill Pavilion of Two Immortals; the Lower View Pavilion on Cloud Step Bridge; the Nostalgia Pavilion in Dujiangyan; the Apricot Platform in the Temple of Confucius in Qufu; the Pavilion of the Moon Arriving and the Breeze Coming, the Master of the Nets Garden, Wang Shi Yuan; the Qingyin (Heart-Cleaning) Pavilion in the mountains of Emei; the Honest (incorrupt) Spring Pavilion of Baogong Memorial Temple), and others.

References / Bibliografia

- Ancient China (Encyclopedia), transl. R. Kogan, Moscow 2007.
- Belova Yelena (ed.), The World of Chinese culture: bibliographical reference, Vladivostok 2007.
- Chinese pavilions. The Series of 100 Gems of Chinese Architecture, text and photos by Qin Li, "China Architecture and Building press" 2019.
- Denike Boris, China, Moscow 1935.
- Kolpakova Olga, Ancient China, Moscow 2006.
- Luchkova Vera, The history of the Chinese city. Urban planning, architecture, landscape gardening art, Khabarovsk 2011.
- Ornaments of every times and styles. 100 tables with explanatory text of N.F. Lorentz, ed. A.F. Devrien, St. Petersburg 1898.
- Syasina Tatyana, Inside the Chinese Palace. The Story of the Glass Beaded Salon, "The Tretyakov Gallery

- Magazine" 2017, no 3 (56), https://www.tg-m.ru/articles/3-2017-56/kitaiskii-dvorets-istoriya-odnogo-interera (access: 6 X 2019).
- The history of China from ancient times to the beginning of the 21st century, ed. Sergey Tikhvinskii, vol. 1–10, Moscow 2014.
- The history of China from ancient times to the beginning of the 21st century, ed. Sergey Tikhvinskii, vol. 1–10, Moscow 2014.
- *The spiritual culture of China*, ed. Mikhail Titarenko, vol. 1–6, Moscow 2006.
- Vinogradova Nadezhda, Nikolaieva Natalia, Small Art History. The art of the countries of the Far East, Moscow 1979
- Yang Zhi, *Chinese pavilions in Tsarskoye Selo*, https://cyberleninka.ru article kitayskie-besedki-v-tsarskom-sele (access: 4 IV 2019).
- Y. Belova (ed.), The World of Chinese culture: bibliographical reference, Vladivostok 2007; N. Vinogradova, N. Nikolaieva, Small Art History. The art of the countries of the Far East, Moscow 1979; B. Denike, China, Moscow 1935; D.R. Kogan, Ancient China (Encyclopedia), transl. R. Kogan, Moscow 2007; O. Kolpakova, Ancient China, Moscow 2006; V. Luchkova, The history of the Chinese city. Urban planning, architecture, landscape gardening art, Khabarovsk 2011.
- ² The spiritual culture of China, ed. M. Titarenko, vol. 1–6, Moscow 2006; The history of China from ancient times to the beginning of the 21st century, ed. Sergey Tikhvinskii, vol. 1–10, Moscow 2014; The history of China from ancient times to the beginning of the 21st century, ed. S. Tikhvinskii, vol. 1–10, Moscow 2014.
- ³ Chinese pavilions. The Series of 100 Gems of Chinese Architecture, text and photos by Qin Li, "China Architecture and Building press" 2019.
- ⁴ Ibidem, p. 18.
- ⁵ Ibidem.
- ⁶ Ibidem, p. 20.
- ⁷ Ibidem.
- ⁸ Ibidem, p. 26.
- ⁹ Ibidem, p. 29.
- 10 Ibidem, p. 36.
- ¹¹ Ibidem, p. 29.
- ¹² Z. Yang, Chinese pavilions in Tsarskoye Selo, https://cyberleninka.ru article/kitayskie-besedki-v-tsarskom-sele (access: 4 IV 2019).

Abstract

The article analyses the historical roofs and types of traditional Chinese pavilions. As all ancient Chinese architecture, the small architectural forms are based on traditions, an ancestral connection with previous periods, a distinct hierarchy and a harmonious connection with nature. A pavilion as a small architectural form had high adaptability to various functions and natural and climatic conditions. Some types of pavilions (for instance, military, temple, postal pavilions and pavilions on bridges) appeared earlier, and on their basis, other types were developed with time (a bell and drum, a garden and park pavilion). In the process of development of a pavilion as a type of construction, its layout, volumetric-spatial composition, decoration and designs were expressed in numerous options; moreover, pavilions had their regional peculiarities in different territories of China. In each case, the main point was the harmonious combination of a pavilion and a landscape. Based on the analysis of the drawings of the old pavilions, the principal types of silhouettes and shapes of the roofs, the symbolic meaning of colors and decor were determined.

Streszczenie

W artykule przeanalizowano historyczne dachy i rodzaje tradycyjnych chińskich pawilonów. Jak w każdej historycznej architekturze, także w Chinach małe formy architektoniczne opierają się na tradycji, nawiązaniu do poprzednich okresów, wyraźnej hierarchii i harmonijnym połączeniu z naturą. Pawilon jako mała forma architektoniczna cechował się wysoką adaptowalnością do różnych funkcji oraz warunków naturalnych i klimatycznych. Niektóre typy pawilonów (np. wojskowe, sakralne i pocztowe, pawilony na mostach) pojawiły się wcześniej, a następnie wzorując się na nich, z czasem opracowano także inne wzorce (dzwonek i beben, pawilon ogrodowy i parkowy). W procesie rozwoju pawilonu jako rodzaju konstrukcji jego układ, kompozycja przestrzenna oraz dekoracja przybierały różne formy. Co więcej, pawilony miały swoje regionalne cechy w różnych rejonach Chin. W każdym przypadku najistotniejszym punktem było harmonijne połączenie pawilonu i krajobrazu. Na podstawie analizy rysunków dawnych pawilonów, podstawowych typów konstrukcji i kształtów dachów określono także symboliczne znaczenie ich kolorów i wystroju.