Specifics of stylised shapes of Chinoiserie-style pavilions as the basis of their restoration

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Specifics of stylised shapes of chinoiserie-style pavilions as the basis of their restoration

This article analyses the phenomenon of Chinoiserie style in European architecture. The basic principles of Chinese landscape design and the role of pavilions in the natural environment are highlighted. The fundamental difference between European and Chinese pavilions is shown at different levels – from the structure of the park to the composition to individual details – and it is also shown that European Chinoiserie-style pavilions were a much simplified and averaged version of the Chinese ones. The ambiguity of purpose and variety of functions inherent in ancient Chinese pavilions are lost in

The ambiguity of purpose and variety of functions inherent in ancient Chinese pavilions are lost in European ones, as the "Chinese-style" pavilion is intended for only one purpose—aesthetic entertainment. The appearance of the European pavilion, sometimes called a "tea pavilion", does not follow that of ancient Chinese tea ceremony pavilions. In addition, the European park pavilions cannot be compared to the most famous Chinese "landscape pavilions", as none of the former are located in such a majestic landscape with the possibility of viewing from a long distance.

Keywords: Chinese pavilion, Chinoiserie, stylised forms, restoration.

Introduction

Analysis of the phenomenon of the transformation of national Chinese cultural and artistic traditions into European architecture from the eighteenth to early twentieth century and proves the lack of shared identity of European oriental buildings and traditional ancient Chinese architecture. The Chinoiserie style, by its nature, was a creative European interpretation of Chinese motifs, differing significantly from the original examples. It would be more correct to say that it did not in fact embody original Chinese architectural and artistic traditions but

rather an image of China and the East in general, as held in the minds of Europeans who had never been there and knew nothing about the philosophical and religious foundations on which Chinese architecture and art are based, and therefore transferred to China images familiar to them from the Baroque and Rococo traditions.

Like artists and writers following Chinese traditions according to their own understanding, European and Russian architects were guided by European principles of aesthetics and beauty, without thinking about the philosophical and esoteric content of each form and element. The most common types of Chinese-inspired construction in Western Europe and the Russian Empire were "oriental" garden pavilions, gazebos and so-called "tea houses".

In order to analyse Chinoiserie-style objects in Europe, sources devoted to the general problems of historical and cultural heritage protection and preservation of the authentic historical environment were analysed. In order to conduct a comparative analysis of Chinese and European pavilions, Chinese academic sources devoted to classifying pavilions by function and drawings of pavilions were studied. This facilitated a comparative analysis of compositional characteristics and morphology. Since the "theatricality" of the Chinoiserie style can be largely explained by the transfer of stylised Chinese forms to a non-indigenous environment (namely, to that of an ordinary European park), publications on this issue and those detailing the features of Chinese pavilions in their "native" surroundings were examined. An important aspect associated with Chinese and Chinoiserie-style pavilions is their preservation and restoration,

¹ SPIRIDON, Petronela, and SANDU, Ion. Museums in the life of public. In: *International Journal of Conservation Science*, vol. 7, 2016, No. 1, pp. 87–92; SPIRIDON, Petronela, SANDU, Ion, STRATULAT, Lacramioara. The conscious deterioration and degradation of the cultural heritage. In: *International Journal of Conservation Science*, vol. 8, 2017, No. 1, pp. 81–88; PETRUŠONIS, Vytautas. Symbolic potential of place and its modelling for management needs. In: *Landscape architecture and Art*, 13, 2018, (13), pp. 39–49; PUJIA, Laura. Cultural heritage and territory: Architectural tools for a sustainable conservation of cultural landscape. In: *International Journal of Conservation Science*, vol. 7, 2016, S. 1, pp. 213–218.

² LI, Qin. Chinese pavilions, Beijing 2019; PEIFANG, Sun. The Chinese Classical-Style Pavilions beside West Lake. In: Art and Design Review, vol. 11, 2023, No. 4; CHANG, Dan. Study on the Appearance and Shape Design of China Pavilion. In: International Conference on Materials, Energy, Civil Engineering and Computer (MATECC 2017), 2017, pp. 30-32); XINIAN, Fu. Traditional Chinese Architecture, 2017; KOHL, David. Offshore Chinese Architecture: Insights on Five centuries of Overseas Chinese building practices, 2018.

³ IVASHKO, Yulia, KUZMENKO, Tetiana, SHUAN, Li, CHANG, Peng. The influence of the natural environment on the transformation of architectural style. In: *Landscape architecture and Art*, vol. 15, 2019, Iss.15, pp. 98-105; IVASHKO, Yulia, KUŚNIERZ-KRUPA, Dominika, CHANG, Peng. History of origin and development, compositional and morphological features of park pavilions in Ancient China. In: *Landscape architecture and Art*, vol. 15, 2019, No. 15, pp. 78–85; IVASHKO, Yulia, CHERNYSHEV, Denys, CHANG, Peng. Functional and figurative and compositional features of traditional Chinese pavilions. In: *Wiadomości Konserwatorskie – Journal of Heritage Conservation*, vol. 61, 2020, pp. 60–66; YU, Kongjian. The conflict between two civilisations of nature-based solutions. In: *Landscape Architecture Frontiers*, vol. 8, 2020, No. 3, pp. 4–9; JIANG, Jiayi, CHEN, Ming, ZHANG, Junhua. Analyses of elderly visitors' behaviors to community parks in Shanghai and the impact factors. In: *Landscape Architecture Frontiers*, vol. 8, 2020, No. 5, pp. 12–31;

especially given the large number of wooden structures.⁴ The sources allowed the authors to compare European chinoiserie-style pavilions with traditional Chinese pavilions and define the differences between the irregular plan of the old Chinese garden with pavilions and European regular-plan gardens with "Chinese-style" pavilions.

Materials and methods

Historical analysis was used to highlight the historical factors influencing the development of pavilion architecture in China and Europe. Graphical and comparative analyses were used to determine features of the layout of Chinese gardens and European parks and to compare genuine Chinese and Chinoiserie-style pavilions.

Results and discussion

1. The location of pavilions in the natural environment

The philosophy of the private garden was formed in China over thousands of years: to create the impression of a space for solitude in the midst of nature and tranquillity. The Chinese garden was originally conceived as the embodiment of harmony and an ideal world (Figs. 1, 2). In European palace and estate parks, however, Chinese themes were just another element of exotic entertainment. The most common Chinoiserie-style architectural form in European parks are pagodas and pavilions. These are typically placed without understanding how they are placed in traditional Chinese landscape environments or the symbolic meaning with which they are imbued. Their design was based on models of Buddhist pagodas and garden towers and, most often, pictures on porcelain vases.

⁴ ORLENKO, Mykola, IVASHKO, Yulia. The concept of art and works of art in the theory of art and in the restoration industry. In: Art Inquiry. Recherches sur les arts, XXI, 2019, pp. 171-190; ORLENKO, Mykola, DYOMIN, Mykola, IVASHKO, Yulia, DMYTRENKO, Andrii, CHANG, Peng. Rational and Aesthetic Principles of Form-Making in Traditional Chinese Architecture as the Basis of Restoration Activities. In: International Journal of Conservation Science, vol. 11, 2020, No. 2, pp. 499-512; ABBASI, Javad, SAMANIAN, Kouros, AFSHARPOR Maryam. Evaluation of polyvinyl butyral and zinc oxide nano-composite for consolidation of historical woods. In: International Journal of Conservation Science, vol. 8, 2017, No. 2, pp. 207-214; ALFIERI, Paula, GARCÍA, Renato, ROSATO, Vilma, COR-REA Maria. Biodeterioration and biodegradation of wooden heritage: role of fungal succession. In: International Journal of Conservation Science, vol. 7, 2016, No. 3, pp. 607-614; AUSTIGARD, Mari, MATTSSON, Johan. Monitoring climate change related biodeterioration of protected historic buildings. In: International Journal of Building Pathology and Adaptation, vol. 38, 2020, No. 4, pp. 529-538; YANG, Ru-yuan, SUN, You-fu, ZHANG, Xiao-feng. Application and Progress of Reinforcement Technology for Chinese Ancient Buildings with Wood Structure. In: Geotechnical and Geological Engineering, vol. 38, 2020, No. 6, pp. 5695–5701; BLANCHETTE, Robert. A review of microbial deterioration found in archeological wood from different environments. In: International Biodeterioration and Biodegradation, vol. 46, 2000, pp. 189-204; CHIDICHIMO, Giuseppe, DALENA, Francesco, RIZZA, Antonio, BENEDUCI, Amerigo. Insect-Infested Wood Remediation by Microwave Heating and Its Effects on Wood Dehydration: A Case Study of Hylotrupes bajulus Larva. In: Studies in Conservation, vol. 63, 2018, Iss. 2, pp. 97–103; YUZHAKOV, Yury, BELKIN, Alexander. Construction strengthening in historical wooden cupolas restoration. In: IOP Conference Series – Materials Science and Engineering, No. 365, 2018, pp. 1853–1861; FRUNZIO, Giorgio, DI GENNARO, Luciana. Scismic structural upgrade of historical buildings through wooden deckings strengthening: The case of study of Palazzo Ducale in Parete, Italy. In: Procedia Structural Integrity, vol. 11, 2018, pp. 153-160; QIAO, Guanfeng, LI, Tieying, CHEN, Yohchia F. Assessment and retrofitting solutions for an historical wooden pavilion in China. In: Construction and Building Materials, No. 105, 2016, pp. 435–447; OLIVER-VILLANUEVA, Jose-Vicente, BENITEZ-TELLES, Julio E., VIVANCOS-RAMON, María Victoria, GRAFIA-SALES, José Vicente. Wood Consolidation Assessment By Fundamental Frequency Method In Cultural Heritage Preservation. In: Wood Research, vol. 57, 2012, Iss. 2, pp. 331–338.



Fig. 1: Chinese pavilion in Yu Yuan private garden in Shanghai. Photo by Justyna Kobylarczyk, 2017-



Fig. 2: Sculpture of sacral lion and pavilion in the Imperial Garden of the Forbidden City, Beijing. Photo by Michal Krupa, 2017.

The first difference between European parks and Chinese gardens is the number of Chinese pavilions: most European parks have a single pavilion that does not affect the perception of the park's overall composition, whereas Chinese sources mention a significant number of pavilions that emphasise the beauty of an outstanding landscape.

For comparison, three Chinese gardens were selected: the garden in the ensemble of the Forbidden City (Gugong), the garden of Yuan Ming Yuan, and the private gardens of Suzhou – Zhuōzhèng Yuán (The Humble Administrator's Garden) and Liú Yuán (Lingering Garden). The selected European landscape parks with Chinoiserie-style buildings were Sanssouci Park in Potsdam, Germany; Tsarskoe Selo (Monarch's Park) near St Petersburg, Russia; Oleksandriia

Park in Bila Tserkva, Ukraine; and Sofiivka Park in Uman, Ukraine. All of these parks are in the estates of aristocrats.

Imperial Chinese gardens outside the Forbidden City have a picturesque irregular layout. The Suzhou gardens were a model for landscaping both private and imperial gardens (Figs. 3, 4).





Fig. 4: The Mid-Pond Pavilion of the Shī Zǐ Lín Garden (The Lion Grove Garden). Watercolour by Peng Chang, 2020.

Fig. 3: The Pavilion Whoever Enters the Pavilion Becomes a Buddha in Liú Yuán Garden. Watercolour by Peng Chang, 2020.

In European countries and the Russian Empire, examples of "Chinese" constructions are found in large palace complexes with parks and aristocratic estates. In these settings, "Chinese" pavilions were placed in regular parks and existed alongside other Baroque or classical-style buildings.

It is possible that the tradition of giving pavilions and small forms poetic names came from China (see, for example, the "Flying Waterfall Pavilion" in Fig. 5). However, the parks of European monarchs did not embody the landscape techniques characteristic of China's imperial gardens, and bodies of water in Europe do not hold the philosophical connotations with which they are associated in China. In addition, the location of European gazebos in the natural environment was never subject to the strict requirements of feng shui or north—south orientation, unlike their Chinese counterparts.



Fig. 5: The Flying Waterfall Pavilion in Shī Zǐ Lín Garden (The Lion Grove Garden). Watercolour by Peng Chang, 2020.

While one might argue that Chinese imperial gardens and European royal parks of the Baroque and Classical eras have certain features in common, the difference between royal parks and ordinary Chinese private gardens is very noticeable. The dissimilarity in layout is noticeable when comparing Zhuōzhèng Yuán Garden in Suzhou and Sanssouci Park in Potsdam.

In Zhuōzhèng Yuán, the importance of north–south and west–east axes fixed by pavilions is clearly apparent. The design of the Zhuōzhèng Yuán Garden is irregular, with no long-distance straight perspectives or straight paths; there is no pronounced centre to provide a focus of the main paths; and the design focuses on maximising the naturalness of the outlines of mountains, landscaping and water bodies.

By contrast, Sanssouci Park has a regular layout, with distant straight perspectives and straight paths leading to pronounced centres – palace buildings, on which the main paths are oriented. The direction of the axes has nothing to do with feng shui. Despite the presence of secondary curvilinear paths among the greenery, the park does not look "natural" in the way a private Chinese garden aspires to.

Differences can also be observed in the design of the pavilions in Zhuōzhèng Yuán Garden and the "Chinese Pavilion" in Sanssouci Garden. In Sanssouci's "Chinese Pavilion", the rules governing the location of pavilions are not applied. Stylised Chinese forms, proposed with the participation of Emperor Frederick III himself, were transferred to the structure of this regular Baroque-era palace park. The main difference is that the architect engaged in luxurious detailing of the building, rather than copying Chinese features in creating Chinese landscape paintings around it. As a result, the pavilion stands right in the middle of a round area, surrounded by lawns that are themselves bordered by deciduous thickets.

Another difference is the consonance of pavilion's outline, decoration and colours with the surrounding landscape. In Sanssouci Park, the pavilion provides a luxurious accent among the monotonous greens of the trees, maximally emphasised by the splendour of its gilded elements, the luxury of the decor, and the high contrast between the light roof, gold paint and the dark green of surrounding foliage.

Thus, the roles of the landscape and the pavilion are reversed: in European designs, the pavilion dominates a landscape which is mainly ignored – whereas in China, the pavilion serves to accentuate the landscape and draw attention to its features.

The second typical example is Tsarskoe Selo park near St Petersburg. This park also has a regular design which does not disguise the arrangement of secondary curved paths. Even

objects that are labelled "Chinese" ("Chinese gazebo", "Chinese village", "Chinese theatre") are placed within a regular structure.

Despite Europeans' fascination with Chinese landscape design, they failed to embody it on European ground. The following differences can be observed:

- 1) Despite the existence of a main north—south axis along which the main pavilions are oriented, with their the main facades to the south, Chinese gardens have an asymmetrical layout and are irregular, aiming to get as close as possible to the natural landscape without human intervention. Contrastingly, European royal gardens of the seventeenth and eighteenth centuries had a regular, usually symmetrical layout with the main axes oriented towards the palace.
- 2) In Chinese gardens the aim is to achieve maximum naturalness; the architecture of small forms tries to "hide", to subordinate these constructions to their environment. In European gardens, nature is subordinated to architecture by the dominating scale of the main buildings and straight pathways with sculptures and fountains.
- 3) A Chinese garden embodies the principles of variability and infinity of space. The garden itself consists of a set of scattered landscape segments which cannot be viewed from a distance. The framing of landscape paintings by trees, used like screens, creates the impression of an endless labyrinth of space. By contrast, in a European palace park, the entire garden as a whole is subordinated to one plan, and it could be viewed from a distance to visually expand the space. Chinese gardens are seen as natural, changeable and spontaneous, like everything in nature. European gardens are intended to embody the perfection of human work, created for human comfort; in them, nature is to the will of humanity.
- 4) Chinese and European gardens take different approaches to the location of buildings within their design plan. In the Chinese garden there is a clearly defined approach for placing a particular type of pavilion in a particular landscape scene, with accordingly defined functions. The composition of the garden is based on the laws of landscape painting, with rules connecting genre and landscape scenes. On flat, open areas one finds pavilions for various activities; on the tops of hills and near water one might find pavilions on poles intended for contemplating the landscape; on the edge of a lake one might place a modest pavilion where at night one could sit and observe the moon's reflection in the water. In European gardens, no clear rules were applied when it came to locating pavilions in specific environments; their placement was random.
- 5) The Chinese garden "completes heavenly nature" it reveals and emphasises the beauty of natural elements while the European garden expresses the idea of man-made improvements to nature. One of the most important features of a Chinese garden is the presence of stones and a lake, which have a symbolic meaning associated with the symbol of the Mountain of the Immortals and the Lake of Eternity. Artificial waterfalls and ponds are designed with asymmetry for maximum naturalness. The ideal landscape in a Chinese garden is complemented by a light pavilion, open on all sides, from which one can contemplate the landscape. By contrast, in the European garden it is not common to place stone waterfalls topped with a gazebo, and water features tend to have a pronounced, often symmetrical shape. In the era under consideration, European water features commonly took the form of single fountains or cascades of fountains with sculptures.

Artistic image, types of planning solutions, specific shapes, decorative finishing and polychromy

European "Chinese-style" buildings are represented by single palace buildings and, more often, "tea houses" and gazebos, sometimes in combination with small bridges. Despite the purpose of such buildings, they generally inherited only the basic well-recognised elements of Chinese architecture, such as concave roofs with swept-up corners, images of dragons, red pillars and so on. As a rule, most European pavilions stand on a lawn and are isolated from the general space of the park by trees. Similarly, the role of Chinese "water" pavilions is actually significantly reduced in European parks. For example, the location of the "Chinese pavilion" in Oleksandriia Park in Bila Tserkva (Fig. 6) cannot be compared with China's water pavilions on rivers, lakes or even on the artificial lakes of Suzhou Gardens.

Religious pavilions and entrance pavilion—gates are not found in European aristocratic parks. The variety of figurative means and possible silhouettes and roof types of pavilions is also narrower in Chinoiserie-style pavilions in Europe, compared to the broad range of Chinese constructions.

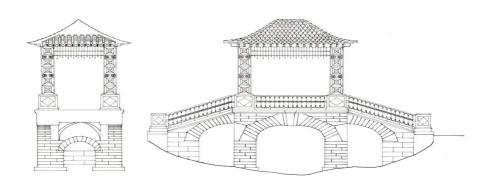


Fig. 6: Chinese bridge with a gazebo in Oleksandriia Park in Bila Tserkva (cross-section and façade). Drawings by Peng Chang, 2020.

Small architectural forms "in Chinese style" are the main elements of Chinoiserie-style parks, as their designers imitated Chinese architecture rather than landscape techniques. Pagodas and pavilions with multi-tiered curved roofs were taken as a model, mainly based on images on vases sketched by travellers. At the same time, no one thought about the suitability of placing such a "pagoda" in the garden or park.

Chinoiserie-style pavilions were built in wood, metal or stone, decorated with gilding for the impression of luxury. Sometimes they were individual buildings, in other cases entire complexes called a "Chinese Village".

Even where the owners tried to maximise the authenticity of the park's pavilions, they did not replicate Chinese models. One of the earliest examples of a Chinoiserie pavilion was built in Stowe Park in England in 1738, modelled on Chinese-type pavilions on the water.

By the middle of the eighteenth century, the fashion for Chinoiserie-style pavilions in landscape design had spread to English landscape gardens which were developing at that time, as a counterweight to French gardens. A "Chinese" pavilion or pagoda was built in almost every large-scale park in that period.

An illustrative example is the "Chinese pavilion" in Sanssouci Park, which was built before the German fashion for such things spread to English gardens. This was the impetus for a new hobby, which in some cases became absurd, as with the "Chinese village" in Kassel – which was actually a dairy farm, with a pagoda, a cowshed and barns "in the Chinese style", with milkmaids playing the role of Chinese women.

The pavilion in Sanssouci Park in the 1770s influenced the garden of Count Ludwig von Bentheim in Westphalia, which had a pagoda and artificial landscape elements such as rocks, hills and islands. The "Chinese Pavilion" in Sanssouci Park is located within the characteristic layout of a Baroque-era royal park. Its appearance is not related to the natural environment; on the contrary, it contrasts with the green splendour of gilding and the luxury of exotic decor. The pavilion has a non-standard design with a combination of curvilinear open and closed parts. The appearance is typical of the Baroque style: light green walls with semicircular and oval windows, gilded decor and grey-blue roof.

However, sometimes attempts were made not only to place a "Chinese gazebo" among the greenery, but also to somehow embody some features of Chinese landscape design. Such attempts can be seen in the cases of the "Chinese gazebos" in Tsarskoe Selo and Oleksandriia. The "one in Tsarskoe Selo was originally intended to embody basic features of a Chinese garden such as mountains, water and greenery through an artificial hill and an artificial pond. However, these elements were embodied in European traditions, without the orientation of the main north—south axis, and without the landscape paintings that are present in Chinese gardens which follow certain rules arrangement ("one lake, three mountains", "landscape borrowing", "garden in the garden", etc.). The "Chinese gazebo" in Oleksandriia Park stands on a bridge and is an allusion to ancient type of Chinese pavilion on a bridge.

In some cases the designs of European "Chinese gazebos" were similar to simple Chinese designs; in other cases not. As mentioned above, Sanssouci's "Chinese gazebo", with its alternation of open and closed curved parts, is radically different from the original. Tsarskoe Selo's gazebo consists of three volumes of different size and height; the one in Oleksandriia Park is square; and the one in Sofiivka Park is faceted.

Visually, the gazebos in Tsarskoe Selo, Sofiivka Park and Oleksandriia Park are simpler and smaller than the Chinese models, where a sense of massiveness is created by the considerable height and the high roof. At the same time, the pavilion in Sanssouci appears bigger and overly decorated compared to Chinese models.

There is a discrepancy in colour: European gazebos are more polychrome, accentuated more brightly than typical (non-imperial) pavilions of China. For example, the gazebo in Tsarskoe Selo has a red roof, a blue roof and walls, and yellow and white details. The wooden "Chinese gazebo" in Sofiivka Park is open, with bright red wooden pillars, a golden roof, white cornices and blue ornaments on the eaves, but the roof does not have a pronounced curved silhouette to go with the decor. In the "Chinese gazebo" in Oleksandriia Park, the load-bearing structures are made of metal; the outlines of the roof are even less similar to Chinese roofs, in that there are no such features as active dynamic roofs or wooden pillars; it also has restrained colours.

Traditionally in China, the visual originality of the pavilion was primarily achieved through the dynamic outline of the silhouette (even in polychrome imperial pavilions) and the perfection of the proportions. In European gazebos, on the contrary, the silhouette is simplified. This can be clearly seen in the gazebo in Sofiivka Park, which has bright red wooden pillars and a golden roof (in China these colours are only typical for the most important imperial pavilions), with white cornices and blue ornamentation of the eaves, but without the traditional sign of Chinese architecture – the sweeping concave roof with decorations, the characteristic fine carvings and paintings on the facades and interiors, symbolic figures, and white fences around.

In the gazebo in Oleksandriia Park, the roof is a monochrome red, there is no specific polychromy, and nor are there paintings, ceramics, or other decorative elements. Two bronze figures of a Chinese man and a Chinese woman are placed in front of the stairs to the bridge.

In Chinoiserie-style gazebos, Chinese decor tends to be simplified or modified in line with local aesthetics. For example, the luxurious gilded sculptural ornaments of the pavilion in Sanssouci are related to Baroque-era sculptures and contain no sign of Chinese traditions. Stylised images of dragons on the corners of the roof are used in the Chinese Gazebo in Tsarskoe Selo.

The Chinese Garden is one of the most interesting landscape elements in Łazienki Królewskie (Fig.7) – a historical garden of 76 ha area with a number of valuable architectural and sculptural elements, located in the centre of Warsaw and founded in the eighteenth century by Stanisław August Poniatowski. In addition to architectural structures, the site includes four gardens: Royal, Romantic, Modernist and Chinese.⁵

The idea of establishing a Chinese Garden in Łazienki Królewskie was initiated by King Stanisław August Poniatowski (1732–1798). The garden is located in the northern part of the complex, in the part of the former Zwierzyniec, near Agrikola Street. It was designed according to the patterns used in the eighteenth-century residence of Prince Gong of the Qing Dynasty, on the shores of Lake Qianhai near the northwest border of the Forbidden City. It was conceived during the aftermath of the fashion for Chinoiserie, in that it is a reference to Chinese culture through art, design and architecture promoted by the king. This is evidenced by, for example, the establishment of a "Chinese" road lined with chestnut trees.⁶ A Chinese bridge, discovered by archaeologists in 2012, was also erected around the same time.

The Chinese Garden in Łazienki Królewskiehas has a naturalistic character and contains a pavilion and a gazebo. Winding paths lead to these buildings, which also connect the garden with the park. The garden was designed by Edward Bartman and Pawel Bartman. Their work on the design concept was supported by Chinese architects from the Prince Gong Museum in Beijing. The garden opened in 2014.

When analysing the Chinese Garden, attention should be paid to both architectural elements and the plants that grow there. The architectural elements are a wonderful pavilion and an openwork Chinese gazebo connected by a stone bridge. The roofs of the pavilion and gazebo are covered with hand-glazed tiles made in China. Traditional Chinese lanterns, located near the pavilion and the bridge, act as indicators of small-scale architecture. It is also worth paying attention to the sculptural elements in the form of two lions, symbolically placed at the entrance to the

⁵ MAJDECKI, Longin. Łazienki. Przemiany układu przestrzennego założenia ogrodowego. In: Rejestr ogrodów polskich, vol. 7, 1969; TATARKIEWICZ, Władysław. Łazienki królewskie i ich osobliwości, Warszawa 1987.

⁶ JANICKA, Magdalena. Układ przestrzenny Łazienek Królewskich w Warszawie jako przykład założenia krajobrazowego na skalę krajową. In: *Teka Kom. Arch. Urb. Stud. Krajobr.*, vol. 7, 2011, Iss.1, pp. 132-143.



Fig. 7: View of a fragment of the Chinese Garden in Lazienki Królewskie. Photo by Michał Krupa, 2019. garden. The plants in the garden were also selected in such a way as to create the right mood and resemble traditional Chinese gardens known from Beijing, Shanghai or other cities.⁷

Comparative analysis of traditional Chinese architecture and European architectural Chinoiserie

Eighteenth- to early twentieth-century "Chinese" buildings in Europe and the Russian Empire were usually small in size and mainly served as garden pavilions or gazebos. European Chinoiserie-style buildings generally inherited only the basic cognitive elements of Chinese architecture, such as curved roofs, images of dragons or red pillars.

We can identify the following most characteristic features of Chinese pavilions of various status and function:

- 1) *location, proportional and metro-rhythmic construction*: subordination to a clear orientation (north–south), scale in accordance with the status of the object and the natural environment, modularity, proportionality and metro-rhythmic regularities, defined by structural elements
- 2) *materials*: wooden structures, ceramics, stone, painting; use of expensive wood, inlay, silver in imperial pavilions;
- 3) layout, design of space and shape: footprint might be square, rectangular, faceted, round or paired with two identical geometric shapes; open space on wooden pillars, space partially or completely closed by walls with windows, tiered sloping or concave roofs; high-status pavilions may have ceramic figures on the roof ridges;
- 4) *facade colours*: mostly restrained, except for pavilions for the emperor and members of his family and important temple or memorial pavilions; in these the roof would be yellow (for the emperor's pavilions), green (for the emperor's son), blue, terracotta red, grey or brown. Under-cornice planes dim or with a predominance of blue ornamentation; red, yellow–green and white inserts; bright red pillars, white fence around the pavilion;
- 5) *symbolic images*: common symbols include dragons, the good beginning "Yang", the Chinese nation, water, the emperor, cranes (symbolising success and good manners), lions (symbolising the power of authority; turtles (an ancient symbol of the world) and unicorns (a symbol of worldly wisdom and endurance).

⁷ Ibidem; WERNER, Barbara. Ogród Łazienek Królewskich. In: *Wiadomości Konserwatorskie – Journal of Heritage Conservation*, vol. 53, 2018, pp. 1, 138.

The gazebos Oleksandriia and Sofiivka parks (Fig. 8) and Tsarskoe Selo do not take feng shui or the matter of appropriate orientation into account, despite their quotation of Chinese architectural themes. Compared to the original source of inspiration, roof shapes and decor are greatly simplified and the outlines of the roofs are not Chinese at all. The Chinese sense of proportional construction is not retained and the silhouettes are less dynamic.

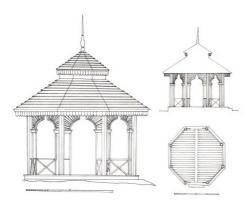


Fig. 8: Chinese gazeho in Sofiivka Park in Uman (facade, section, footprint). Drawings by Peng Chang, 2020.

Thus, despite the common name "Chinese gazebo", the constructions actually built were pseudo-Chinese pavilions in which the Chinese traditional building shapes were changed, the shape of the roof was simplified, proportions and articulations were changed, and the decor was devoid of symbolic meaning. This allows us to conclude that European "Chinese" gazebos are not really an exact reproduction of Chinese motifs but rather represent a free interpretation of this style in the compositional construction, shapes, materials and decor.

Modern designers and landscape architects who design Chinese-style pavilions and gardens often make the same mistake as Chinoiserie-style artists of the past, who also over-simplified Chinese forms and transferred Chinese architecture ad verbatim to an unusual environment without a radical transformation of the environment.

Thus, there are three possible types of stylisation. The first is exact repetition, taking into account all the features of the original and trying to achieve maximum similarity. The second is a simplified imitation of the original embodying only certain features. The third is a creative rethinking of the original, producing an innovative work which at the same time creates analogies with the original one.

From the point of view of the aesthetic value of architecture and artworks, the most original option is the third, when the author does not try to literally or simply reproduce what once existed but creates something of their own which belongs to both past and present.

However, in the cases examined here of Chinese traditions imitated in Europe and the Russian Empire, there were no attempts to creatively rethink or at least reliably embody Chinese traditions, but rather a simplified way of imitating the original.

Conclusions

Chinoiserie-style pavilions were erected in the parks of European monarchs and aristocrats and generally did not take into account the traditions of Chinese landscape design in terms of the arrangement of landscape paintings and the subordination of architecture to the natural environment. Even when the architects tried to embody certain Chinese features in constructions for Chinese gardens (as in Tsarskoe Selo), they approached the design from the standpoint of a European. As a result, the natural environment around such pavilions does not give the impression of China.

A comparison of European parks with Chinese gardens shows that European recreations are more similar to the imperial gardens in terms of the scale of plots and the regularity of paths oriented to the pavilions.

In Western Europe and the Russian Empire, Chinese influences were marked by a certain specificity, as they were superimposed on local architectural and artistic traditions. It is a well-known phenomenon that the further a style or stylistic direction is transferred from the centre of its origin, the more regional layers it acquires. Although several dozen "Chinese" pavilions were constructed, they did not become widespread and gradually came to naught. Existing pavilions can be reduced to two main groups:

- pavilions that give a false idea of Chinese architectural traditions (such as the "Chinese Pavilion" in Sanssouci, Pilnitzburg Palace, the "Chinese Gazebo" in Oleksandriia Park and the second Chinese pavilion in Drottingholm (Fig. 9) and,
- pavilions that represent a simplified version of Chinese architectural traditions (such as the "Dragon Pagoda" in Sanssouci, the "Chinese Pavilion" in Pilnitz Palace, the "Chinese Pavilion" in Tsarskoe Selo (Fig. 9) and the "Chinese Pavilion" in Sofiivka Park).



Fig. 9: The second Chinese pavilion in Drottingholm. Drawings by Peng Chang, 2020.



Fig. 10: "Chinese Pavilion" in Tsarskoe Selo. Drawings by Peng Chang, 2020.

References

- ABBASI, Javad, SAMANIAN, Kouros, AFSHARPOR Maryam. (2017). Evaluation of polyvinyl butyral and zinc oxide nano-composite for consolidation of historical woods. In: *International Journal of Conservation Science*, vol. 8, No. 2, pp. 207–214, ISSN: 2067-8223
- ALFIERI, Paula, GARCÍA, Renato, ROSATO, Vilma, CORREA Maria. (2016). Biodeterioration and biodegradation of wooden heritage: role of fungal succession. In: *International Journal of Conservation Science*, vol. 7. No. 3, pp. 607–614, ISSN: 2067-8223
- AUSTIGARD, Mari, MATTSSON, Johan. (2020). Monitoring climate change related biodeterioration of protected historic buildings. In: *International Journal of Building Pathology and Adaptation*, vol. 38, no. 4, pp. 529–538, ISSN: 2398-4708
- BLANCHETTE, Robert. (2000). A review of microbial deterioration found in archeological wood from different environments. In: *International Biodeterioration and Biodegradation*, vol. 46, pp. 189–204, ISSN: 0964-8305
- CHANG, Dan. (2017). Study on the Appearance and Shape Design of China Pavilion. In: International Conference on Materials, Energy, Civil Engineering and Computer (MATECC 2017), pp. 30-32, ISBN: 978-1-912407-89-7
- CHIDICHIMO, Giuseppe, DALENA, Francesco, RIZZA, Antonio, BENEDUCI, Amerigo. (2018). Insect-Infested Wood Remediation by Microwave Heating and Its Effects on Wood Dehydration: A Case Study of Hylotrupes bajulus Larva. In: *Studies in Conservation*, vol. 63, Iss.2, pp. 97–103, ISSN: 0039-3630
- FRUNZIO, Giorgio, DI GENNARO, Luciana. (2018). Seismic structural upgrade of historical buildings through wooden deckings strengthening: the case of study of Palazzo Ducale in Parete, Italy. In: *Procedia Structural Integrity*, vol. 11, pp. 153–160, ISSN: 0039-3630
- IVASHKO, Yulia, CHERNYSHEV, Denys, CHANG, Peng. (2020). Functional and figurative and compositional features of traditional Chinese pavilions. In: *Wiadomości Konserwatorskie Journal of Heritage Conservation*, vol. 61, pp. 60–66, ISSN: 0860-2395
- IVASHKO, Yulia, KUŚNIERZ-KRUPA, Dominika, CHANG, Peng. (2019). History of origin and development, compositional and morphological features of park pavilions in Ancient China. In: *Landscape architecture and Art*, vol. 15, No. 15, pp. 78–85, ISSN: 2255–8632
- IVASHKO, Yulia, KUZMENKO, Tetiana, SHUAN, Li, CHANG, Peng. (2019). The influence of the natural environment on the transformation of architectural style. In: *Landscape architecture and Art.*, vol. 15, Iss.15, pp. 98-105, ISSN: 2255-8632
- JANICKA, Magdalena. (2011). Układ przestrzenny Łazienek Królewskich w Warszawie jako przykład założenia krajobrazowego na skalę krajową. In: *Teka Kom. Arch. Urb. Stud. Krajobr.*, vol. 7, Iss.1, pp. 132-143, ISSN: 1895-3980
- JIANG, Jiayi, CHEN, Ming, ZHANG, Junhua. (2020). Analyses of elderly visitors' behaviors to community parks in Shanghai and the impact factors. In: *Landscape Architecture Frontiers*, vol. 8, No. 5, pp. 12–31, ISSN: 2096-336X
- KOHL, David. (2018). Offshore Chinese Architecture: Insights on Five centuries of Overseas Chinese building practices, ISBN: p78-1724829009
- LI, Qin. (2019). Chinese pavilions, Beijing, ISBN: 711222800X
- MAJDECKI, Longin. (1969). Łazienki. Przemiany układu przestrzennego założenia ogrodowego. In: Rejestr ogrodów polskich, 7

- OLIVER-VILLANUEVA, Jose-Vicente, BENITEZ-TELLES, Julio E., VIVANCOS-RAMON, María Victoria, GRAFIA-SALES, José Vicente. (2012). Wood Consolidation Assessment By Fundamental Frequency Method In Cultural Heritage Preservation. In: *Wood Research*, vol. 57, Iss. 2, pp. 331–338, ISSN: 1336-4561
- ORLENKO, Mykola, DYOMIN, Mykola, IVASHKO, Yulia, DMYTRENKO, Andrii, CHANG, Peng. (2020). Rational and Aesthetic Principles of Form-Making in Traditional Chinese Architecture as the Basis of Restoration Activities. In: *International Journal of Conservation Science*, vol. 11, No. 2, pp. 499–512, ISSN: 2067-8223
- ORLENKO, Mykola, IVASHKO, Yulia. (2019). The concept of art and works of art in the theory of art and in the restoration industry. In: *Art Inquiry. Recherches sur les arts*, XXI, pp. 171-190, ISSN: 1641-9278
- PEIFANG, Sun. (2023). The Chinese Classical-Style Pavilions beside West Lake. In: *Art and Design Review*, vol. 11, 2023, ISSN: 2332-1997
- PETRUŠONIS, Vytautas. (2018). Symbolic potential of place and its modelling for management needs. In: *Landscape architecture and Art*, vol. 13, No. 13, pp. 39–49, ISSN: 2255–8632
- PUJIA, Laura. (2016). Cultural heritage and territory: Architectural tools for a sustainable conservation of cultural landscape. In: *International Journal of Conservation Science*, vol. 7, S. 1, pp. 213–218, ISSN: 2067-8223
- QIAO, Guanfeng, LI, Tieying, CHEN, Yohchia F. (2016). Assessment and retrofitting solutions for an historical wooden pavilion in China. In: *Construction and Building Materials*, No. 105, pp. 435–447, ISSN: 0950-0618
- SPIRIDON, Petronela, and SANDU, Ion. (2016). Museums in the life of public. In: *International Journal of Conservation Science*, vol. 7, Iss.1, pp. 87–92, ISSN: 2067-8223
- SPIRIDON, Petronela, SANDU, Ion, STRATULAT, Lacramioara. (2017). The conscious deterioration and degradation of the cultural heritage. In: *International Journal of Conservation Science*, vol. 8, No. 1, pp. 81–88, ISSN: 2067-8223
- TATARKIEWICZ, Władysław. (1987). Łazienki królewskie i ich osobliwości, Warszawa, ISBN: 83-213-3162-9
- WERNER, Barbara. (2018). Ogród Łazienek Królewskich. In: Wiadomości Konserwatorskie Journal of Heritage Conservation, vol. 53, pp. 1, 138, ISSN: 0860-2395
- XINIAN, Fu. (2017), Traditional Chinese Architecture, ISBN: 9780691159997
- YANG, Ru-yuan, SUN, You-fu, ZHANG, Xiao-feng. (2020). Application and Progress of Reinforcement Technology for Chinese Ancient Buildings with Wood Structure. In: *Geotechnical and Geological Engineering*, vol. 38, No. 6, pp. 5695–5701, ISSN: 0960-3182
- YU, Kongjian. (2020). The conflict between two civilizations of nature-based solutions. In: Landscape Architecture Frontiers, vol. 8, No. 3, pp. 4–9, ISSN: 2095-5405
- YUZHAKOV, Yury, BELKIN, Alexander. (2018). Construction strengthening in historical wooden cupolas restoration. In: *IOP Conference Series Materials Science and Engineering*, 365, pp. 1853–1861, ISSN: 1757-899X