

Space structure features of the Garden of Cultivation in the context of traditional private gardens of Suzhou

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Abstract. The paper is devoted to the identification of the main architectural features of the Garden Cultivation. The history of the garden was analyzed, the main stages of the formation of the planning structure were revealed. The etymology of the name of the estate, which is related to the functional direction of the object, has been studied. The garden was founded during the Ming Dynasty. Over time, both the planning structure and individual elements of the garden changed. The space of the garden consists of two main areas: residential and garden, north and south. Each of the zones is actively integrated into each other. The garden space is very densely built up, consists of 17 elements (morphotypes) located on 0.37 hectares. Garden of Cultivation is unique landscape object for Suzhou and for China, the features of which begins with the name and end with unusual buildings and decor. However, the educational function of most of the morphotypes makes the overall structure of the plan different (unique) from the "traditional" gardens of this era.

1. Introduction

The city of Suzhou is the most popular place among researchers of private gardens in China. There is a large number of preserved landscape complexes dating back to various historical periods since the reign of the Jin Dynasty (III century - V century).

The Garden of the Humble Official, the Lion Grove Garden, the Master of the Nets Garden located in the historic city of Suzhou are outstanding representatives of landscape architecture throughout China. All gardens are the rich cultural heritage of the nation, expressing through architecture the spiritual and cultural component, which is the imprint of the era [1, 2].

One of these objects is a Garden of Cultivation. The object under study is located in the historical part of Suzhou and is one of the monuments of UNESCO. Nevertheless, a small number of papers are devoted to the architectural characteristics of this object. So, what is the specialty of YiPu in the context of Suzhou's traditional private gardens?

2. Garden history

The name of the garden differs from other estates of the Jiangnan region by its "non-literary", in contrast to the Garden of Harmony or the the Couple's Garden Retreat. The name of the garden consists of two characters 艺圃 (Yì Pǔ). Literally, the name is translated as – the Garden of Art, while in English language you can find the translation – Garden of Cultivation. The issue of translation is always an acute one, especially when it comes to hieroglyphic writing, where it is often not necessary to manage a single translator to understand a sign.

The first character is 艺 (Yì). translated as art, the second 圃 (Pǔ) means a nursery (vegetable



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garden), which already indicates the theme of the garden. Almost all the names of the "classical" gardens of Suzhou city at the end use the hieroglyph 园 (Yuán), meaning the garden, as a place to relax, a recreational space. The hieroglyph 圃 (Pǔ), in the context of landscape art, appeared during the Shang dynasty (1600-1046 BC), when there were 3 main types of landscape gardening complexes: pu, you and yuan. Pu is a plant garden, you is a royal garden where animals and birds were kept, yuan was a hunting ground. Accordingly, the name of the garden 艺圃 (Yì Pǔ) can be translated as "the art of growing", but since in this case we are talking about plants, it would be more correct to translate it as "the Garden of Cultivation", but the estate has changed several names in its history.

The garden was built in 1541 by the former government official Yuan Zugen (1519-1590), who quit and devoted himself to creating the garden. The original name of the estate is the Hall of Admiration (in some sources it is mentioned under the name - Drunk Mansion). In 1620, Wen Zhengheng (1585–1645), a scientist, artist, and also the great-grandson of the Humble Administrator's Garden creator – Wen Zhengming (1470–1559), bought the land. Wen completely rebuilds the park and changes its name to the Garden of Medicinal Herbs (Garden of Medicine). In 1659, a new owner appeared at the garden and park complex - Jiang Xiao, who works as the foreign minister and changes the name of the garden to Jin Mountain Villa. Entering the inheritance, his son, Jiang Shijie builds a chapel to the goddess Guanyin and changes the name to the Garden of Cultivation. In the 19th century, two merchants bought the estate to create an association for the silk industry, renaming the complex into the "Office of seven yuan" and building several trading buildings on the site. The area of the garden decreases at this time, some scientists believe that this is the reason why the Garden of Cultivation should not be called the traditional garden of the Ming Dynasty. At the beginning of the reign of the Republic of China, the garden was leased as a residential building due to the economic problems of the owners [3].

In the late 1970s, the complex was included in the list for the restoration of classical gardens in Suzhou, during the restoration, an 18th-century plan was taken as a reference. In 1984, the object was completed and opened for public visits, in November 2000 it was included in the UNESCO World Heritage List, and on May 30, 2006 it was included in the list of national units of protection of cultural property.

3. Main elements of the garden

The area of the complex is 0.37 hectares. The layout has a clear division into residential and recreational areas, which is rarely found in private gardens. However, open areas with green spaces and stone sculptures are present in the residential area, as well as the presence of architectural structures in the garden area. The residential part of the complex, the southern border of which is the Yangwang pavilion, is represented by residential, educational, religious and household buildings. The main buildings of the northern half of the estate are: Boya Hall (The Hall of Erudition and Elegance), Bright Valley teaching room and Yangwang Pavilion [4].

One of the biggest building in this part is the Boya Hall – this is the main hall of the estate, which includes five rooms. Columns and beams in the main hall are the original supporting structures of the Ming Dynasty. Boya Hall is one of the oldest rooms in the complex, bearing the name – Hall of Admiration, with the first owner.

In addition, in the northern part there is a training room called – Bright Valley, named after the mythical valley of Chenggu, in which the sun rose.

The Yangwang Pavilion is the most unusual building both in the Garden of Cultivation there and for Suzhou as a whole (fig. 1). Its unusual elongated shape, with a long side of 15.5 meters, is a panorama of the garden. It is also the only building from the northern part which stands on columns, since part of the structure is painted above the pond. Inside is a tea room. The pavilion is named after the lyrical hero of the work "Legend of a Great Man" – Iguana.

In the greater half of the southern part of the complex there is a pond (fig. 1), in connection with which almost all structures are designed taking into account scenic views and have a deeper cultural and historical implication. The main elements of the southern part are: Zaoshuang Pavilion (Morning

freshness), Fry Pavilion, Moon Veranda (Xiangyue), Sweet Grass House (fig. 2) and Hall of memory (guanyin chapel).

The Pavilion of Morning freshness is a hexagonal, open structure located on a cliff top in the southern part of the complex. Due to its location, the pavilion is the first building in the garden to see the dawn. The architectural element surrounded by the forest and the rock on which it is located is the center of most scenic views in the Garden of Cultivation. High stone slides and forests are extremely rare in Suzhou's private gardens, especially as small as the object under study.



Figure 1. Yangwang Pavilion and Lotus pond (author photo)



Figure 2. Sweet Grass Garden (author photo)

The entrance to the garden is located in the east, then, passing through a narrow alley that previously served as an alley, crossing the gate we find ourselves in the garden and the first building the visitor sees is the Fry Pavilion, located in the southeastern part on the shore of the Lotus Pond. Made of wood, the plan is a square with four columns, the height of the structure is 3.05 meters, the length of each side is 3.32 meters. The pavilion is a representative of the architecture of the Ming Dynasty, it was built to observe fish in the pond, also due to the open type, the pavilion has a panoramic view of the entire pond [5].

On the opposite side of the lotus pond there is a Moon Veranda (Xiangyue), located in the center of the gallery, along the western border of the estate, which has unusual scenic windows, in which bamboo is located against the background of the wall, calligraphy signs are located on the sides of each window (fig. 3). Being part of an open gallery, the building also has a panoramic view. Due to location on the western side, the veranda is well lit by the sun during the day, and at night from this place it is most convenient to observe the moon, from which the name comes from.

The most remote and enclosed space in the southern part of the complex is a small courtyard –

Sweet Grass Garden, which included Sweet Grass House, Hall of memory and part of a lotus pond with several bridges (fig. 4). This area added by Wen Zhengheng. It is called upon to invoke the principle of “freeing residents from worries, freeing residents from unwillingness to leave, and giving visitors the opportunity to get rid of fatigue”. The memory hall located in this zone functioned as the Guanyin Chapel.

4. Conclusion

The garden space is very densely built up, consists of 17 elements (morphotypes) located on 0.37 hectares (fig. 5). As a result of the analysis, the following spatial elements were identified that form the surrounding volume around themselves: a hall, a pavilion, a gallery, an entrance group, a room, a veranda. The set of elements is not diverse, for example, in the Humble Administrator's Garden and other gardens in Suzhou, you can find the following elements: a kiosk, a tower, a stone garden and a loggia. A different set of garden elements (morphotypes) varies depending on the functional content of the garden, and not on its size. The Lion Grove Garden, which has an identical plan structure (all elements are located around the pond - the central element) in a small area, has almost all types of architectural and landscape structures of private gardens in the Jiangnan region [6, 7].



Figure 3. Garden yard (author photo)



Figure 4. Moon gate to Sweet Grass Garden (author photo)

In this case, the garden is heavily integrated into residential development (fig. 6). A large number of open green spaces and corridors with plants along the walls. In the north of the plot is a separate zone for growing plants. Sometimes the same elements can be found in the green part as in the Humble Administrator's Garden, in the garden of a Lion Grove Garden this element is also highlighted in a separate zone [5, 8].

The Garden of Cultivation has one central volume, which is a pond, around which a space is formed, filled with a diverse relief, architectural structures and plants. The Master of the Nets Garden has a similar spatial structure, where the pond is also the main element, but there are several small green spaces throughout the site. However, another structure of the plan can be observed in the Couple's Garden Retreat and Humble Administrator's Garden. Here there are several equivalent volumes, located separately but at the same time and complementing each other.

However, a unique feature in the framework of Suzhou's private gardens is the functional orientation of both individual architectural structures and the garden as a whole. Throughout the territory there is a large number of premises for education in various fields: spiritual, medicine, dendrology, etc. All this combined the Garden of Cultivation together with the recreational function and culture of the Ming Dynasty. Due to this, unique elements were created: Yangwang Pavilion (Tea room), Sweet Grass House and etc.

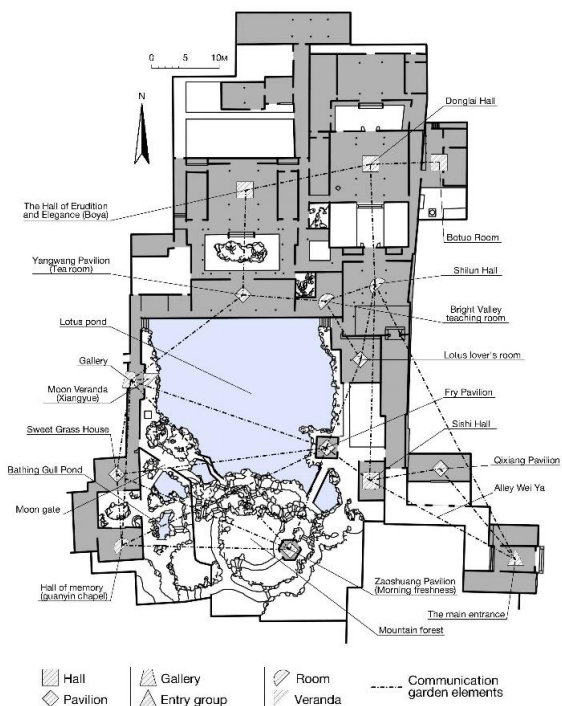


Figure 5. Elements of Garden of Cultivation

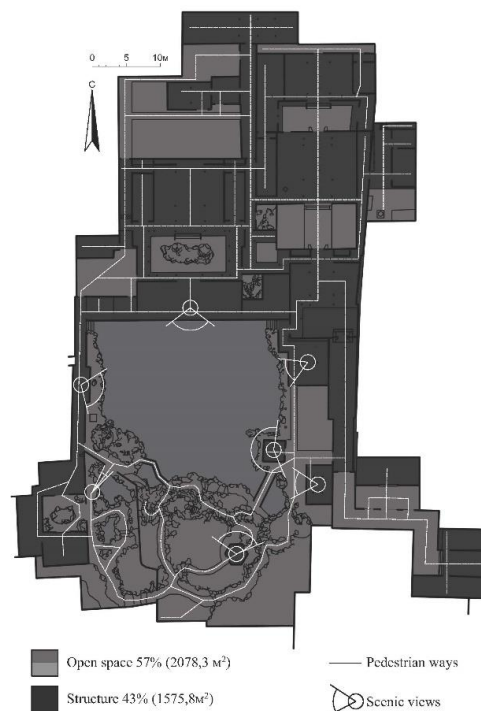


Figure 6. Communication in residential and garden plots

Cultivation Garden is a unique landscape object for Suzhou, and for China as a whole, the features of which begin with the name and end with unusual buildings and decor. The spatial structure of the object is largely identical to the private gardens of the Ming dynasty and older – there is one central element – the pond, around which the rest of the garden is built. However, in this case, the integration of the residential and garden parts of the building takes place, which is not so much manifested in other parks – Canglang Pavilion and the Lion Grove Garden. The educational function of most of the morphotypes makes the overall structure of the plan different (unique) from the "traditional" gardens of this era.

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