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Features of Architectural and Spatial Composition of Traditional Gardens and Parks of Uzbekistan

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Annotation

Landscape architecture, landscape compositions and landscape design tools - plants, geoplastics, stones, water structures, various architectural forms of evening (night) lighting. It is known that compositions of trees, shrubs, flowers are the main elements in the formation of landscape design objects. Lighting them at night has a huge positive psychological effect on a person. The soft light of the leaves, the unusually attractive silhouette of the bushes have a calming effect on the psyche of the viewer, distracting him from daytime worries. The organization of landscape groups of plants is also aimed at providing and creating the cosiness of this spectacle.

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Introduction

Of the whole variety of aspects affecting the composition of landscape gardening spaces, this article discusses the principles of constructing the visual development of various types of architectural spaces in traditional gardens of Uzbekistan and the nature of the distribution of the main types of landscape spaces - closed, open, semi-open according to the elements of the territory of parks.

The climate of the region dictates a number of requirements for the organization of garden and park spaces: the predominance of tall tree vegetation, and hence of closed, shaded landscape spaces over open parterre spaces. This determines the great intimacy of the prospects, the difficulty of creating deep landscape views (the exception is parks located on the shores of lakes and reservoirs). Closed landscape spaces are used more intensively, formed by dense tree plantations or architectural sheds, awnings, galleries. All this fundamentally distinguishes Uzbek methods of composition of gardens and parks from European ones, which provide for equal use of all types of spaces. For example, in such well-known examples of landscape art as the parks of Versel, Vaux Le Vicomte, the park of the Arkhangelskoye estate near Moscow, walking routes equally pass through open parterre spaces and through dense alleys and bosquets. In the conditions of Uzbekistan, a person should be mainly in a closed, shaded landscape space. The composition of green spaces should therefore be built taking into account the special nature of perception, which requires the attraction of funds and techniques of

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landscape architecture that are different from those used in European art [1-7].

The main part

In order to identify, critically select and systematize the techniques of traditional gardening and park art in Uzbekistan, the author examined city parks of culture and recreation, greening of public centers, as well as objects of garden and park nature located in rural areas. The survey was carried out: in Tashkent, Fergana, Margilan, Kokand, Chust, Andijan, Namangan, Bukhara, as well as in regional centers located along the highways between the listed cities. The surveyed cities are located in different natural and climatic zones of the republic. The bulk of the examinations was carried out in June-August 2015.

In the course of field surveys, it was revealed that in modern urban green building canonized techniques of European gardening art are widely used, with a difference only in the range of plantings. The use of the principles of space organization inappropriate to the climate leads to the fact that good landscaping, a rich assortment of vegetation and a composition performed at the proper artistic level form uncomfortable zones of the urban landscape. In Tashkent, examples of such zones are: the square in front of the Shopping Center of the Chilanzar massif, GUM, the Shirin shopping center, the Synthetics store and others. In them, open parterre spaces prevail, there is no shading of the arteries of movement and rest of people, in relation to which the sequence of perception of the ensemble is not provided.

City parks of culture and recreation in the best examples, as a rule, can only illustrate the palette of local plant material, the extravagance of the green architecture of the most valuable tree species of Uzbekistan, such as the eastern plane tree (plane tree), elm (elm), even individual specimens of which are capable of creating an environment. by its microclimatic and aesthetic qualities [8-11]. According to planning techniques, most city parks are landscape-regular mini-parks with Europeanized techniques, an obligatory parterre (usually an entrance regular part) and a landscape part, which, due to the fight against overheating, is planted so thickly that it creates not a landscape space, but an entirely closed one, shaded, with unsatisfactory aeration and conditions for the normal development of plants, with closed perspectives (Fig. 1).

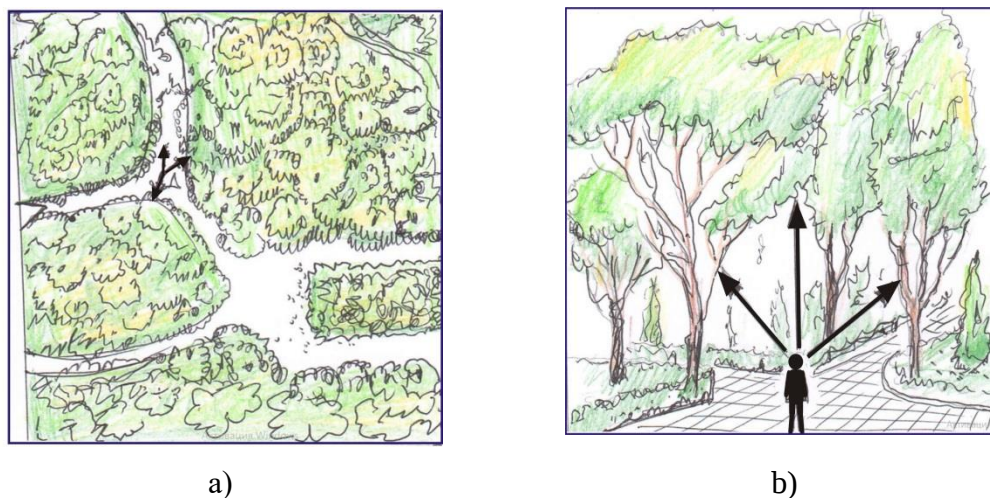
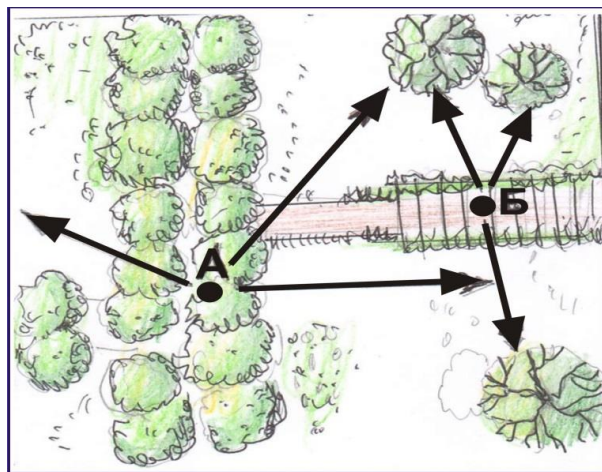


Fig. 1. A typical example of the construction of garden and park spaces in modern urban landscape construction in Uzbekistan: a-plan; b-the nature of the possible visual development of space relative to point A.

Examples of using traditional techniques for constructing garden and park spaces are: greening of old-city residential structures (centers of makhallas, teahouses) of rural settlements, as well as some rural parks (for example, a park in the city of Chust). The lack of fully preserved historical garden and park complexes led to the addition and comparison of field survey data with materials from literary sources, special architectural and art studies.

Currently, one of the main characteristics of the park space is the ratio of the three main types of landscape spaces - closed, formed by dense tree plantings with a canopy closeness of > 0.8 , half-open, formed by a sparse planting of trees with a canopy closeness of 0.5 and open spaces (less than 50 trees per 1 ha). It is interesting that the ancient Central Asian architects, characterizing the spatial organization of the garden, used similar characteristics: "Plantings can be subdivided into three types: shading, fruit and beautiful flowering" [11-17]. It should be noted that fruit plantings are of a sparse type, because according to agrotechnical conditions for favorable development, they are planted at distances greater than 1 and even 1.5 diameters of the crown of an adult tree. The recommended distance between fruit trees is 8 meters, which is equal to 1.5 crown diameter. Shading are dense decorative tree plantations of 1-2 sizes. Beautiful flowering trees form open spaces of shrubs and flowers (flowering fruit trees have already been identified in a separate group).

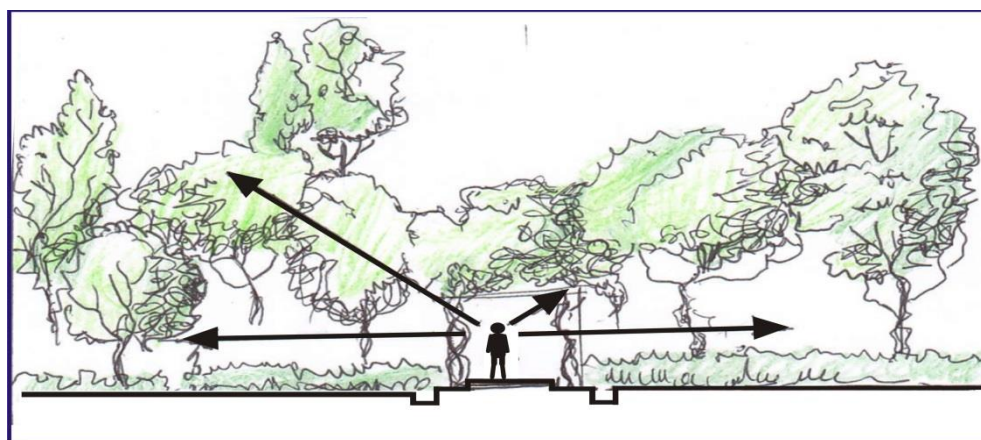
Using the above classifications of park spaces, let's take a few examples of using the techniques of traditional landscape architecture. The newly developed part of the Margilan city park of culture and recreation - side alleys (in contrast to the entire park, created according to the established Europeanized pattern - parterre, alley-rays to open areas with sculptures or fountains), - formed only by gardeners, illustrates the traditional principles of building a garden space. Here, the most dense landscaping was created over the alleys with high-standard breeds: ailantusk, acacia. Some of the newly created alleys are landscaped with pergolas with a vineyard and other climbing plants. On the pergolas above the alleys, there is no side landscaping, only the horizontal plane is densely shaded. The alleys are accompanied by flower beds. Dark cool alleys coexist with open landscape spaces, richly decorated with cannes flowers, saffron roses. Further, there are picturesque groups of beautifully flowering bushes and fruit trees. The types of landings are distributed as follows: dense over the places of stay of people; sparse and open, rather a decorative purpose was created in accordance with the functional zoning of the site. The dynamic factor of planting development was also taken into account: flowers and shrubs were planted from tree trunks at a distance equal to about half the diameter of the crown of an adult tree. Compositional integrity has been achieved in the perception of space.



a)



b)



c)

Fig. 2 Margilansky park of culture and rest: a-side alleys of the park, plan diagram. 1-high-stemmed trees; 2-vineyard; 3-open spaces decorated with flowers, flowering shrubs and fruit groups; b - the nature of the possible visual development of spaces relative to point A; c-the nature of the possible visual development of spaces relative to point B.

High-stemmed landscaping of alleys with trees or climbing plants on pergolas and ment of alleys with open and semi-open spaces contribute to their visual unification and an increase in the depth of perspective disclosure (Fig. 2).

In the descriptions of one of the gardens of Timur-Davlet-Abad [2,18,19], similar principles of organizing its space are traced.

An example of a typical traditional landscaping of a community center site can be a park in the city of Chust. Actually, the “old traditional” part of this park is a grove, which is formed by powerful trees over 100 years old. Previously, it was used as a resting place at a religious building, which has now been preserved and turned into a club for cultural work. This is a dense grove with a canopy closeness of 0.8-1.0, consisting of elm, plane trees, Bolle poplars [20-22]. A small number of highly developed trees create a canopy of solid shade. All plantations are high-stemmed without undergrowth. All areas used during the day are located under the canopy of woody vegetation: reading room, teahouse, resting places. The grove is surrounded by an open insolated space decorated with a parterre of roses. The

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parterre, apparently, is a newly created part, previously there was just an open area in its place. This technique meets the requirements of the microclimate. The canopy of stands in the absence of multi-tiered plantings and undergrowth makes it possible to perceive all the spaces of the grove as a whole. Correctly found plantation structures - a high bole, one-tier and the distance between the rocks ensured the possibility of such a solution.

You should take into account the likely seasonality of the use of garden and park spaces. For example, in the Ak-Saray garden [3], a large densely shaded space was created for visitors to relax during the day. In the courtyards of the dwelling, we, as a rule, see a place for the family's evening rest, located in the open air on an earthen elevation. Sometimes two places: one - densely shaded plantings for family recreation during the day, the second - under the open sky, for evening relaxation.

Apparently, the presence of different types of spaces served not only to enrich the composition of the garden, but also made it possible to use the types of spaces formed by different plantings - dense or sparse - depending on the season (sparse in spring, dense in summer) and time of day. For example, a sparse longline planting around open spaces in the evening, according to microclimatologists, has more favorable environmental indicators than alleys with dense plantings.

Ornamental trees were used to restrict fruit groves. Trellises of pyramidal poplars ran along the main avenues. Researchers suggest [3,23,24] that it was a type of tall pyramidal poplar with a bare lower trunk and a narrow crown, which did not deprive adjacent areas planted with fruit trees of sunlight, possibly with a gradual transition from green parterres to shrub plantings.

Figure 3 shows a diagram of a typical combination of different spaces in Uzbek traditional landscape gardening.

The analysis made it possible to formulate some conclusions. The composition of green spaces in the traditional garden and park art of Uzbekistan is built taking into account the most intensive use of closed landscape spaces. In relation to them, the possibility of visual development of the surrounding spaces of open and semi-open types is being built. The elements of the composition, designed for perception from short distances, are close and conveniently located along the main routes of movement and rest.

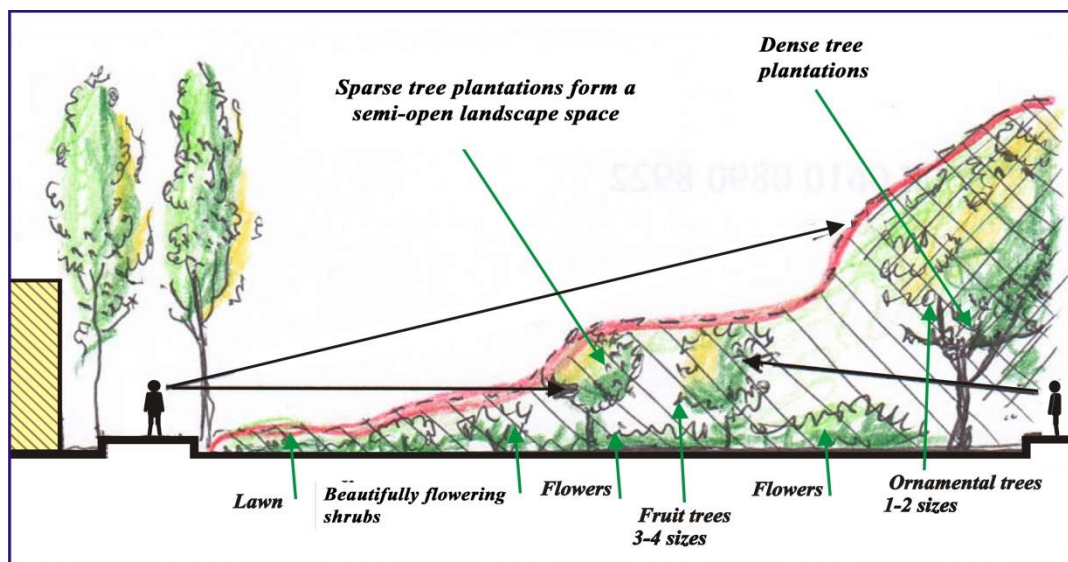


Fig. 3. The principle of building spaces in the traditional gardening art of Uzbekistan, possible visual development and use of various types of spaces.

In traditional gardens, the alleys are accompanied by strips of flower beds arranged according to the principle of continuous flowering. An open space with a flower garden is characteristic of a shaded recreation area. Apparently, in modern landscape art, shaded dense alleys can be accompanied by systems of microlandscapes composed of water devices, gardens of continuous flowering, compositions of inert materials and rarefied spaces with picturesque groups of vegetation, and not a set, which is the case in modern practice when open avenues are accompanied by densely thickened tree and shrub plantings [24-28].

In traditional landscape construction, the following character of the distribution of types of spaces can be traced: dense tree plantations form the landscaping of walking alleys and recreation areas that are intensively used during the hours of daytime overheating of the park. The main plantations in the garden are sparse plantings formed by fruit trees, flowers and shrubs, which contributes to the creation of a significant area of soil shading, lightening of the landscape and the introduction of polychromy. They make up 50-60% of the total plantations.

Skillful use of all three types of spaces enriches the composition of the gardens. The integrity of the perception of the garden ensemble, an increase in the depth of the perspective view in the conditions of the prevalence of tall woody vegetation is facilitated by:

- a tiered order of placement of vegetation types with a gradual increase in the height of plantings relative to the point of view, that is, a lawn is located in parallel with dense tree planting, then flowers, then shrubs and fruit trees;
- the formation of a tall trunk in woody vegetation in places of dense shading.

The presence of three qualitatively different landscape spaces served to organize recreation and walks at different times of the day and season. Alleys with dense plantings were used in the hottest hours of the day of the summer overheating period, lawns with sparse plantings and open spaces in the evening, as well as in spring and autumn.

Conclusion

The composition of the garden was built on the regular axes of the main alleys. Scenic planting was allowed inside the maps, which is largely dictated by the method of irrigation overlapping on the maps.

The use of traditional principles of composition will help designers create landscape architecture spaces in which the requirements of microclimate and aesthetics will be optimally correlated.

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