

Historical Foundations of Flower Garden Formation and Landscape Design In Uzbekistan

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Abstract: *This article analyzes the historical stages of garden and park culture that has long developed in the territory of Uzbekistan. The study focuses on the formation of horticulture, landscape organization, and irrigation systems during the periods of the Bactrian, Sogdian, and Khorezmian civilizations, highlighting the social, aesthetic, and economic significance of the gardens created in these regions. The article also provides a scholarly explanation of the symbolic meaning of plants in Zoroastrian teachings, including the interpretation of trees and flowers as sacred symbols. The findings of the study demonstrate that the ancient garden culture of Uzbekistan serves as an important historical and methodological foundation for modern landscape design.*

Keywords: *Sughd, Bactria, Khorezm oasis, Zoroastrianism, Haoma cult, ancient irrigation systems, ornamental plants, Central Asian landscape, traditional gardening, ancient garden planning, historical landscape heritage.*

Introduction

In Uzbekistan has long been recognized as a region where irrigated agriculture, horticulture, and landscape art have thrived. From the time of ancient civilizations such as Bactria, Sogdia, and Khorezm, rich experience accumulated in organizing the natural landscape to meet human needs, establishing flower gardens, and using plants for aesthetic purposes. Ancient sources interpreted tree planting, garden creation, and their cultivation not merely as an agricultural necessity, but as a religious, spiritual, and cultural value [1].

The symbolic meaning of plants in Zoroastrian teachings, the essence of the Haoma cult in Avestan sources, and the reverence for fruit-bearing and ornamental trees laid the foundation for the development of ancient garden and park culture [2]. These historical processes later led to the emergence of palace gardens, flower beds, and scenic squares in the medieval cities of Samarkand, Bukhara, Khiva, and other centers. This rich historical heritage serves as an important scientific and practical basis for modern landscape design, urban planning, and ecological planning processes [3].

Today in Uzbekistan, the pace of urbanization is accelerating, and the need to expand green areas, improve the ecological environment, and create aesthetic landscapes is growing. Modern landscape design requires not only practical skills but also a thorough study of historical gardening traditions. Understanding the principles behind the formation of ancient flower gardens and parks serves as an important methodological guide for contemporary designers and specialists in modern projects [4].

Methodology

Furthermore, historical garden and park culture holds great importance as Uzbekistan's intangible cultural heritage. The legacy of Bactria, Sogdia, Khorezm, and Zoroastrianism can serve as a scientific foundation for current landscape work in terms of plant use, compositional solutions, and maintaining ecological balance. Studying the history of flower garden formation and landscape creation is a topical issue from the standpoint of ecological sustainability, greening of cities, and restoring national landscape identity.



Figure 1. Ancient Bactria, Sogdia, and the Kingdom of Khorezm

The territory of Uzbekistan has always been a favorable region for horticulture and garden formation, thanks to its natural-climatic conditions, fertile oases, and developed irrigation systems. According to archaeological and historical sources, in Bactria, Sogdia, and Khorezm, ornamental gardens and flower beds were established alongside agriculture based on artificial irrigation as far back as thousands of years before the common era. In the ancient settlements, the custom of planting trees and flowers around courtyards was widespread, related not only to agricultural needs but also to aesthetic and climatic necessities. In the hot and dry climate, the shade of trees, water reservoirs, and green spaces improved the quality of life. In particular, ornamental plants grown along irrigation canals were considered an important part of the natural landscape.

Bactria (Baqtiriya) was one of the most developed cultural and economic centers of Central Asia in the 2nd–1st millennia BCE. Its territory included present-day southern Uzbekistan (Surkhandarya oasis), northern Afghanistan, and partly Tajikistan. Bactria's natural-climatic conditions, fertile soils, and developed irrigation systems made it a favorable region for the early formation of gardening and landscape culture.

During the Bactrian period, gardens were mainly organized along river valleys, streams, and artificial canals. Irrigation systems created through the Amu Darya and its tributaries allowed for the cultivation of ornamental plants alongside agriculture. Archaeological studies (at sites of Dalvarzintepa, Kampirtepa, Kiziltepa) confirm the existence of canals, reservoirs, courtyard gardens, and green spaces around palaces in these areas. Gardens were often located around palaces, places of worship, and the residences of nobles, and were regarded not only as places of rest but also as symbols of power and wealth.

In Bactrian society, gardens served the following functions:

- Climate protection – in the hot and dry climate, the shade of trees improved living conditions
- Aesthetic decoration – colorful flowers, trees, and water features created visual beauty

- Religious and spiritual significance – under the influence of Zoroastrianism, plants were regarded as sacred symbols
- Social status indicator – large gardens reflected the power and prestige of rulers and nobles

Results

According to historical and botanical sources, the following plants were widespread in Bactrian gardens [5]. Among ornamental trees: plane tree (chinar), willow, poplar, and juniper; among fruit trees: pomegranate, grape, apricot, peach, and apple; and among ornamental flowers and plants: tulip, narcissus, basil, rose, and violet. These plants carried not only decorative value but also symbolic meaning. Bactrian gardens were planned based on a central water feature (pool or canal) surrounded by trees and flower beds, with symmetrical or semi-symmetrical compositions, pathways dividing the grounds, and resting areas (platforms and porches) [6]. This system later exerted a strong influence on the garden cultures of Sogdia and Khorezm. Bactrian gardens are considered one of the main roots of Central Asian landscape culture. It was during this period that the idea of harmony between man and nature took shape, landscape aesthetics formed, and the garden became a religious, social, and political symbol [7].

Sogdia (Sogdiana) was one of the most developed cultural and trade centers of ancient Central Asia, encompassing the territories of present-day Samarkand, Bukhara, the Zarafshan valley, and Kashkadarya. The favorable geographic location, fertile lands, and developed irrigation systems of the Sogdian oasis created the conditions for the high development of horticulture and landscape culture [8]. A complex irrigation system based on the Zarafshan River and its tributaries formed in Sogdian territories (Afrasiab, Panjikent, Varakhsha), showing that cities had wide canals, pools, inner courtyard gardens, and green areas around palaces and temples. Gardens were mainly located inside cities, on the outskirts, along trade routes, and around noble residences [9]. This indicates that Sogdian gardens had not only aesthetic but also socioeconomic importance. In Sogdian society, gardens served the following main functions:

- Trade and hospitality environment – gardens along caravan routes served as resting places for merchants
- Social status indicator – large gardens expressed the wealth and prestige of nobles
- Cultural and ceremonial venue – festivals and religious ceremonies were held in gardens
- Aesthetic environment – beautified the cityscape and improved the quality of life

Sogdian gardens were an inseparable part of urban culture, deeply integrated into the daily life of the population. Based on historical sources and archaeobotanical studies, the following plants were widespread in Sogdian gardens: plane tree, mulberry, willow, poplar, juniper, pomegranate, grape, apricot, apple, pear, peach, and various flowers and ornamental plants [10].

Discussion

Khorezm is one of the oldest centers of civilization in Central Asia, located in the lower reaches of the Amu Darya. From the 1st millennium BCE, developed irrigation systems, fortified cities, and major cultural centers formed in the Khorezm territory. This process also created the conditions for the high development of horticulture and landscape culture [11]. The natural conditions of Khorezm – a sharply continental climate, strong winds, hot summers, and cold winters – required a distinctive approach to garden planning. For this reason, Khorezmian gardens were organized in a protected, enclosed, and compact form [12].

Zoroastrianism and the Symbolic Meaning of Plants

Zoroastrianism is one of the oldest religious and philosophical teachings in the territory of Central Asia, widely spread in the territory of Uzbekistan in the 1st millennium BCE. This teaching considered natural elements – earth, water, fire, air, and plants – to be sacred. For this reason, during the Zoroastrian period, gardens and flower beds took shape not merely as agricultural areas,

but as spiritual, religious, and symbolic spaces [13].

In Avestan sources, plants are interpreted as expressions of “forces of good.” Planting trees, caring for the earth, and preserving water were considered virtuous deeds. These views caused garden culture to take deep root in the territory of Uzbekistan. According to Zoroastrian teachings, nature created by Ahura Mazda is pure and sacred, and preserving it is the duty of man [14, 15]. The Avesta particularly emphasized: not harming the earth, not polluting water, planting and multiplying trees, and nurturing plants. For this reason, gardens were regarded as spaces reinforcing the forces of good.

In Zoroastrianism, **Haoma** was considered one of the most sacred plants. It was a symbol of vitality, health, and spiritual purity. Haoma juice was consumed in religious rituals, and it was believed to protect a person from evil forces [15].

This belief caused certain plants in gardens to receive special attention. Medicinal and aromatic plants similar to Haoma were planted in the central parts of gardens. During the Zoroastrian period, plants carried not merely decorative or nutritional value, but symbolic and emblematic meaning:

- Tree – a symbol of life, vitality, and eternity
- Flower – a symbol of purity, light, and renewal
- Basil (rayhon) – a sign of sacredness and purity
- Rue (isiriq) – a plant protecting from evil
- Pomegranate – abundance, prosperity, and fertility
- Grape – life force and plenty

For this reason, gardens were planned based on plant symbolism. The planning of gardens in the Zoroastrian era was based on the idea of “order – goodness – beauty,” interpreted as a symbolic struggle against forces of evil. The reverence for nature during the Zoroastrian era had a strong influence on the garden culture of subsequent periods. In particular:

- Sacred plants were preserved in the gardens of Sogdia and Khorezm
- The concept of the “paradise garden” formed in the gardens of the Islamic period
- In modern Uzbek horticulture, planting trees is regarded as a virtuous deed

This continuity shows the deep rootedness of the Zoroastrian heritage.

Conclusion

The traditions of flower garden formation and landscape creation in the territory of Uzbekistan have a history of thousands of years, having formed in close connection with ancient civilizations, religious views, and architectural experience. The garden culture that developed during the Bactrian, Sogdian, and Khorezmian periods demonstrates that the idea of harmony between man and nature emerged very early in this region. Ancient irrigation systems, courtyard gardens, green spaces around palaces, and ornamental plant compositions met not only the agricultural needs but also the aesthetic and spiritual requirements of the society of that era. The sanctification of natural elements in Zoroastrian teachings, the symbolic interpretation of plants, and the formation of the Haoma cult imbued garden culture with deep spiritual meaning. Since planting trees, caring for the earth, and preserving water were considered virtuous deeds, gardens became symbols of virtue, purity, and prosperity. These views found expression in the gardens of subsequent periods, serving the continuous development of landscape culture in the territory of Uzbekistan.

The palace gardens, madrasah courtyards, and public flower gardens built in medieval cities of Samarkand, Bukhara, and Khiva formed as some of the finest examples of Eastern garden art. These gardens, planned in harmony with architectural structures, created a perfect compositional system through central pools, symmetrical pathways, and colorful flower beds. As a result, gardens became important not only as places of rest, but also as centers of social life, cultural and spiritual

spaces.

In modern Uzbekistan, returning to the traditions of historical garden culture, restoring the national style, and creating an ecologically sustainable environment remain among the urgent tasks in urban planning and landscape design. By studying ancient experiences, important scientific conclusions can be drawn regarding the selection of climate-appropriate plants, rational use of water resources, and improving the microclimate through green areas. An approach based on historical heritage serves both to enrich the aesthetic appearance of cities and to improve the quality of life of the population. Therefore, the in-depth study of the historical foundations of flower garden formation and landscape creation in Uzbekistan is not only of scientific importance but also practically significant. This research serves as an important scientific basis for developing the national landscape style, preserving cultural heritage, and leaving future generations a healthy, beautiful, and sustainable environment.

References

- [1] I. A. Karimov, *High Spirituality – an Invincible Force*. Tashkent, Uzbekistan: Ma’naviyat, 2008.
- [2] A. Askarov, *The Origins of the Uzbek People*. Tashkent, Uzbekistan: Fan, 2010.
- [3] E. V. Rtveladze, *Ancient Civilizations of Uzbekistan*. Tashkent, Uzbekistan: Sharq, 2005.
- [4] J. Sulaymonov, *Irrigated Agriculture and Horticulture in the History of Uzbekistan*. Tashkent, Uzbekistan: Fan, 1998.
- [5] M. E. Masson, *Ancient Cities of Central Asia*. Tashkent, Uzbekistan: Fan, 1973.
- [6] B. A. Litvinskiy, *Ancient Cultures of Central Asia*. Moscow, Russia: Nauka, 1972.
- [7] L. T. Pyankova, *Bactria in the Antique Period*. Moscow, Russia, 1992.
- [8] Y. G‘. G‘ulomov, *History of Irrigation in Khorezm*. Tashkent, Uzbekistan: Fan, 1959.
- [9] S. P. Tolstov, *Ancient Khorezm*. Moscow, Russia, 1948.
- [10] V. A. Livshits, *Sogdian Epigraphy of Central Asia*. London, U.K., 2008.
- [11] M. Boyce, *Zoroastrians: Their Religious Beliefs and Practices*. London, U.K., 2001.
- [12] *Avesta*. Tashkent, Uzbekistan: Fan, 2001.
- [13] T. Khodzhayev, *History of Garden and Park Art in Central Asia*. Tashkent, Uzbekistan, 2012.
- [14] K. Nizomiy, *Eastern Garden Art and Landscape Architecture*. Tashkent, Uzbekistan, 2015.
- [15] A. Qosimov, *Fundamentals of Landscape Design*. Tashkent, Uzbekistan, 2020.