

**EXPLORING THE ROLE AND INFLUENCE OF TIMURID GARDEN-MAKING PRACTICES IN
THE DEVELOPMENT OF SAFAVID GARDEN TRADITIONS**

**ИЗУЧЕНИЕ РОЛИ И МЕСТА САДОВОДЧЕСКОГО ОПЫТА ГОСУДАРСТВА
ТИМУРИДОВ В ФОРМИРОВАНИИ САДОВОДЧЕСКИХ ТРАДИЦИЙ ЭПОХИ СЕФЕВИДОВ**

**SAFAVIYLAR DAVRIDAGI BOG'SOZLIK AN'ANALARINING SHAKLLANISHIDA
TEMURIYLAR DAVLATI BOG'SOZLIK TAJRIBASINING ROLI VA O'RNINI O'RGANISH**

<https://doi.org/10.5281/zenodo.17330887>

Akramova Kholida Alisher kizi

SamSACU basic doctoral student

Uralov Akhtam Sindarovich

Doctor of Architectural Sciences, Professor

Samarkand State Architecture and Construction University

E-mail : xolida.akramova5@gmail.com

Abstract: *The purpose of the article is to conduct a deep scientific analysis of the art of gardening of the Timurid era and its influence on the formation of gardens of the Safavid era from a historical, cultural and architectural point of view and to evaluate it as a source of inspiration for modern urban planning ideas. The study, using historical-comparative, discursive and architectural-conceptual analysis methods, identified the continuity, interaction and differences between the gardening traditions of the two periods. According to the results of the study, the gardening norms formed during the Timurid era, such as the shape of the Charbagh, its symmetrical structure, central water system, architectural and philosophical balance, were integrated into the idea of forming the city center and recreation during the Safavid era, and were combined with trade and cultural centers. It is emphasized that these approaches serve as an important source of inspiration in modern urban concepts in such areas as sustainable green areas, ecological design and preservation of the cultural landscape. The discussion section analyzed how historical gardening practices can be applied to modern urban planning, particularly in terms of cultural identity, ecological sustainability, and social integration. In conclusion, it was emphasized that historical gardening traditions should be considered not only as architectural monuments, but also as urban models for a sustainable future.*

Аннотация: *Цель статьи - провести глубокий научный анализ искусства садоводства эпохи Тимуридов и его влияния на формирование садов эпохи Сефевидов с исторической, культурной и архитектурной точек зрения и оценить его как источник вдохновения для современных градостроительных идей. В ходе исследования с использованием историко-сравнительного, дискурсивного и*

архитектурно-концептуального методов анализа была выявлена преемственность, взаимодействие и различия между традициями садоводства двух периодов. Согласно результатам исследования, нормы озеленения, сформировавшиеся в эпоху Тимуридов, такие как форма Чарбага, его симметричная структура, центральная система водоснабжения, архитектурный и философский баланс, были интегрированы в идею формирования центра города и рекреации в эпоху Сефевидов и сочетались с торговлей и культурные центры. Подчеркивается, что эти подходы служат важным источником вдохновения для современных городских концепций в таких областях, как устойчивые зеленые зоны, экологический дизайн и сохранение культурного ландшафта. В дискуссионной части был проведен анализ того, как исторические практики садоводства могут быть применены к современному городскому планированию, особенно с точки зрения культурной идентичности, экологической устойчивости и социальной интеграции. В заключение было подчеркнуто, что исторические традиции садоводства следует рассматривать не только как памятники архитектуры, но и как городские модели устойчивого будущего.

Annotatsiya: Maqolaning maqsadi Temuriylar davri bog'sozlik san'ati va uning Safaviylar davri bog'larining shakllanishiga ta'sirini tarixiy, madaniy va me'moriy nuqtayi nazardan chuqur ilmiy tahlil qilish va zamonaviy shaharsozlik g'oyalariga ilhom manbai sifatida baholash. Tadqiqotda tarixiy-komparativ, diskursiv va arxitekturaviy-konseptual tahlil metodlaridan foydalangan holda, ikki davr bog'sozlik an'analari o'rtasidagi uzviylik, o'zaro ta'sir va tafovutlar aniqlangan. Tadqiqot natijalariga ko'ra, Temuriylar davrida shakllangan bog'sozlik me'yorlari masalan, Chorbog' shakli, uning simmetrik tuzilish, markaziy suv tizimi, me'moriy va falsafiy muvozanat, Safaviylar davrida shahar markazi va rekreatsiyasini shakllantirish g'oyasiga integratsiyalashgan, savdo va madaniyat markazlari bilan uyg'unlashtirilgan. Ushbu yondashuvlar zamonaviy urbanistik konsepsiyalarda barqaror yashil hududlar, ekologik dizayn va madaniy landshaftni asrash kabi yo'nalishlarda muhim ilhom manbai bo'lib xizmat qilishi ta'kidlangan. Muhokama qismida tarixiy bog'sozlik tajribasining zamonaviy shaharsozlikka qanday tatbiq etilishi mumkinligi, xususan, madaniy identitet, ekologik barqarorlik va ijtimoiy integratsiya nuqtai nazaridan tahlil qilingan. Xulosa sifatida, tarixiy bog'sozlik an'analari faqat me'moriy yodgorlik sifatida emas, balki barqaror kelajak uchun urbanistik model sifatida ham qaralishi lozimligi ta'kidlangan.

Keywords: Timurids, Safavids, gardening, urban planning, cultural heritage, historical landscape, urbanism.

Ключевые слова: Тимурид, Сефевиды, садоводческое искусство, городское планирование, культурное наследие, исторический ландшафт, урбанизм.

Kalit so'zlar: Temuriylar, Safaviylar, bog'sozlik san'ati, shaharsozlik, madaniy meros, tarixiy landshaft, urbanizm.

INTRODUCTION

In medieval urban planning, gardens and avenues were considered not only aesthetic objects, but also spaces with social, cultural and political symbolism. In particular, the concept of the "paradise garden" established in Samarkand and Herat during the Timurid period, water canals, and the square garden (rectangular plan) are described in historical sources as "paradise-like". Later, during the Safavid period, especially during the reign of Shah Abbas, this tradition was continued in a new form in Isfahan. Chaharbagh Alley in Isfahan is a clear proof of this. This fact has been studied by E. Clark, A. S. Uralov, K. Rakhimov, Shahin Mirhosseini Vakilli, Shaham Asadi, M. Ghariopur, S. Sadikova.

We intend to evaluate this practice, namely the Chaharbagh Alley in Isfahan, not only as a monument of the Iranian people's garden and park art, but also as the role of the Timurid-era chorbaghs in its formation, and as a source of inspiration for modern urban planning ideas.

THE MAIN PART

The Timurid period garden and park art is a unique school of garden and park architecture that emerged in the 14th-15th centuries in Central Asia and Iran. The gardens of this period were usually rectangular in shape, located around a central water basin, and emphasized the harmony of water and plants, symmetry, geometric order, and aesthetic perfection. Timurid gardens were often based on the chorbog tradition in the philosophy of the paradise garden, expressing the harmony of nature and human creativity. An atmosphere of peace and harmony was created through water elements, walkways, and a complex of plants.

The Safavid period (16th–18th centuries) garden and park art continued the basic principles of the Timurid school, incorporating more complex and large-scale urban planning concepts. During the Safavid period, gardens became an integral part of urban planning and served not only aesthetic, but also social, political, and religious purposes. The principle of "chorbog" (four gardens) (Figure 1), which was formed during the Timurid period, was further developed during the Safavid period and used as the basis for forming the city plan. The gardens of Isfahan were rectangular in shape, with water-filled ditches connecting the two main garden paths to the avenue, dividing them into four parts. This geometric symmetry and the complexity of the water system made the gardens not only beautiful, but also functionally perfect.

During the reign of Shah Abbas in Isfahan (16th century), the "Chaharbagh" avenue was created as a bright representative of this concept. (Figure 2) This garden avenue was a revolutionary achievement in urban planning, serving as the main avenue dividing the city into four parts. Chaharbagh served not only as an aesthetic garden, but also as a central part of the city plan, as a center of social and cultural life. Palaces, mosques, and shopping complexes were located around the garden avenue, ensuring the harmony of city life.

Historical sources record [4,5,6,7] that Shah Abbas I (1571–1629) spent the early years of his youth in Herat. In this city, he became closely acquainted with the

environment of the Herat Gardens, a garden-park complex built and developed during the reign of the Timurids. The Herat Gardens of the Timurid period were famous for their unique architectural solutions, water structures and symmetry, and planting patterns. These gardens were mainly based on the concept of a four-story garden, creating an environment that expressed the harmony of nature and human spirituality. The fact that Shah Abbas lived in the Herat Gardens complex, created by the Timurids until the age of 16-17, had a great influence on his personal and political outlook, as well as his interest in gardening and urban planning. Through the gardens of Herat, he learned the basic principles of garden and park art - water-based symmetry, harmony of natural and architectural elements, and the art of creating a beautiful and functional environment.

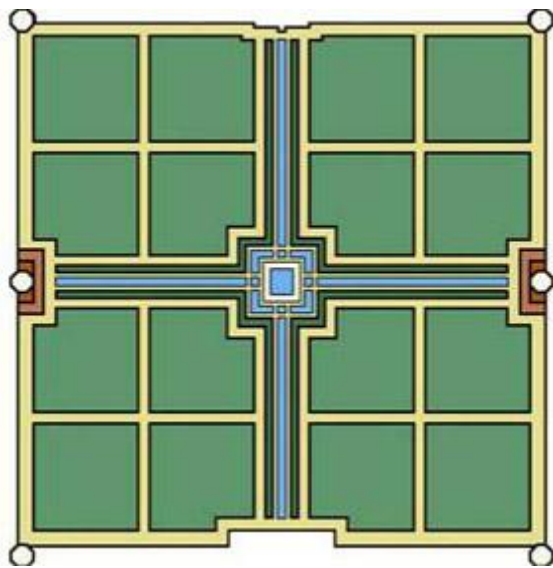


Figure 1. General plan of the garden



Figure 2. Plan of Chahar Bagh Alley

The Safavid period's garden and park art can be considered a continuation of the Timurid school of garden building. During the reign of Shah Abbas, the Safavid state's garden and park art reached a new level. The dominance of the chorbagh principle formed during the Timurid period was further strengthened, and its use in urban planning, combined with the alley style, was strengthened. During his reign, Shah Abbas made Isfahan the new capital and implemented major world-class urban development projects. In particular, he preserved the Timurid traditions he saw in Herat, enriching them with a new creative approach. This led to urban planning, the creation of parks, and the aesthetic and functional improvement of the city. (Figure 3)

The Chahar Bagh Alley, built by Shah Abbas in Isfahan, is one of the most important park-garden monuments of the Safavid era and is a practical example of the Chahar Bagh concept in urban planning. The word "Chahar Bagh" (four gardens), which is about six kilometers long, itself expresses its shape and style of organization: the garden is divided into four parts, with two ditches branching from the Zayandeh River flowing through it on both sides of the street, creating a cool, shady green area in the garden. (Figure 4) This

garden-alley divided the city into four main parts, not only ensuring balance and order in urban planning, but also functioning as a socio-cultural center. During the reign of Shah Abbas, the Chahar Bagh area was surrounded by palaces, mosques, and shopping centers, and was considered the focal point of city life. Thus, Chaharbagh Park is valued not only for its natural beauty, but also as a complex system that combines urban planning and political-economic functions (see Figures 2 and 3).



Figure 3. Plan of the Chahar Bagh Alley complex in Isfahan. 16th century

Chaharbagh Alley in Isfahan is also of great importance in modern urban planning. Its rectangular, water-based symmetrical planning principles are still accepted today as the main approach to creating environmentally sustainable, aesthetic and functional cities. Chaharbagh Alley plays an important role in the effective organization of the city center, facilitating pedestrian movement and developing socio-cultural activities. Chaharbagh is also valued today as a historical heritage and serves as a source of cultural tourism and identification of the city. (Figure 5) This alley not only reflects the cultural and urban heritage of Isfahan from past centuries, but also remains a unique experience in modern urban planning, ensuring the harmony of nature, man and architecture.



Figure 4. The junction of Chaharbagh Avenue with the Zayandeh River



Figure 5. Chahar Bagh Alley is the socio-cultural center of Isfahan.

Today, Chaharbagh Alley in Isfahan is not only a historical monument, but also an example of advanced architectural and ecological approaches in modern urban planning. Its geometric planning and water systems play an important role in controlling the city's natural climate, creating clean air and an aesthetically pleasing environment. Chaharbagh Alley not only serves as a socio-cultural center in urban planning, but also plays an important role in the development of pedestrian traffic and public activities. This alley is an important object in the development of tourism and culture, and is also of great importance in preserving the historical identity and heritage of the city. At the same time, Chaharbagh Alley serves to ensure environmentally sustainable development in urban

planning based on the harmony of nature and human activity. This, in turn, is considered an important experience in the combination of ancient and modern principles in modern urban planning.

The results of the study showed the following :

- During the Timurid era, gardens were established not only as aesthetic green spaces and courtyards, but also as political power, religious symbols , and social centers.
- The Safavids , however, adopted these concepts, combining the Charbagh with alleys and making them more developed in an integrated manner with markets , public squares , and recreational areas (for example, Chaharbagh in Isfahan).
- The traditions of Timurid gardening – geometric symmetry, centrality of water structures, philosophical and spiritual meanings – were further refined by the Safavids.
- be a source of inspiration for developing concepts such as "green urbanism" , ecological design , and landscape projects based on cultural heritage in modern urban planning .

Discussion: The garden traditions of the Timurid and Safavid periods are closely intertwined, their formation being based not only on aesthetic principles, but also on religious, political and social ideas. Timurid gardens , such as the Boghi Jahonoro in Shahrizabz or the Boghi Dilkusho in Samarkand, were clearly planned, centralized, based on water and geometric symmetry, and symbolized power and order . These approaches were adopted by the Safavids and became the main elements of the urban structure of the city of Isfahan . The concept of the Chahar Bagh was inherited from the Timurids and became the center of Isfahan's social life and cultural recreation during the Safavid era. It is this form that bears resemblance to the modern concept of "landscape urbanism".

One important difference is that the Safavids directed the gardens more towards public needs. While the Timurid gardens were a symbol of power and philosophical harmony , Safavid gardens were marked by democratic, open approaches to international trade and cultural exchange.

"green infrastructure development" , ecological urban design , and cultural landscape preservation in modern urbanism have direct connections with these historical experiences. Especially today, against the backdrop of global climate challenges, historical gardening traditions are relevant not only as a heritage, but also as a model for sustainable urban design . There is also the opportunity to study these historical experiences within the framework of architectural and urban education , reconstruct them using digital technologies and apply them in modern architectural projects. This approach, while strengthening cultural identity , serves to create a sustainable and green living environment in modern cities .

In conclusion, it can be said that the urbanism of the Safavid era, based on the personal experience of Shah Abbas, extended the legacy of the Timurid garden tradition to the urban space . While the Timurid tradition introduced symmetrical -gardens through the

central pavilion of the Charbagh , the Safavids enriched this principle, that is, through the boulevards of the Charbagh , expanding it not only as a green space, but also as a socio-cultural space. This historical -urban integration offers the following practical concepts for today's modern urban planning:

1. "Chaharbag Quarter": city blocks consisting of green areas divided into four symmetrical quarters with a central square.
2. Water -landscape integration: using natural gradients to create a cooling and aesthetic environment through water flow.
3. Architectural landscape harmony: **kiosk, terrace, pavilion** and By combining **mosaic** elements in **an innovative way, it is possible to create aesthetically appealing, functional, and sustainable urban spaces.**
4. Social sustainability: Gardens based on historic landscape principles can serve as the basis for creating green complexes that are open to the public and include cultural, social, and ecological functions .

Today, the issues of quality of life and ecological balance in cities are relevant, and the experience of historical gardening is a valuable resource in this regard. On this basis, using past experiences, it is possible to design modern gardens , street and sidewalk systems, and green areas based on cultural landscapes. The gardens built during the reign of Amir Temur and the Timurids were perfect, world-famous architectural and landscape masterpieces in their time. Unfortunately, these gardens have not reached us. However, the Safavids were inspired by the concept of these gardens and further improved it, and some of their examples have survived to this day. Today, there is an opportunity to visually imagine the form and spirit of these historical gardens, to conduct scientific research. Cultural heritage can be revived within the framework of a modern urban planning concept, and it can be effectively used in urban projects based on ecological design and cultural values. Historical gardening can be not only a memory of the past, but also the foundation of future cities.

LIST OF REFERENCES USED:

1. Uralov, AS, & Adilova, LA (2014). *Landscape Architecture* . Tashkent: [Publisher's name not specified].
2. Rakhimov, KD, & Uralov, AS (2013). *Garden and Park Art of the Eastern Countries* . Tashkent: [Publisher's name not specified].
3. Representative, SM (2020). A Comparative Study of Urban Spaces Between Samarkand City in the Timurid Period and Isfahan City in the Safavid Period. *Landscape Architecture and Regional Planning* , [volume/issue not specified], [pages not specified].
4. Asadi, S. (2023). Power Discourse: Reflecting Shah Abbas I's Political Thoughts on Safavid Architecture and Urban Development (Isfahan's Baghshahr Utopia). *Arts & Humanities Open Access Journal* , [volume/issue not specified], [pages not specified].

5. Gharipour, M. (2011). *Islamic Gardens and Landscapes* . Philadelphia: University of Pennsylvania Press.
6. Makhmudova, M. (2020). Islamic Style in Landscape Design on the Example of Ancient Gardens of the Timurid Period. *Society. Integration. Education* , 5, 706–718.
7. Sodiqova, SN (2024). *Conceptual foundations of the traditional “Chor-bog”* . Monograph. Samarkand: Samarkand State Institute of Architecture and Construction.
8. Sadikova, SN (2024). Architectural restoration of gardens of the Timurid era in Samarkand using GIS technologies. *Journal of Architecture and Construction of Uzbekistan* , 2024(4), 47–52. (Scientific direction code: 18.00.00. №7) .