Darakeh Valley as the Iranian Sharbagh

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Abstract | Destructive process of Tehran’s river valleys and unsuccessful experiences in different cases indicate the lack of proper understanding and misuse of the capacities and potentials of these river valleys. Darakeh river valley is one of the seven valuable river valleys in Tehran as well as one of the main and natural corridors located on the foothills of Alborz Mountains. Darakeh River Valley is composed of three components of water, plant and architectural pieces. The essential companionship of these three components expresses the natural and vernacular structure of Darakeh river Valley. Route of the river alongside valley’s thalweg and formation of trees and plants along it and presence of architectural pieces at the end of the river path, shape the main configuration of Darakeh river valley. The Iranian Shaarbagh hypothesis, which was presented by Mahdi Shaybani and Maryam Esmaeil Dokht in landscape Magazine No. 33 in 2013, iterated the elements for Shaarbagh's paradigm that the water, plant, and architectural pieces were introduced as the main components of Shaarbagh's configuration. It seems that the components of Iranian Shaarbagh can be the model for the formation of the river valley, which water, plant (gardens of Darakeh) and the architectural pieces (the village of Darakeh) are shaped in a linear structure and along the river path. According to natural context and river path, the figure of the Darakeh’s gardens and the architectural pieces (village of Darakeh) following the paradigm of Iranian Shaarbagh. This research seeks to develop a future theory for Darakeh River Valley and by studying the Iranian Shaarbagh paradigm and its adaptation to the landscaping elements of the river valley, it concludes the issue which Iranian Shaarbagh paradigm is the basis for Darakeh river valley and it is possible to apply this theory in the future development of this river valley.

Keywords | River valley, Iranian Shaarbagh, natural structure of the valley, natural landscape of the river.

Introduction | The initial formation of cities along the rivers had very different reasons including livelihoods, agriculture, and more important access to life resource for survival. The formation of these cities along this vital element has created the sense of place, sense of belonging, identity and history for the citizens of the city. The river valley has played a very effective role as a natural component for increasing happiness, vitality and urban spaces. Today, according to increasing pollution of big cities as well as the reduction of recreational spaces, the importance of river valleys is being felt more than ever and the way to organize them is a challenge for the managers, planners, designers and citizens. In addition to creation of a recreational and economic opportunity in the city, river valleys bring the urban management close to achieve various goals, such as recreational spaces, sports areas, and also establishment of more security in insecure spaces (Karimi Moshaver, 2013: 52).
Tehran valleys on the south of the Alborz foothills are among the important natural elements in Tehran. Seven river valleys are considered as a north-south axis of Tehran, air flow axis and access paths (Ale Hashemi, Bagheri & Akhavan, 2015:
95). As the landscaping components, the natural elements of these river valleys have a significant influence on preserving the city's identity. These components are located in the south foothills of Alborz Mountains as one of the most important natural urban elements. And lack of proper attention to them in enactments and Tehran's master plans are the main reasons for destruction process of the river valleys. Projects such as the Nahj al-Balagheh garden and the Javanmardan garden show the claim that designers and managers have destroyed their natural context because of the lack of proper understanding of landscaping elements of the Tehran's river valleys. In this downward trend, the proper recognition of the landscaping elements of these river valleys has become more necessary than before.

This research is looking for the true identifying of landscaping components of one of river valleys in Tehran named Darakeh. This research attempts to evaluate the Iranian Shaarbagh theory on the river valleys of Darakeh, by identifying and employment of Iranian Shaarbagh paradigm, which in fact is looking for evaluating utilization possibility of this theory in its future development. Despite the unsuccessful experiences in this field and destruction of Tehran's river valleys, by introducing the Iranian Shaarbagh as the basis of the Darakeh river valley, this research tries to maintain the landscaping components of this river valley and in following aims to maintain the identity of urban landscape and urban nature with regard to future developments of river valley. Which in fact claims the importance and the necessity of this research. In this regard, this research introduces the Shaarbagh hypothesis, river valley of Darakeh and compares the Iranian Shaarbagh components with Darakeh river valley.

Iranian Shaarbagh
The Iranian Shaarbagh hypothesis, which was presented by Mehdi Shaybani and Maryam Esmaeil Dokht in an article under title of “Paradise Magazine” Number 33 was a new one on the formation of Iranian city. The idea of Iranian Shaarbagh has been a thought for creating sustainable urban landscape in interaction with human and nature, and providing a place for comfort and relaxation, and an environment for efficiency. Shaarbagh had been created in four different climates with the aim of adapting to the environment and using the environmental factors as the urban infrastructure of Iran, and they aims to create garden city and a dynamic form and adaptable with the environment (Sheybani & Esmaeil Dokht, 2015: 15). Configuration of Iranian cities are designed according to the environment and natural and ecological contexts and three factors of water, plants (gardens and farms) and architectural fabrics have been their constituent elements. In this process, cities are shaped from the natural synthesis of two waterway corridors, green infrastructures and the organic generation of architectural pieces in this context. Green corridors compatible with mentioned water canals are the real creators of Shaarbagh. In traditional Iranian cities, the structure and configuration of the city was shaping from the spatial relation of corridors and their overlapping and in the notion of creating the city there was a close connection between corridors and architectural pieces. So that the city's structure actually was shaping from the relation between natural corridors (waterways and green infrastructure) (Ibid: 15-16). In terms of structure, Iranian Shaarbagh follows linear geometry, and the garden and architectural pieces are shaped linear along the river axis. This architectural element, which is the product of an essential companion of different elements, is a landscape (subjective, objective) in fact which can be the basis and paradigm of modern and natural urban designs. Shaarbagh is generated from the interaction of two infrastructural and natural elements (water) and (plants), besides architectural elements and pieces as artificial elements. There are considerable cases of Iranian Shaarbagh in Samarkand in Timurid period. “Clavijo” provides valuable evidences from the gardens, to one of which he was invited by “Timur” "... Long boulevards were connecting these gardens to the city's gates and by walking through them, it seemed that you were walking in a forest with tall trees where a city embedded (Ibid: 16); (Figs. 1 & 2).

Darakeh river valley
Darakeh is one of the natural and pristine areas of Tehran. Despite passing of time and modern urbanization, Darakeh is one of the natural areas of Tehran, which has remained to be immune from disaster damage and modern events. Darakeh’s place among the people of Tehran is sometimes so important that mountain climbing has become an old tradition on Friday mornings. The same as its similar cases, this river valley is considered as one of the most obvious natural components in Tehran. The expansion and influence of this river valley among the urban fabric and as a result its high accessibility are some of important characteristics of this natural element. This feature is unlike the characteristics of other environmental elements such as mountains, gardens, grassland and forests, which for obvious reasons are far away from citizens (Koozegar Kajegi & Moslemi, 2015: 114); as a result, the importance of this river valley is not hidden only in its natural and environmental values but over the time, it has become (a subjective-objective phenomenon) a landscape. The figure of Darakeh river valley is shaped according to its environment and surroundings and three factors of water, plants and architectural spots are its generators. In this structure, the river of Darakeh (water) is the main component and the gardens (plant) and architectural spots (the village of Darakeh) follow the form of its motion; so that the direction of the water movement along the thalweg has created a linear arrangement and the low width of the valley has amplified this feature. As a result, the river is a connecting element
Fig. 1: Formation of the Iranian Shaarbagh according to its three factors. Source: Sheybani & Esmail Dokht, 2015: 15.

Fig. 2: The formation of cities and gardens in the direction of water movement. Source: Sheybani & Esmail Dokht, 2015: 16.

Table 1. Identifying the characteristics and formation structure of Iranian Shaarbagh. Source: author.
between the constructive components of the Darakeh river valley (Figs. 3 & 4). The Gardens in Darakeh also have created different microclimates due to the presence of water in different parts of the valley. 

Gardens of Darakeh
The gardens of Darakeh are generators of this valley’s green infrastructures. These gardens are created on the riversides and follow the form of water motion (Figs. 5-7). Through structure and natural context of the valley, the structure of these gardens has created a paradigm similar to Iranian garden’s paradigm. These green infrastructures, which are created in different terraces, have an organic geometry, linear structure, various terraces and a various spatiality. Similar to Persian garden, Darakeh gardens are enclosed. Agricultural activity and harvesting are the main pillars of these gardens; but the main difference between Persian garden and these gardens is the geometry and general structure of garden. Formation of the gardens in the context and the steep slopes of the valley have affected the geometry of these gardens. As a result, their geometry does not follow the official Persian garden geometry. (Figs. 8 and 9)

River valley as an Iranian Shaarbagh
Configuration of Darakeh river valley is dependent on three main components of water (Darakeh River, Plant (gardens), architectural pieces (Darakeh village). With a precise study of these three components, we can conclude that the fundamental components of Darakeh river valley are those components of Iranian Shaarbagh. In this regard, the components of Iranian Shaarbagh and Darakeh valley are evaluated in comparison to each other:

Figs. 3 & 4: The formation of the village of Darakeh and the gardens in the direction of the water movement (the right one is the diagram of river valley, which is deduced from its aerial photo). Source from right to left: author & https://www.google.com/maps/place/Darakeh+River.

Figs. 5-7: Darakeh’s gardens along the river follow the shape of the water movement on the river’s edge. Source: https://www.google.com/maps/place/Darakeh+River.
In terms of structure, Darakeh river valley is following the linear form same as Iranian Shaarbagh and architectural and garden pieces are shaped along the river axis in a linear format (Fig.10). Iranian Shaarbagh sources its consuming water through the river and the Qanat; as a result one of these two water supply methods created the structure of Shaarbagh. Darakeh river valley shapes its main configuration by Darakeh river same as Iranian Shaarbagh (Fig.11). In this process, the green corridors are conformed with foresaid water paths are organizer of Shaarbagh (Sheybani & Esmaeil Dokht, 2015: 16). Same as Iranian Shaarbagh, and conformed with river path, Darakeh gardens are the organizer of configuration and general structure of Darakeh river valley (Fig.12). Same as the structure of Iranian Shaarbagh, architectural pieces of Darakeh river valley are shaped in the synthesis of two canals and green infrastructures. Despite all the similarities between Iranian Shaarbagh and Darakeh river valley, lack of agricultural lands (farms) is visible in the structure of Darakeh river valley. Due to structure and context of the river in this area, providing vast and extensive farms is not possible but agricultural activities and harvesting in private gardens of this area are happening (Fig.14).

Due to the mentioned matter, we can conclude the point that same as Iranian Shaarbagh, Darakeh river valley is the production of essential companion of different elements. And Iranian Shaarbagh components can be the basis of Darakeh river valley as its main configuration, and this river valley operates same as Iranian Shaarbagh with its main components (water, plant, architecture) with a dynamic form and adaptive with its environment.

Future developments of Darakeh river valley

In study domain of the article, Tehran had three master plans until now, which was approved in the past years and some of their provisions has been enforced in specific periods. In enactment master plans of 1968 and 1990, river valleys have been treated more as mediums to control the spate. However, in approved master plans of 2007 this attitude to river valleys was almost being changed and in addition to spate controlling, river valleys also gets the capacity of providing recreational spaces (Karimi Moshaver, 2013: 52). And there is no specific or approved plan in terms of retrieving the natural capacities of river valleys (Ale Hashemi & Shahsavargar, 2013: 47). Nevertheless, in the approved master plan of Tehran in 2007, increasing the spatial continuity-movement along the axis, benefiting from existing natural capacities for upgrading the urban-based landscapes, and development of public spaces along the axis in relation with Darakeh river valley are proposed. Due to a glance and skim of the main corridors in Tehran including Darakeh river valley and lack of having a specific plan, the danger of river destruction is increasing and similar to previous experiences we see application of an imposed and external identity into this place and destruction of the river. In this regard, using the natural identity of this river in its organizing and development plan is necessary and important more than before and by using their potentials and capacities, we can propose an environmental/landscape adaptive plan.

Conclusion

Unsuccessful experiences in plans and similar structures to
Fig. 10: Comparison of the structure and formation of the Iranian Shaarbagh, (on the left) and the Darakeh River valley (on the right). Source: author.

Fig. 11: Comparison of water supply sources in Iranian Shaarbagh and Darakeh river valley. Source: author.

Fig. 12: Comparison of green infrastructure in Iranian Shaarbagh and Darakeh river valley. Source: author.

Fig. 13: Comparison of architectural pieces in Iranian Shaarbagh and Darakeh river valley. Source: author.

Fig. 14: Comparison of the farms in Iranian Shaarbagh and Darakeh river valley. Source: author.
Darakeh river valley, such as Javanmardan garden and Nahj al-Balagheh garden and imposing an external identity to the natural identity of these river valleys, had no consequences instead of separating people from the nature and separating the city from the nature and destruction of natural structures of these rivers. As a result, identifying of landscaping components and reinforcing their natural qualities needs an objective-subjective approach.

In this research is tried to compare the organizer components of Iranian Shaarbagh with the organizer components of Darakeh river valley. And it seems that the structure of Darakeh river valley and its configurative components has a similar structure to Iranian Shaarbagh. The existence of elements and components such as water, plant, and architectural pieces, which are following the water formal movement in a linear structure, shapes the structure of Darakeh river, a structure, which is shaped due to the environment and natural context of the valley. Lack of agricultural farms as a single component in the river valley is obvious but agricultural activity and harvesting is latent in the vernacular gardens of Darakeh and fruitful trees has this role. In this process, understanding the landscaping elements of Darakeh river valley, which is studied in this research, is its main configuration. And conformity of these elements with main elements of Iranian Shaarbagh provides the possibility of future development based on paradigm of Iranian Shaarbagh.
Reference List

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