

Full Length Research Paper

Basic elements of the traditional garden identity in the city of Van

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Garden culture in the architectural patterns in and around the city of Van in the East Anatolian region of Turkey has been a tradition from the Urartian Iron Age Kingdom in Eastern Anatolia to the present. Until the end of the nineteenth century, the city of Van had an exclusive residential area where houses were surrounded by gardens. In this study, by exploring the texture of the old gardens in some current residential areas of the Van city center and its surroundings, we evaluated depending on the house-garden relationship, the street-house relationship, and size, garden elements, types of the plants. In this study the garden culture and understanding of the landscape will be brought from the time of the Urartians to our time and to the future. Further, an understanding of the traditional use of plant types in the city and their ornamental use will be recorded and perpetuated for regenerating into garden culture.

Key words: Van/Turkey, landscape, Van lake, garden elements, structure of Van gardens.

INTRODUCTION

Growing plants for their decorative features may have started in Mesopotamia. In the 3rd century BC, the Epic of Gilgamesh documented that Sumerians' gardens and orchards have been introduced due to importance of garden culture on the region. Later, there can be identified evidence about Urartian gardens and orchards. Civilizations have influenced each other on the decorations of gardens and the plants used for centuries (King, 1979; Sevim, 2001; Hobhouse, 2002).

In ancient times, it was a sign of honour and a privilege to have a garden for noble people. Thus, kings, rulers, nobility and gentry, as well as ecclesiastics made great efforts to set up vineyards and gardens which were awarded in the historical poets. The Urartian Kingdom, with its capital city of Van, can be shown to this tradition such as other kingdoms on the region. Beginning in the

Ispuini Period (830 - 820 BC), it is obvious that the kings paid great attention to set up vineyards, fruit trees and vegetable gardens mostly in the Van Lake basin. Among the Urartians, in addition to the kings, the court women and nobles also had the privilege of having such gardens. There are not many resources on the types and status of Urartian gardens (King, 1979; Sevim, 2001).

Until the end of the nineteenth century, in the city of Van, it has been common life style for residential places to be surrounded with gardens. The area with the surrounding city walls is called *The Lower City*, with its commercial, official, and religious buildings, which constitute the business and trade centre of Van. A second part of the city is called the *Upper City*, which includes the current city of Van and it was famous for its gardens, fresh fruits and rich and various types of wine production (Figure 1). One of miniature in the Topkapı Palace archive (E. 9487) dated from the seventeenth century, gives information on Van Castle and a city view. As defined in old photographs and engravings, Van was a city with the mixture of diverse religions, architecture,

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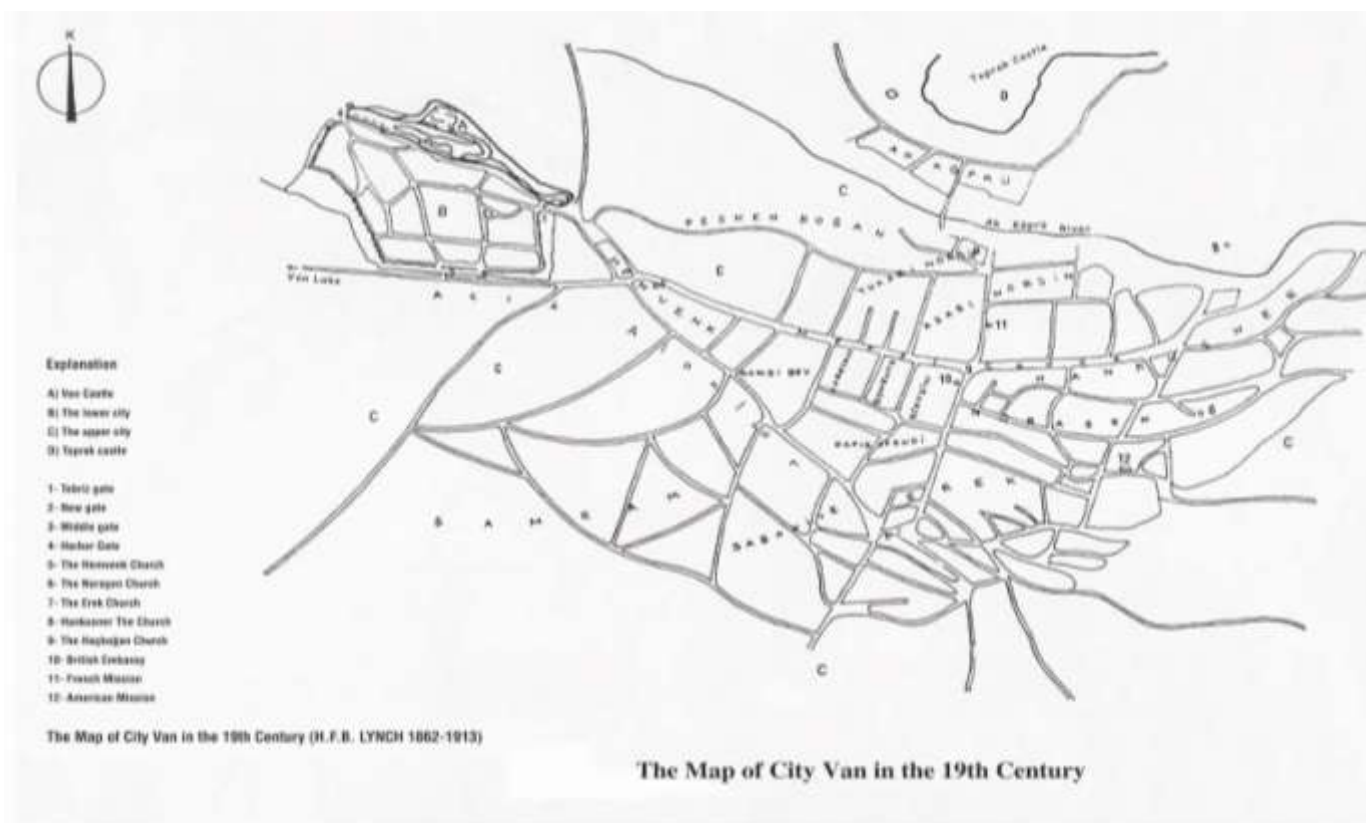


Figure 1. Map of Van city in the 19th century.



Figure 2. View from the back garden of a traditional mud brick house from 1890.

vineyards, gardens, markets, mostly two storey, soil stuccoed houses, domes, minarets, churches, mosques, consulates, national and international colleges and a military barracks (Günel, 1993; Öztürk, 2004).

The houses of old Van city have been researched within garden characteristics in this research, but there has not identified a comprehensive study of the gardens. The traditional gardens have also been affected by the modi-

fications which are imposed on the development of modern city. A few traditional Van houses and gardens remain in current city form (Figure 2). The traditional plant materials and original garden specifications in Old Van city have a risk of vanishing. The aim of this study was determined the main specifications of garden culture, from Urartian time to this day, as well as the general outlines of the current situation with specifications of plant layout.

MATERIALS AND METHODS

This study examined traditional garden culture and styles in the city texture, which is identified with remainder of big old gardens in the centre of Van city and its surroundings. Measurement, analysis and photographic studies were carried out in the old gardens for identifying garden culture.

People had relation with big gardens in the history of the region. This study identified the entrance door, garden elements, the type of plants and plantings on the structure of the historical gardens in the city of Van.

RESULTS

The following findings are the result of our study for Van

gardens.

Garden elements

Gardens of Van, instead of being perceived as a whole, have been organized as a fragment structure, in order that each part serves a different use. A Van garden is mostly narrow and long in rectangular shape, flat and has no irregularities. The garden's building elements are as follows:

'Hayat' (living area)

In traditional Van houses, the places called '*hayat*' are areas between the house and the garden provided for the daily requirements of the home. In Van houses, if the tandoori (the clay ovens) is adjacent to the house, the hayat is behind the house, between the garden and the house. If the tandoori is apart from the house, the '*hayat*' is between the garden and the house. The hayat is the vital element of Van houses in both formal and functional concepts.

According to the land layout, the '*hayat*' is designed square, rectangular or trapezoid shape. The floor of the '*hayat*' is mostly covered with fine stone, and usually contains a wall. There are flower beds surrounded by railings around the '*hayat*'. To obtain a shade, there are generally used grapevines and single trees. In the front of the '*hayat*' there is an open area which has a passage toward the garden where fruit and vegetables are grown (Figure 3).

Garden wall (Mühre)

The gardens are surrounded by hedge plants or mud walls. The walls are built 150 cm high from mud which is called "*bad*". *Bad* is prepared by adding straw and salt to soil and water, in an attempt to prevent the growth of insects and seeds in the soil.

Though the gardens are surrounded by high walls in Anatolia to protect privacy under the influence of Islam, the walls in the Van region are not as high as in Anatolia. High and bushy trees are planted in front of the garden walls to provide seclusion. Some garden walls are covered by vines and climbing plants for ornament of surrounding to the garden.

Tandoor house and Kalak

All Van houses have 'tandoor' houses which may be built adjacent to the home or apart from it. The poultry house and food store are located in the same area. The oven in the 'tandoor' house is used to cook food for the residents. Fuel is stored in the '*kalak*' located behind the house

between the 'tandoor' and the barn.

Toilets

In Van houses, the toilets are generally in the garden, separate from the house. They are located either in some corner of the garden or adjacent to the toilet on the ground floor. In two storey houses generally each floor has one toilet. Some of the two storey houses have toilets both inside and outside of the house as adjacent or apart from the house. The city has no drainage system so each toilet has a septic tank.

Barn and straw house

In Van houses, the barn is an essential element of the home and is most frequently located in the garden. Most of the Van houses have barns, either in the garden or near the 'tandoor' adjacent to the house. The floor of the barn is covered with fine stone and there is a feed box and a tank called a '*curna*' where the animals drink water.

The straw house may be a part of the barn or a separate division. The straw house is used to stock animal feed.

Water elements

Under the influence of Islam, the fountain pool is an essential element of Turkish gardens (Eldem, 1987; Elmas, 2009). In the Van region, with its long, tough winters, water is useless for gardens. Therefore these elements are not common in Van garden style. But there are water channels, '*kerhiz*,' in front of the houses that carry water and are used for irrigation.

THE BOTANICAL CHARACTERISTICS OF TRADITIONAL VAN GARDENS

The most important characteristic of Van gardens is that it generally imitated nature. There is no definitive axis in the gardens. Primarily the practicalities of living and utilization have been thought of in the gardens. The needs of eating, drinking, amusement, viewing and playing are all carried out in the garden.

Thus, it has been considered that the gardens should be functional. Areas for living, resting and using are preferred instead of viewing areas. Sitting places are located in the most pleasant relaxing and coolest part of the garden. Therefore favorite places are sitting places under the tree shade in the gardens. Trees like *Salix babylonica* and *Fraxinus exelcior* are also used individually to provide S shade.

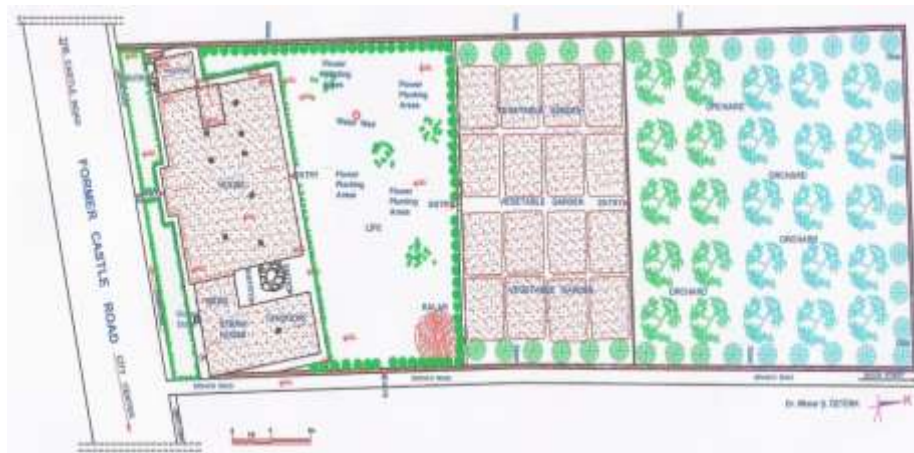


Figure 3. Mustafa Dilaver's house restoration design.



Figure 4. *Narcissus poeticus* that originally came from Europe are in front of Mühre wall.

Long, narrow trees like poplar are planted along the walls and in front of them sour cherry, quince, *Rosa canina*, *Rosa hemispherica*, *Rosa foetida*, and *Rosa heckellana* ssp. *vanheurckiana* bushes are planted. In front of the roses bulbs such as *Tulipa sylvestris*, *Hemerocallis fulva* and *Narcissus poeticus*, are planted with the irrigation channel (Figure 4).

In the first section of the garden, the courtyard, or *hayat*, there are no tall trees, allowing residents to communicate with their neighbours. In these sections there are only roses.

The hedge plants grown to establish garden borders are the informal section of the garden. In this section human effect is minimized. The plants are not managed and left to produce natural forms. No pruning is used to control these plants.

The garden consists of two areas. The first place is the front yard that is located near the house; the *hayat* is mostly for show. The second place is flower areas that are

located near sitting places, or surrounding the house. Colourful flowers are the main green element to improve the colour and appearance of the garden.

The flowers are grown in areas where the women spend most of their daily life. Flower plots have no fixed form. Groups of flowers may be round or square according to shape and use of the garden space. Perennials are mostly used in these gardens because of their ease of maintenance.

Flower groups are generally used mixed or grouped in the gardens. There is no colour or type distinction for using of flowers.

Expanding types, like roses, are planted separately and allowed to spread. Sometimes a single type of flower is used with groups around buildings. Different types of flowers are grown in flower groups and to achieve a succession of flowering.

The water requirement of the front yard is obtained from the well. The most commonly used flower types in the gardens are the rose. The following flower species are used in the historical gardens (Alp, 2007): Roses; *R. foetida*, *R. foetida* var. *bicolor*, *R. heckellana* subsp. *vanheurckiana*, *R. hemispherica*, *Rosa laxa* var. *harputensis*, *Rosa pisiformis*, *Rosa X centifolia*, *Rosa X damascena*, *Rosa X damascena* var. *semperflorens*; the alliums; *Allium hirtifolium*; the common bulbs; *Dahlia*, *Fritillaria imperialis*, *Helianthe tubereux*, *Hemerocallis fulva*, *Iris germanica*, *Iris spuria* subsp. *musulmanica*, *N. poeticus*, *T. sylvestris*; seasonal flowers; *Aster* ssp, *Alcea rosea*, *Coreopsis grandiflora*, *Viola odorata*; the trees and bushes; *Amygdalus trichamygdalus*, *Crataegus orientalis*, *Eleagnus agnustifolia*, *F. excelsiyor*, *Marus alba*, *Marus nigra*, *Qercus rubra*, *S. babylonica*, *Salix caprea*, *Syringa vulgaris*, *Ulmus minor*.

Traditional Van gardens both in appearance and function have been designed to provide individuals and society better living places. Van gardens gained a great

extent reputation that, in people imaginations they are equated to the beauty of paradise as the proverb “Dünyada Van Ahirette Iman” Van in the word, faith in hereafter, explains.

The second section of the garden is designed where fruit trees and vegetables are grown. Functionality is the most important approaches on the plans of Van gardens. Therefore the main focus is on vegetables and fruit trees areas in the gardens.

The vegetables areas are between the fruit section and the front yard. There have been enough vegetable plots in the garden to provide vegetable needs of the house. “Kerdi” is the name of individual vegetable plots that are grown; parsley, onions, potatoes and cabbage are vegetables in these sections.

The fruit section is designed after the vegetable section. The fruit trees are planted in a specific order. Summer types are in a section near the house while winter types are at the back part of the garden. Apple, pear and apricot are used the most widely species as a fruit in the gardens. Van gardens have a rich variety of local plant species. There are approximately 30 types of apple, 10 types of pear and many types of apricot and quince.

The water required to grow the fruit and vegetables is derived from small channels of the main channel where the gardens are, below the main channel. Gardens above the main channel are irrigated from a well.

In the second part of the garden, soil of the fruit tree areas is not tilled especially under the trees. Grass areas are used for animal feeding in the gardens. Sometimes the area is also used as a playground.

FACTORS AFFECTING THE STRUCTURE OF TRADITIONAL VAN GARDENS

Climate and territory structure

The territory and climate of regions affect the structure and architecture of buildings, as well as gardens structure, building supplies, shapes and materials.

In East Anatolia region, there is a strong terrestrial climate. Summers are hot and dry and winters are tough and cold. Van city, at 1,720 m, is in the terrestrial region. There are climate changes because of the topography and the oceanic affect of Van Lake which enable the region to have a different ecologic system and flora from the nearby zones (Gürbüz, 1994). Van Lake is the biggest lake in Turkey and is a temperature compensator for surrounding areas. The lake leads to the temperature modification in the region. Although the average temperature of the coldest month, is around -3.2°C in Van in the month of January, at the same latitude, the average of January temperature is around -9.3°C in Muş. The main reason for this difference between two cities is

that Muş is located away from the lake and Muş Savana is 500 m lower than Van Savanna (Anonymous, 2009).

The Van Savanna has a mild slope from East to West towards Van Lake. This is a positive condition for the setting up of gardens. Further, it was this slope which enabled the construction of ancient water channels under the soil. Thus the starting point of these channels is in the East and North East sides of the city. The ground water runs in line with the slope and then surface in Van.

Local building supplies and structure

Local materials such as wood, stone, mud brick and partially fired bricks are used for the civil architecture in Van. In buildings, stones and mud bricks are used in walls, and wood is used in windows, doors and roofs (Öztürk and Bingöl, 2009). Historically, the region has not been rich for forest areas. The limited numbers of tree species, in the region, are not suitable for construction (Pamay, 1966; Alp, 1999). For that reason, people in the region have sought their own solutions by growing suitable trees for wood such as poplar (*Populus nigra*), ash (*F. excelsior*), and elm (*Ulmus* spp).

Traditional kitchen culture

In the past, many people were engaged with agriculture and animal husbandry in the city of Van. They produced generally their own food (Figure 5). The climate and geographical structure of the region was convenient for the breeding of some fruit and vegetables, so residential areas developed with their beauty gardens on the region.

Besides production of daily consumption for the kitchen, seasonal crops were also grown in the gardens. The women of the region also cultivated decorative plants which led to creation of a traditional garden form.

Interaction with the outside world

Because of its geographical location, the city of Van has been a significant cultural centre with its historical, military and strategic importance. The city of Van, which is located on the old Silk Road, used to have cultural and commercial relations with Mesopotamia and Iran. As a result of its location, significant foreign institutions such as the Dominic French Mission, Russian, Iranian and British Consulates and American Schools existed in Van during the Republic Period (Günel, 1993). These relationships, occurring through this structure led to some plants which did not previously grow in the region for Van gardens. Exotic ornamental plants grown in the gardens have made significant contributions to the improvement of traditional gardens. Besides exotic ornamental plants



Figure 5. Fruits left to be dried on the roof of traditional Van house.

there was a richness of local fruits and vegetables in the Van gardens and their surroundings.

In addition to the contributions of the region and the climate, the reflection of "*hayat*" styles also contributed to garden form. Different regions can have the same climate, the same flora and the same building materials, but the beliefs and values of people's lives are reflected as a different design of approach to the garden architecture which is an element of civilian architecture.

DISCUSSION

Today, many historical Van Houses and Gardens have diminished depending on the new modern development trend. Subsequently, the analyses and observations were carried out on the remnants of traditional Van Houses and Gardens and interviews were made with the owners of gardens who have information about old gardens. The distinguishing features of Van Gardens are identified with the following:

The most important feature of Van Garden is its compatibility with topography and its naturalness. Van Gardens were bought vegetables, fruit and ornamental plants together as a green texture of garden which is also designed functionally as a living space. The size and shape of Van Gardens could change depending on the structure of terrain and location of the house. In this aspect, it can be said that Van Gardens are displayed to Ottomans garden structure on the region (Evyapan, 1999).

In Van, abode, garden, avenue and yard are indispensable components which complement one another. Therefore, garden structure integrates with abode architecture which constitutes an important element of life. A formal structure is observed in the section of fruits and vegetables areas in the gardens. This structure is softened and taken as an informal shape. The barn,

kalak, tandoori house and toilets were creating integrity with the main structure of the garden. Van Gardens are important on the region in terms of its formal and informal harmony within fruits, greenness, coolness and restful structure.

In the region, gardens were dressed more for women. Therefore, the gardens developed in a way which would enable the woman to work rest and build societal relationships. As a result of this development, traditional Van Gardens have been shaped according to the taste of women and in the course of time, Van Garden transformed to the art with the taste of women which also became an important element of the identity of Van City. Earth walls were used approximately 1.5 meters around the Van Gardens as fences. Apart from garden yard trees, which were also used such as poplar trees near the earth wall as a fence, it was used intensively by the household.

Traditional garden walls of gardens pertaining to Ottoman period were high to ensure privacy (Evyapan, 1999; Elmas, 2009). By this aspect, Van Gardens differs from Turkish Gardens.

Short garden walls can be assessed as an influence of women on the region. The short garden wall in the life section of the garden allowed easy communication with the neighbors which contributed to improvement of neighbourhood relationships.

Although the other structural elements used in the gardens varied depending on traditional characteristics of the region and socio-economic condition of garden owner, kalak, tandoor house and barn were indispensable components of the garden. In the Ottoman Gardens, pools and fountains were used intensively (Evyapan, 1999). Such structural components have not been used in Van Gardens due to regional climate conditions.

Van Gardens were chosen plants depending on characteristics of climate, daily requirements relationships with outer world and aesthetics. However, in the selection of plants which were used in the gardens, rather than aesthetic worries, plants' convenience for usability in the kitchen, fast growing, pruning and soundness took precedence. Aesthetical values like plants' colour, odour and shadow were used in the selection of plants for the life section of gardens.

When plants with vivid colours were more preferable in this section of garden for colour harmony, usage of the plants was not concerned with combination. Contrary to Turkish garden style, *Rosa* species were more prevalent in Van Gardens.

One of the reasons for the use of *Rosa* species as fence plants is that alongside serving as a fence, nutriments such as jam and rose syrup were made of petals and fruits, its flowers.

Today, there are only a few limited examples of traditional Van gardens. But there are people who still remember traditional garden structures from their

existence days. These people can give ideas about these characteristics of the gardens. By learning the features of Van gardens from these people, the gardens can be reorganized and brought into the present. We hope that the city regional planners, architects, interior designers and landscape architects can realize traditional Van garden within modern architectural designs and transfer it from past to present in the city of Van.

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