



Using Trees in Perception of Urban Spaces Located in Historical Fabrics

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Abstract: *Nowadays the importance of green spaces in all aspects of life is no longer a secret. Human has used the green space as he has been given. Through the main elements of landscaping, since the old days, are trees that have been linked to human lives deeply. These life-giving creatures that are the nature heritage for the whole world can have both physical and psychological-spiritual effects on their surroundings. These noble creatures which in the past, have been present in different aspects of human life, even in their beliefs and attitudes in completely organic and unsettled way, in recent decades, have retained their role in human life and entire exterior parts of his residential areas, as fully planned. Furthermore they have given color and smell of pure nature to human's life, and have made his atmosphere friendly, spirited and vibrant. In this study, by using a documentary method and library research procedure, the impact of trees in urban spaces and the possibility of using their positions in the historic and old fabrics will be investigated and analyzed.*

Keywords: *Trees– Urban Space– Historical Fabric*

1. INTRODUCTION

Urban spaces are the areas for gathering citizens that one of factors of increase in the presence of them, is their vitality; green spaces and trees are of the factors of vitality promoting in the urban space that must be planted in space in accordance with the standards and by the means of a planned and designed procedure, and after these processes, care and adjustment should be taken into account.

Trees with their unique features that separate them from other living organisms, in addition to physical and material effects on humans and other living creatures, leave many spiritual and psychological effects on the lives of not only man, but the entire universe. Trees with their different arrangement are able to form feeling, orientations, various activities and behaviors in human and though it has not been a long time since conscious and purposeful planting trees as a formative and integrating element of urban landscape, but traditionally they have been had different meanings for people.

The importance of this study is that trees are not just seen as a green alive creature but something beyond that and they have tied and bound spirit with human. All urban scholars refer to the subject of trees in their research, all images available in the books and papers were always full of trees, but with regard to the amount of trees used in research work, today is man able to truly understand it and try to link it with their lives correctly?

The aim of this study is representing the role of trees in public spaces readings in the cities. Many people like Lynch (1960), Nadel (1977), and Kaplan (1978), Ulrich (1991), Schroder (1993), Arnold (1993), Fontana (1994) and ... have tried to explain the concept and importance of trees in the preservation of human life and we will use these studies when it is necessary.

2- Method

In this research that is an extensional-scientific research, by the means of documentary method and library research procedure, at first we tried to collect resources about trees, their importance to human life and other creatures, the history of planting and using trees and the arrangement of the spaces, then, by summing up the content, we reached a favorable conclusion with regard to the purpose of this research that is related to the reading of the urban spaces by the means of trees and extending to the whole world.

3. Theoretical Foundations

Tree that is tied to human life and has got a high position in every sector of living space, has had its concept and use throughout history and especially in the historic and old districts that these issues will be discussed in the following parts.

3.1. The definition of tree

Trees or logs are large and long-standing wooden plants. In botany, tree is one of the most enduring plants that maintains the leaves with the growth of the stem or trunk. In some definitions only its application is related to wood. It is the only plant that we acquire wood from it. We specify the exact height of the trees, but generally adult trees can grow at least up to 6 meters. In the structure of tree there are branches that are usually joined to the large trunk. Compared with other plant and animal species, trees live longer. Species of trees grow more than 100 meters and some live several thousand years. Trees are an important element of landscaping and gardening and the natural landscape. Trees are of two basic classification, deciduous and evergreen, or hardwoods (angiosperms) and coniferous (gymnosperms) (Roshd Encyclopedia).

Tree is a big and thick plant that has roots and stems and branches. In a note, Dehkhoda writes: "I think in the past the term tree was used for something larger than shrub and smaller than timber." (Dehkhoda dictionary)

A woody perennial plant, typically having a single stem or trunk growing to a considerable height and bearing lateral branches at some distance from the ground. (Oxford Dictionary)

3.2. The concept of trees in different rituals and traditions

Trees and human beings share the same fate with each other based on a rich history in the traditions and symbols and trees are among special creatures that have great influence on the people's imaginary lives (Nadel et al, 1977; Porteous, 2002).

Spiritual relationship between humans and trees can be demonstrated as an example of trees worship history and its effects. In the interesting rules and daily issues of modern man, the effects of deep relationship between humans and trees are visible. For example, evergreen trees are considered as a symbol of immortality, while the deciduous trees demonstrate life renewal and eternity in different parts of the life (Fontana, 1994; Schroeder, 1993).

Another key example is the Christmas tree, because pine trees are decorated and became important during Christmas and they are considered as a symbol for life even in the cold and the months without life of the year (Fontana, 1994).

Trees in some cases cause concern, fear and uncertainty; this would be accompanied with a sense of respect in some cases. For example, in Anatolia, talking aloud and quarrel by the ash (*Fraxinus*) tree could bring bad luck, illness and even death, because they are sacred trees (Ergun, 2004).

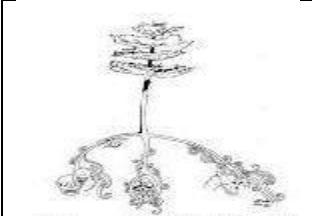
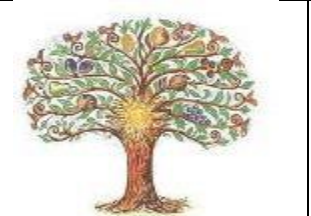


The physical properties of certain trees are another reason for people to form negative connotations in their mind; for example, in line with fig tree, its extends roots and developed leaves, leave no growth opportunities for small plants, the term "fig tree planted in the house of a person" in Anatolian culture means to destroy the family and the person's life. In other cases, forests and woodlands induce emotions such as fear, mystery and uncertainty in people. In psychology, forests are a symbol of the darkest memories and secrets of the unconscious (Fontana, 1994).

World tree, Figure 1, in the sense of the centrality of the universe, maintains the existence and life and at different levels connects the universes with each other. The upper realm by the gods, middle territory by humans and the lower realm is occupied by dead people (Madkarni, 2008).

The Tree of Life, Figure 2, has been at the center of Paradise and has twelve fruit on its branches that provide spiritual rewards such as wisdom, love and beauty. It is said that immortality will be awarded to those who use its fruits. Tuba tree acts as this tree in Islamic concepts (Fontana, 1994).

Tree of Knowledge, Figure 3, is a dual symbol of sacred knowledge and evil knowledge and since Adam and Eve for eating the fruits of it, were sentenced to life on earth, this tree is called "misleading", this tree is the second tree beside the Tree of Life in the Garden of Eden (Hegender, 2005).

Some real trees for people from different cultures have had specific connotations (Figure 4). For example, the oak tree was sacred for the Celts and their premier priests and represents divinity and power and superiority of the male sex. Also this tree to the Romans was a symbol of the God of heaven. Fig tree is considered as the sense of enlightenment for Buddhists and peach tree, a symbol of immortality in Chinese Taoism school of thought (Duygu, 2013).

			
Figure 1)Schroeder,1992(Figure 2)Fontana, 1994(Figure 3)Fontana, 1994(Figure 4)Fontana, 1994(

Personification of trees, as one of the desired concepts, is widely used in semiotics of tree and its main reason may be considering some physical comparisons between the branches with human arms, legs with root and the other similarities in the basic structure of the human body and the tree (Dawyer et al, 1990).

Planting a tree when a baby comes to this world because of a faded belief based on entwining baby's fate with a tree planted in his birth has been common that was related to the growing and development of that tree with baby's growth. Also trees were planted after the death of the people to keep and honor their memory (Porteous, 2002).

In Islam, there are also numerous sources about trees and the tree is considered as a proof for the existence of God. In Muslims' resource, there is a tree called Tuba in Paradise that according to Quranic verses, there are leaves on this tree that represent all people living on the earth and when the man dies, a leaf as a sign of his death will fall on the ground. Fig, olive and pomegranate trees are of symbolic trees that show the divinity and oneness of God while Zaqqum is known as an infernal plant (Ergun, 2004).

3.3. Trees in urban spaces

In recent decades, planting trees is considered an important part of urban design. Tree planting is one of the best investments that a city can do in the field of urban design, because trees play a significant role in the structure of the city with regard to the environmental, physical, and perception features; in addition, people are interested in tree and the greenery and the tree is a sign of life in the city.

1. *Absorbing solar radiation:* Two types of sunlight can affect the human body and other animals. The first one is infrared radiation with long wavelength that has the thermic effect and causes burning and at the same time to a large extent is absorbed by herb and green space; the second one is UV radiation that is absorbed to a lesser extent by green space. Green spaces in cities while controlling the sun reflections and stray lights can prevent dazzling; so calmness that people feel in the shade and in particular the shade of a trees related to a large extent to this characteristics of the tree.
2. *Dust and air pollution reduction:* Green space, especially when trees are dominant can be very effective in chemical pollution in the air reduction. To take advantage of this function of trees, while using non-susceptible and resistant species, in case of damage, their repair and restoration should be taken into account, tree due to the distribution of foliage on all levels, act as a big duster. Based on the investigations, one-hectare green area that approximately 200 trees are planted in it can absorb up to 68 tons of dust in the air at any rainfall event and if there are no trees and green spaces, the cost absorbing this volume of environmental pollution will be so high.
3. *Producing oxygen and absorbing carbon dioxide:* Atmospheric oxygen plays an important role in the process of respiration and metabolism in humans. In urban environments that lack of oxygen is very evident; much of it is produced in nature by green spaces. Lack of oxygen is caused mainly by humans breathing, combustion engines function, cars and industry; so trees by producing oxygen and absorbing carbon dioxide, play a key role in improving environmental conditions. Although in large-scale in terms of oxygen balance the role of trees and green areas cannot be huge but in urban micro-scale this role cannot be overlooked. Every beech tree with the capacity As much as three times the

two single rooms can clean up carbon dioxide from the air, while 40-30 square meters of trees can provide one person's needed oxygen.

4. *Ambient temperature adjustment:* Plants in the green spaces, through three mechanisms of evaporation and transpiration reduce temperature and increase relative humidity in the microclimate. So that the highest temperature in August in one hectare green space is 4.5 degrees less than adjacent areas without tree and at the same time relative humidity within this space is measured up to 11%. In general, green spaces through air and water adjustment of their microclimate will adjust the weather of urban environment.
5. *Wind control:* Green space especially trees, in the case of appropriate and targeted planting (species composition and appropriate arrangement) can be very effective in wind directing (in summer for cooling) in the desired sectors and change it in the desired direction.
6. *Sound pollution reduction:* Though the sound waves can reduce the growth of plants, at the same time trees and shrubs can be effective in reducing sound pollution. However, the quality of sound reducing by trees and different shrubs is different in terms of leaf size, density of foliage, type and height of the tree. This absorbing is due to the cellulose layer and the intercellular spaces of plant cells that does not exist in other organisms. In fact, green space, especially trees, in the is very effective in reduction of noise pollution, and in case of right species and their planting the sound can be used to lower the up noise to 4 dB. This role of trees in cities and highways is of great importance.
7. *Traffic control:* Arrangement of green spaces in urban axes is effective in controlling traffic. Systemic planting of trees in the right places as familiar signs is very effective in guiding traffic.
8. *Creating the aesthetic features:* Ornament of cities and their usefulness for the environment is due to the creation of beauty of green space in its various forms. Green spaces, balanced urban humiliation as man-made phenomena in the natural systems.
9. *Resort creating:* Green space is highly effective in line with creating any recreational system for spending leisure time. Shadow, landscape and stylized climate in addition to beauty, are of cases make the presence of green space inevitable with regard to the creation of resorts.
10. *Energy saving:* Proper planting of trees can have a great impact on energy consumption in buildings. The cost of buildings heating or cooling in the case of using tree will decrease. Trees absorb 9% of solar energy in the summer and can reduce heat inside buildings. In addition, the moderating effect of trees and green on space causes temperature of the cities will reduce necessary energy consumption for refrigeration and emissions of greenhouse gases emitted by power generating units. Reducing temperatures in cities caused by perspiration and shadow not only save energy but also conserve water.
11. *Topping or Interception:* Trees by absorbing interception can delay the movement and flow of water on the impenetrable surface of the city and the water falling on the city level. Coniferous up to 40 percent and broad-leaved up to 20 percent are able to capture rain water and again return it into space through evaporation. This effect of tree is challenging in forest but it is tangibly positive in the cities(Salehi Fard and Ali Zadeh, 2008).
12. The leaves shed from trees enhance soil organic matter. Roots of trees increase soil permeability.
13. Enhance the regional value of homes 10% to 15% (Khabar Online).
14. *Raising the business capacity of stores:* Trees lead to people's frequent and longer traffic in shopping centers that it would lead to 12% raise in buying the products. (Khabar Online)
15. *Psychological effects:* Green space, especially green color or seasonal variations has very effective psychological effects. Ulrich in his research on psychological effects of trees and green space showed that green spaces can shorten the period of hospitalization. Such an effect also has economic use. According to Ulrich, green spaces and trees reduce patients' recovering period up to 8 per cent. With providing landscapes from trees for patients hundreds of millions of dollars of public health costs can be easily reduced (Salehi Fard and Ali Zadeh, 2008).
16. Trees reduce local violence and provide safer and more social environment (Khabar Online).

So the role of trees in urban spaces and human life in general can be summarized as the following table:

Table 1: Summary of the role of trees in cities and urban spaces, collector: authors

Effects	The role of trees
Providing shade and fruit, avoiding sound and chemicals pollution, producing oxygen and absorbing carbon dioxide from the air and ...	Physical and environmental
Creating promenade and eye-catching scenery, the integration of the urban landscape, improving physical and mental health, creating pleasant scents and ...	Psychological and aesthetic
Prevention of violence and crime, increase real estate prices, productivity of shopkeepers and marketing ...	Social and Economic

3.4. History of trees in the process of cities formation

Trees are known for nearly 300 million years, but they have appeared from 8000 years ago in human settlements and international use of trees for design and operation has begun since 200 years ago (Zube, 1973; Kaplan & Kaplan, 1978).

Little evidence is present about trees as a significant factor in a calculated design with a geometric plan in different parts of the city. But it is clear that trees are used as filling factors for remaining spaces of construction and circulation and in general, spaces for trees, were not premeditated (Arnold, 1993).

Similarly, Nadel also believes that trees were planted in the remaining spaces of the buildings or land corners, and in fact their presence is after the initial design and thinking. He further says that planting trees always should be done seamlessly and with design, from initial design to final construction (Nadel et al, 1977).

The first step of understanding, takes place by the term "object". Tree as an object represents heaven and hell. This issue suggests the continuing and growing of tree is not just because of its spatial position (Duygu, 2013). Every year, the trees continue the activity of creation and in the belief of a believer, the tree is the whole world, because that it is always rises and prospers and it is doing reproduction (Nourburg-Scholtz, 1984).

The first effects of meditation and delving into the arrangement of trees date back to ancient Egypt. The ancient Egyptians purposefully used plantain tree, (one of the most viable urban trees today), to maintain geometric path that they determined towards their temples that (Arnold, 1993).

This regular use of geometric trees in the Assyrians and Persians eras was used in parks and gardens that were considered as the first parks in the history (Nadel et al, 1977).

It seems that the premier planners have used trees to expand urban pattern geometry that more straight lines and symmetrical geometry rectangle were used by Iranians for designing tree settings, (Arnold, 1993).

Trees in the cities of the Middle Ages were used only two general purposes: (Lawrence, 2006)

1. The trees were planted near the churches to create shadow on the trading place and also reflect the diversity of religious beliefs.
2. The trees were planted along the city wall to create shade on the merchandise exchanging place.

Until the seventeenth century and the advent of the Baroque in France, the use of trees was not common for public purposes in the cities. This approach included a geometric pattern with long lines of trees that affected the future of urban design in the eighteenth century (Zube, 1973; Kaplan & Kaplan, 1978).

In the eighteenth century, trees perspective, gardens, squares and boulevards of France, Britain and Germany manifested the increased attention towards trees planting in cities. For example, Paris was covered by a network of long boulevards of trees that connect Plazas and town square. Also based on the trees using, Champs-Elysées Avenue was one the most famous streets in the late eighteenth century in Paris (Arnold, 1993).

Until recent decades, trees were regarded as decorative objects or civilized extensions of urban landscape. Today this notion of gardening has been associated with the knowledge of trees participation in the psychological part of the city (Nedal et al, 1977; Arnold, 1973; Sommer, 2003).

So the main incentives for using trees in the city during the past can be summarized into three objectives: beauty, power and national and citizenship tradition (Lawrence, 2006).

Beauty: It's clear that understanding the beauty of urban trees at the same time is modified by changing the process of architecture and urbanism. For example, streets covered by one row of trees were replaced by with two rows of trees which were known as "allée" (Lawrence, 2006).

Power: Trees also had been planted to control public space and power reflection such as streets with rows of trees in the Baroque era, for marching soldiers and manifesting the officers' power. During the French Revolution, people were planting trees despite the aristocratic government's will and order in line with restricting and banning the planting of trees in public spaces (Lawrence, 2006). Also trees that were planted along the main streets of Paris, as obstacles, were responsible of military protection from the mansions (Nadel et al, 1977).

National tradition: Using trees as the national tradition can be explained by their national culture and preferences. For example boulevards in France are described and defined by their trees. Romantic view toward nature in American parks and enclosed squares in England, creates certain visions toward the trees in all of the blocks. (Lawrence, 2006; Bradshaw, 1995; Arnold, 1993)

Today, in addition to the above mentioned reasons, other reasons such as supplying oxygen in the cities and a variety of psychological and emotional reasons that has been impermeable to human by advances in psychology science, are related to the use of trees for the construction of the integrated urban landscape that also they can be mentioned simultaneously in line with tree planting.

Studies on environmental psychology show the reducing stress and regenerative effects of trees and landscape on children and adults (Sommer, 2003).

Also therapeutic effects of trees that were measured by Ulrich (1981) showed that people who experience the urban landscape with green spaces, have slower heart rate, lower blood pressure and more relaxing brain waves than those without this experience. In addition to the desirable features visual, smell; sound of trees and forests has therapeutic effects on human (Schroeder, 1992).

Schroeder (1990) classified these effects as sensory dimensions of trees and stated that trees can have a profound calming effect on people. His studies show that generally, people use words (calm, gentle and full comfort) with regard to the trees, to describe their favorite environment. These psychological factors are important, because they help people to balance their relations with the environment and repair their damaged self (Sommer, 2003).

Trees protect people from sun, rain and wind and trigger the feeling of having the shelter and home by creating deeper relationships between humans and trees (Schroeder, 1992).

Sommer (2003) states that the presence of trees in the urban environment improves social interactions and quality of life. Dayer (1992), suggests that trees create ideal and pleasant atmosphere for residents and by the promotion of collective identity, self-esteem are involved in the community and public-oriented sense.

According to Jones (2002), trees are icons for all major social meanings and performances that create balance in the public interest to nature and in short, the trees may create the sense of freedom, comfort and peace (Nadel et al, 1977; Ulrich, 1991).

Trees can form one place; provide their size, shape, and rich material and lifespan, and the qualities to explain a specific location (Jones et al, 2007).

Trees represent places and indicate the passage of time and memories. A tree, forms a space around itself, And at the same time will create a place, allocated the specific meaning and identity for the place (Jones et al, 2007).

3-4 - Trees and shaping urban spaces

Public spaces of cities are a kind of open spaces that crystallized the essence of social life, where civilians are present, urban space is a scene in which collective life story will be present and every one can have access to it and operate in that space and cooperate in a new social environment; thus the main condition for a public space, to be considered as urban space, is that interaction and social interaction to take place in it (Pakzad, 2007).

According to the definition of urban space, doctor Pakzad introduces a variety of inputs, squares (nodes), paths (directions) and river edges, and steps as urban spaces.

Lynch also defined elements such as roads, edges, nodes, signs as the elements of readability in the cities; he also states that identity is considered as a feature of a mental picture of location in which the face of location of is caused by identity or vice versa; however, it seems that there is a strong link between these two issues, because the trees are able to explain the identity of a place or even the city. For example, the city of Rome is famous for its palm trees (Lynch, 2010).

Trees can be physical means to convey the meanings and can stimulate emotions in psychological discussions, and it can express the layout, dimensions or sounds of trees create deeper emotions in humans (Duygu, 2013).

Meaning as the first and most frequent component of place, can cooperate with trees symbolic values and their positive psychological effects on people. On the other hand, the active ingredient can be defined by the possibility of assigning trees to urban activities, and physical characteristics of trees can also be arrange a certain kind of activity; For example, a memorial tree as a natural monument can be considered as an attraction for tourists and visitors, and finally, the form as the last component, can be analyzed as the physical presence of trees in the urban fabric (Duygu, 2013).

According to studies, the trees are arranged in three general ways in the city:

1. *Point mode*: In this case a single planted tree is known as a sign among the people of a region or by providing a space for gathering, undertakes the creation of a neighborhood center.
2. *Linear mode*: In this case the number of trees is more than one, creating a gateway with two trees or the formation of the edge of roads, rivers sides or boulevards (trees are the main reason of boulevards formation) by using the rows of trees is feasible.
3. *The group and mass mode*: In this arrangement, the trees will be planted as a regular or irregular group which canbe observed in natural parks, artificial parks and forests.

According to the stated states and the definition of urban spaces, by using ideas of the doctor Jahan Pakzad and Kevin Lynch, classification of the presence of trees in the city can be investigated under the following categories:

- *Square (social-behavioral nodes)*





Each civilized community need the center for its public life; a place where people refer to with the aim of seeing and being seen (Alexander, 2008).

Nodes are sensitive parts of the city that an observer can enter and are the creating centers of source and destination, a number of centralized nodes are the main point and center of a neighborhood that their influence is visible on the whole neighborhood and in fact the "node" itself is a symbol for the entire neighborhood (Lynch, 2010).

Squares are of the effective urban spaces to the extent that usually citizens, identify the other parts of their city by the squares and apply them as the urban index for addressing those unfamiliar with the location.

Squares are the locations with physical and visual integrity that are designed based on the people’s pause (rest) and their choice to communicate socially with others and staying longer at that location (gathering) (Pakzad, 2007). One way to emphasize the gathering and making the squares prominent compared with the surrounding spaces, is using curved tabs and planting a single tree as a symbol in its center.

In the past, local field green element was an old single-tree mode that due to the residents’ role in the maintaining them, it was involved in the collective memory of neighborhood and the special focus was induced on the square. While today, the green islands located in the new squares, are limited green spaces which are located obsolete in line with moving vehicles and practically they cannot be used (Pakzad, 2207). So to make public squares prominent in the valuable historic district, we can undertake certain actions by maintaining the single tress or planting suitable species in a designated place that is in line with historic district and has enough shadow.





			
Lahyna of Maui in Hawaii	Local Square of Catania in Italy	Mahallat Square	Niyavaran Neighborhood Center

- *Entrance (Gate)*

Considering the entrance as a place to connect, demands certain expectations based on mental picture and experiences of people that takes it beyond an entrance. Entrance scheme in addition to convertibility and creating a sense of harmony between behaviors before and after the passing an entry by individuals, should induce visual and psychological vulnerability and finding a way into a new environment in people (Pakzad, 2007).

Entrance is a transfer point, a place to stop, pause and decide on the options that give a message with regard to transition between inside and outside and displays a perspective from outside which allows people to anticipate what was happening and they will experience. Also potential visitors also enjoyed looking at that side and can be informed what is going on beyond the entrance (Kaplan., et al 2005).

The gap between the rows of trees forms an entry. The trunks, branches and trees umbrella, in addition to creating a sense of discovery and mystery, can define and determine an input with a glance toward the entrance (Kaplan., et al 2005). Also with the protection of trees located at the entrance of historical sites or by planting two trees at the beginning of their entrance, while creating a sense of invitation and prioritizing the entry point for neighborhood residents, make the entrance more uncertain to strangers, and by creating shadow on the ground, a new realm can be defined that is the interface between the public and semi-public space.

			
An entrance in Gormanstown Village, Co. Meath, Ireland	Entrance of St. Edward Church in England	Secret Garden Entrance in Portland, Oregon	Entrance of Pittsburgh Post Office in 1999

- *Street (Route)*

It is one of the main and foundational elements in the mental structure of a city and appears in the minds of citizens as lines that leads to communication and connectivity of different parts of a city; also paths, always have been place for a variety of events in the city such as transportation, trade, cultural exchanges, religious ceremonies, the expression of political ideas, fun, roam (Pakzad, 2007).





"Road" is a factor that usually by using it, movement is possible actually or potentially; therefore, the path may be street or sidewalk or road or railway or underground lines of tram. Along the ways, different environment factors are associated with each other and depend on themselves (Lynch, 2010).

So it can be concluded that all paths with different features can accommodate all age groups and social citizens at different times (existence), also life should be present in all parts (dynamics) and recession and stop should not be allowed in them (Pakzad, 2007). Also by maintaining the existing trees along a path that have been located in the past for a specific purpose or planting them in a row in a historical fabric, while defining the route, by creating shading and creating a desired space, people can be encouraged to use the route as much as possible and would further enrich the identity of this valuable fabric.

Trees play an important role in determining the direction and creating vitality along the path and in most paths trees are planted in different number, species and sizes, but one of the things that tree in that particularly leads to path of development, is the boulevard. The word *Bolvar* (Boulevard) is a French word which is equivalent to German *Bollwerk* and English *Bulwork* and it means the defenses wall around the city (Pakzad, 2007).

Initial boulevards such as street with trees and Chaharbagh, were wooden and green path for pedestrians and they were considered a place to tour, seeing and being seen and over time more trees and greenery grow in these passages (Pakzad, 2007).





It should be noted that any route with three rows of trees and high-speed automobile traffic cannot be called boulevard, but vital presence of pedestrians and influence of neighboring land uses and diversity must not be forgotten in defining boulevard (Pakzad, 2007).

			
Keshavarz Blvd., Tehran	Main Street, Rasht	Main Street, Bastam	Vali Asr Ave. Tehran

- Edge of water (soft edges)

Edge, is a linear factor that observer considers it different from a route. The boundary between the two parts, a gap, and elongation between two parts joined of the city, cut in rail lines of the city, a building or a wall set limit can be regarded as an urban edge. Edge plays an important role in connecting the components in city limits by walls, trees or water (Lynch, 2010).

Water has the characteristic that returns to the deepest and innermost part of our nature and in the midst of turmoil and urban pollution, binds us to the fate of our existence; water has always had great importance in civilizations, cultures, especially in arid areas that traditionally has been recognized also as symbols to express clarity and holiness in our culture. Water influence can be seen in shaping social life with a glance at the emergence of early civilization realms; if we put aside those factors that lead to War and conflict in line with finding water, in most cases, water has provided social links (Pakzad, 2007). We often remember Venice with its canals, Isfahan and Paris with their rivers and Bushehr and Marseille with their coastal ports. Most people expect from these sides and edges of water to be exhilarating atmosphere combined with freshness and a person experience a sense of leisure in the vicinity of these places (Pakzad, 2007).

			
The water's edge in a park in Colombo in Sri Lanka	Taghar the river's edge in Kohgiluyeh & Boyerahmad	Qara-Chai River's Edge in Hamedan	Balighloo the river's edge in Ardebil

- *Stairs*

Sitting on the stairs, talking and chatting with friends are a familiar experience. Stairs are different spaces with other urban spaces and have a unique identity and are independent because: (Pakzad, 2007)





1. The wide spaces are in height not on the surface.
2. Are usable for pedestrians under the all conditions, not for those with cars and other vehicles.
3. Presence in the stairs is the feeling of presence in several places, and not only a space.

Stairs as an urban space must have the following characteristics: (Pakzad, 2007)

1. Closed space, gated and only usable during certain hours.
2. Usable space for all different age, gender, social, economic groups and so on.





3. Multi-functional Space.

Stairs, through different types of structures in the field, has always been considered and have provided the opportunity of viewing the surrounding landscape from above, and they are scenic; on the other hand, by creating physical, functional and conceptual hierarchies, connect two parts with different heights and finally, due to spending more energy in paving them rather than walking on the surfaces, they should be able to induce comfortable feeling in people (Pakzad, 2007).

			
Urban Stairs, Rome	Potemkin Stairs in Ukraine	Haiku Stairs in Oahu, Hawaii	Peace Stairs in Syria

- Signs

Signs are diagnosing factor of different parts of the city; with this difference that the observer cannot find way into them. Usually, things that have a distinct appearance, such as buildings, shops, mountains or even a tree can be considered a sign; Character of a sign must be such that it can be recognized among multiple factors. A number of signs are recognizable in general face of the city and several other have purely local aspect and trees are among local symptoms (Lynch, 2010).

			
Oak tree in Sherwood forests, England	Saleh shrine Sycamore in Tajrish, Tehran	Cotton tree in the middle of Freetown city in Sierra Leone	Cypress Santa María del Tule, Mexico

- *Neighborhoods (districts or regions)*

Neighborhoods are those parts of the city that have medium or large size and must meet the following two characteristics by which observers feel that s/he has entered into them: (Lynch, 2010)

1. Its components are quite recognizable because of many features in common.
2. The face of the neighborhood can be distinguished from their inner features and in case of visibility from outside will be used to find locations, from outside the neighborhood.

Since neighborhoods are larger than the other elements of cities, they may have nodes, ways and different symptoms and association within them; these factors not only shape the fabric within the neighborhood, but also give more richness and depth to the whole neighborhood and increase its discrimination (Lynch, 2010).

For example, Haft-Chenar (seven Plane trees) neighborhood in Tehran and Chahar-derakht (four trees) neighborhood in Birjand that are known as neighborhoods in the historic parts of the city, because of their special trees, are famous among the residents of that neighborhood, the city and even other regions and can be used as a model for other neighborhoods located in the historical fabric in order to use trees to protect older concepts and identity, making neighborhoods nostalgic and more effective. The importance of trees in these two neighborhood is in a way that even if new name used to recognize them, older residents of these neighborhoods, still will call them by their former names.

Summary and Conclusions

According to researches, it is clear that humans have used trees as planned or non-planned for a long time; in recent decades by increasing awareness of the many benefits of trees for human's body, soul and mind, using trees take another form and gradually became part of the fundamental elements of human life without which, it would be impossible. With the advance of urban design and urban landscape, many definitions were provided for the manmade urban spaces that by reviewing them in this study, the importance of trees was mentioned; as it can be observed in the conducted studies and collections, according to professors' and experts' idea in the field of urbanism all definable urban spaces are always associated with different types of trees and they believe that an urban space without trees, is an undefined and unimaginable space. also, based on recent research, including research by Sharghi and colleagues (2006) that shows the importance of sycamore in Vali Asr Street and turning it into one of the most important streets of Tehran in the lives of inhabitants, this result can be virtually extended to the whole urban spaces and indicate that the citizens, also, did not consider the urban space, as spirited and livable, in absence of trees, and were less interested in using it. Finally, it can be concluded that in the historical fabrics trees can be used as a single tree in the center of historic neighborhoods, rows of trees in defining a clear direction or two trees as a gateway to the old and historic fabrics, they can also act as a sign to remember the neighborhood and make that fabric very special while increasing richness, creating comfort and making shade, by maintaining and enhancing neighborhood and historical fabric identity. So in case of trees' presence in the historical fabric, they should be protected and preserved and in case of absence, due to climatic conditions and accordance with the historical fabric, by choosing suitable species with regard to the type of tree, number, height of the trunk, the breadth of umbrellas, shading and fast-growing they will lead to preserving ancient concepts in contemporary fabrics.

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