

Influence of Place Identity on Walkability: A Comparative Study between Two Mixed Used Streets Chaharbagh St. Isfahan, Iran and Dereboyu St. Lefkosa, North Cyprus

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Abstract—One of the most recent fields of investigation in urban issues focuses on the walkability in urban spaces. Considering the importance of walkability apart from pedestrian transportation, increasing walkability will help to reduce the congestion and environmental impact. This subject also matters as it has a social life, experiential quality and economical sustainability value. This study focused on the effects of walkability and place identity on each other in urban public spaces, streets in particular, as a major indicator of their success. The theoretical aspects which examine for this purpose consist of two parts: The first will evaluate the essential components of place identity in the streets and the second one will discuss the concept of walkability and its development theories which have been derived from walkable spaces. Finally, research investigates place identity and walkability and their determinants in two major streets in different cities. The streets are Chaharbagh Street in Isfahan/Iran and Dereboyu Street in Lefkosa/North Cyprus. This study has a qualitative approach with the research method of walkability studies. The qualitative method is combined with the collection of data relating to walking behavior and place identity through an observational field study. The result will show a relationship between pedestrian-friendly spaces and identity by related variables which has obtained.

Keywords—Place identity, walkability, urban public space, streets, pedestrian-friendly.

I. INTRODUCTION

IDENTITY is a basic objective of perception; therefore, specific places have strong image of the city's identity. Place identity concept can be changed and developed over the long time, so in general, identity is a substantial component of urban public open spaces.

As Oktay mentioned: Identity is a reflection of society's culture, happiness and time of residence, therefore, from large scale to small scale; city, place and space have to be sustained. People can feel that components of the environment are belong to them from individual and selective point of view. [23]

Street's design plays an important role in public open spaces and cities which is an essential issue in place identity of the build environment. Streets are vital and live spaces in the cities that create a high level of accessibility (vehicle and

pedestrian) all around the city pattern. It means accessibility is part of identity of streets. In addition, from pedestrian perspective, walkability has been known as an important and effective factor of place. Unfortunately, today walking is considered as forgotten types of transportation. Therefore, there are few critical methods to help practitioners identify the low quality walking area.

Making easy accesses to the transport network for different range of members is a vital issue in the communities; such as very young, old, children and disabled people. Walking and walkable area will support the community involvement, health, meeting and gathering, and recreation which have positive effects on place identity and vice versa. Walkability is the basis of a sustainable city. Walking like cycling is known as 'green' type of transportation which has positive effects on decreasing of street's crowd, and also has low level environmental influences. It can be more than a purely useful type of travel to shopping, school and work. Also it has both social and recreational importance. It is an equitable type of transportation which offers to the majority of the population in different age classifications.

II. THEORETICAL BACKGROUND

A. Identity and Place identity

Identity has been known as one of the critical goals of sustainable environments. There are many researchers presented definitions for identity. Kevin Lynch defined the keyword of identity by the meaning of "a workable image requires that the identification of an object, which implies its distinction from other things, its recognition as a separable entity" [18]. Identity is a "characteristic combining uniqueness, dissonance and mystery" [12]. Moreover, Oktay mentioned; Identity is the individual character of a place or a person and it is one of the most important aims to create a successful environment. Furthermore, it is a uniqueness which defines something different from others and is related to settlement of society not to individuals. [23] The identity had been classified in two types by Rappaport as;

- 1) Private Identity- emphasizes the identity of personal and intimate group.
- 2) Public Identity- emphasizes the identity to another by making difference between them and us. [25]

Places have a specific identity as the same as man's personal

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identity. Place identity has a strong characteristic that people can specify it in their mind. It can be recognized by physical, spatial and social characteristics. Furthermore, effects of place identity have been reflected in the physical basis and spirit of society.

Generally, place identity is a psychological investment which comes from the place over the times. It includes the groups of “feeling, meanings, experience, memories and action that, while ultimately personal are substantially filtered through social structures and fostered through socialization” [17], [14].

In addition to physical characteristics of places, social, political, cultural and economic parameters will affect on the identity of a place from a different perspective. For instance, Lynch revealed; specific places have a “clear perceptual identity”. They should be recognizable, alive, attractive, memorable and different from other places, which is the objective basis of perception. [19] On the contrary, as pointed out by Hugh, “feeling” is the basic factor which makes an understandable place. It can be recognized by man’s sense in their mind (i.e. sounds, smells, sight and etc.). [14]

Meiss, classified setting of place identity in three different groups;

- 1) “Identity as Human being, *Homo sapiens*, who are distinct from the physical, mineral, vegetable and animal world.
- 2) Identity as a member of a group with which one shares and discusses values: The family, political party, club and etc.
- 3) Identity as an individual who maintains a margin of liberty and personal responsibility, distinct from the group and from all others; each person is unique.” [20]

B. Street

Street is one of the most important part of a city which

makes pedestrian and vehicle access through the city. Streets are one of the essential parts of public open spaces.

Carr classified public open spaces into five categories as; “Street, Square or plaza, Parks, Playground and recreational area and Water front” [4].

Moughtin defined street as “an enclosed, three-dimensional space between two lines of adjacent buildings, it is not only a means of access but also an arena for social expression”. [22]

Jacob states that many urban planners and scholars defined street as a space to represent the outdoor space. It is an exterior space between different areas to make a linked network. As a pathway or physical point of view streets is used for pedestrian and vehicular movement, but from the other point of view they are social line which offers different function to their users to do the communication, living, shopping, working and also relaxing. They contribute to social, economic, cultural, political encounter and in general they have an important role in city life. [16]

Streets are classified into four main groups by their functions;

- 1) Civic streets
- 2) Commercial streets
- 3) Residential streets
- 4) Multifunction streets [22]

In addition, street is classified by their form such as long or short, straight or curved, narrow or wide, formal and informal, open or enclosed [22]. Moreover, street corners are important in street classification which classified in three main groups by Moughtin;

- 1) Angular street corner
- 2) Curved street corner
- 3) Towered street corners [22]

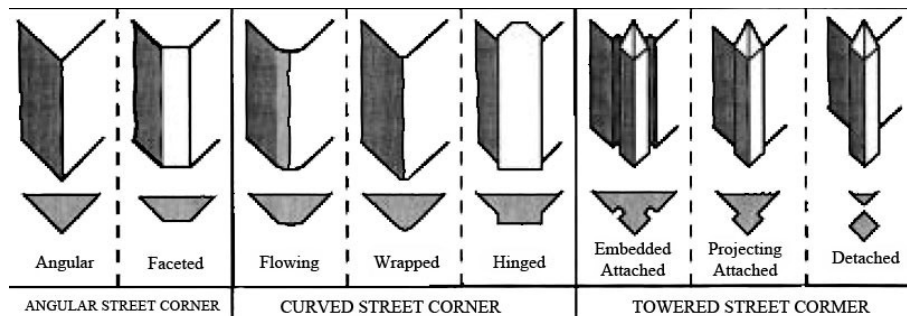


Fig. 1 Street corner typology, [20]

All of the classification has direct or indirect effect on street Identity. [21]

C. Street Identity

Streets have a specific identity themselves, which make them different with the others. Their identity depends on varies physical and social factors. Fasli defined a scheme for city identity which can be used for public open spaces identity as well. [6] The classification includes two main categories;

- 1) Environmental Identity

- 2) Social Identity

a) Environmental Identity

Environmental identity itself includes two separate factors of natural environments and man-made environments which each of them has different effective components on place identity.

- (1) Natural Environment Characteristics

The most effective characteristics in formation of places

and their identity are;

- 1) Geographic Formation
- 2) Topography
- 3) Climate
- 4) Greeneries
- 5) Water

(2) Man-made Environment Characteristics

Man-made characteristic which related to build environment defined by;

- 1) District characteristics
- 2) Urban space characteristics
- 3) Building functions and characteristics
- 4) Landscaping characteristics
- 5) Symbolic elements/ Landmarks

b) Social Identity

The second factors of public open space's identity back to social identity which has three main types;

- 1) Socio-cultural Activities
- 2) Socio-economic conditions
- 3) Socio-political characteristics

D. Walking and Walkability

Walking is usually recognized as a kind of movement and it is one of the main human behaviors to transport. Walking typically is slower than running and other transportation types.

All around the world, terms of walking are described in different types such as trekking and hiking. However, generally walking is defined as moving from one point to another point in a short distance [26].

Walkability concept has been focused by urban designers and planners recently to make a pedestrian friendly area for shopping, communicating and recreating based on pedestrian. The concept of walkability typically uses for measuring the degree of pedestrian-friendly of an area. Factor of comfort is necessary to walk in a walkable space, in physical and psychological type [26].

Walkability also could be introduced as sustainable transportation, which effects on public and private transportation model as well. This option possibly can be helpful to decrease the social tensions to make a relax environment in cities specialty crowded cities. One of the advantages of high level walkability in cities is that people can do their daily activities and get access to everywhere without any difficulty; more importantly, they can improve their health quality and enjoy of their walking in city pattern [7], [8], [10], [27].

Traditionally, walkability subject has been an attractive issue for architects and urban planners. Recently urban designers and scientists of economic, social and community health are interested to do more interdisciplinary research about the effects of walkability and built environment [3], [1], [11].

The health researchers have known walking as a type of physical activities. Besides, Gehl and Gemzøe in the field of urban design, defined walking as a kind of social and recreational activities [8], [9]. There are more researches

which show that the walkability of a place not only decreases the level of social, economic and environmental stress, it also has a positive effect on public health. [10], [13], [24], [28] Nevertheless, Forsyth and Southworth mentioned that there are several recent researches on walking subject with considering the relationship between health and improving people's physical activity may deflect other basic meanings of 'walkable spaces' [7]. They defined other meanings of walkable environments according to physical activity which include;

- 1) Close: From transportation planning, a walkable space includes a short distance to a well-defined end point, especially when driving in space is inconvenient or cars are not in an easy access format.
- 2) Barrier-free: A walkable environment is a passive path without obstacles. Walkability means that walking is an easy way of movement specifically for elderly, children, handicapped or women wearing high heels.
- 3) Safe: A walkable environment from crime and traffic perception is a safe place.
- 4) Full of pedestrian infrastructure and destinations: A well-defined walkable environment has been design by efficient pavement, sidewalks, market pedestrian passage and greenery.
- 5) Upscale, leafy, or cosmopolitan: A walkable place is a pleasant environment for different types of users, especially for upper middle-class professionals, who have other options. Such places are multifunctional places with different shapes, restaurant, cafes, mix of housing type, full of natural shadings and tree lines with a well-designed landscape and street furniture. Furthermore, such places should be accessible by public transportation.

Also, in complete of Forsyth and Southworth definition about walkability, Gehl add three more factors which are;

- 1) "Protection: A good quality walking space provides protection against (1) traffic and accidents – feeling safe, (2) crime and violence – feeling secure, (3) unpleasant sensory experiences.
- 2) Comfort: A good quality walking space provides opportunities (1) to walk, (2) to stand/stay, (3) to sit, (4) to see, (5) to talk and listen, (6) for play and exercise.
- 3) Enjoyment: A good quality walking space (1) is designed to human scale, (2) provides opportunities to enjoy the positive aspects of climate, (3) offers positive sensory experiences". [8]

Therefore, walkability is a general subject which is more than physical infrastructure and involves the quality of walking environment. Walkability as a type of transportation has positive effects on communities' health. Thereupon, identification of a walkable place/space is related to physical settlement and the environmental characteristics of a place/space.

III. METHODOLOGY

Methodology of the research is based on qualitative method to examine the place identity in two major streets, one is Dereboyu Street, Lefkoşa/North Cyprus and the second one

is Chaharbagh Street, Isfahan/Iran to evaluate the effects of place identity on walkability. The methods have two main sections as well as empirical theoretical review. At the first part, the user survey is based on observation method, map marking and further analysis to evaluate the current identity of both case studies. The second part is based on comparison method between the two cases to evaluate the influence of identity on walkability and successfulness of the cases as a public open space in the city. In this case, the method provides an analytical base to understand the current identity of both streets which are supportable by walkability concept.

IV. EVALUATION OF THE CASE STUDIES

A. Dereboyu Street, Lefkoşa, North Cyprus

Lefkoşa is the capital city of North Cyprus Island in the eastern part of the Mediterranean Sea. "Ledir, Ledroi. Ledron, Letra or Ledra were the old names of Lefkoşa. Europeans have always called the city as Nicosia and the Turkish Cypriots called it as Lefkoşa" [15]. It has been as one of the strategic points through history, because of that its lead to have a specific identity in architectural and urban environments. After the war in 1974, the island was divided into two parts that the Greek Cypriots are living in the southern part and the Turkish Cypriots are living in the north. Lefkoşa or northern part of Nicosia itself has two main parts, the Walled city and the new development area.

Fast and new developments in the city out of the walls created new axis and extended the boundaries of the city. These new axes are connecting new areas together. One of the newly developed city axis and probably the most famous one is the Dereboyu Street. Dereboyu Street, which has officially been Mehmet Akif Avenue is one of the busiest streets in Lefkosa and mostly used as the entertainment center. Dereboyu comes from "the phrase "dere boyundaki cadde" ("the avenue along the river") was used as it lies along the Pedieos River" [5].

Çavusoglu, describes the street as a "multi-functional commercial spaces, together with residential building attached to them" [2]. The silhouette of the street is randomly shaped, and the heights of buildings are various.

a) Environmental Characteristic of Dereboyu Street

The environmental identity of the Dereboyu street can be evaluated in two main headings; natural and man-made.

(1) Natural Environment

Natural environments are the effective factors in the perception of a place. Dereboyu Street developed out of the wall of historical part parallel to the Kanlıdere stream by length of 1500 m. Per prevailing climate which is long dry-hot summer and rainy-mild winter, this city is more appropriate for using in various activities in open and semi pen spaces.

From the greenery point of view, Dereboyu Street itself has a few natural plants and green surface, but approximately in the middle of the street, there is a pleasant green pedestrian axis (as a park) perpendicular to the street which has the potential to become a powerful pedestrian path. Also there is a

water channel (river) parallel to the street which is currently seen as a green line in existing maps because there is no water within, and unfortunately, it is left without any function.

(2) Man-Made Environment

Figure-ground map shows that the right side of street is fairly compact, but on the left side because of existence of military area, it is uncompact and unconstructed. It seems that some of the houses have been transformed into offices, shops, etc., which looks unplanned. Individual buildings and their structure shaped the architectural vision of the street without any coordination by each other. Furthermore, free spaces between buildings have been left over without any design.

The next level of man-made environment evaluation is the Lynch analysis that is initially used to define the image of the Dereboyu Street. According to Fig. 2, there is a strong vehicle path. The street is facing with car traffic during rush hours. There is not a positive pedestrian connection between the street and other parts of the city; those who are walking are coming with their cars, and lack of car parking is turning the sidewalks and the spaces between buildings into parking lots.



Fig. 2 Lynch Analysis of Dereboyu Street, Lefkosa/North Cyprus

The sidewalk quality is full of obstacles and has low design. It is almost impossible for a person in a wheelchair to use the sidewalk, it is full of obstacles, cars, and the discontinuity of sidewalk levels makes it worst. (Fig. 4 (a)) The space is fairly visible; it is possible to see the street in perspective.

The pedestrian path which is located in the middle of the street offers a beautiful space for people to walk and rest also make a safe area for children as a playground, but the visual permeability and weak connection to the street is visible. The facade of this park is not active and it is all covered with

fences, and the entrance of the park is occupied by cars. Also, there is no significant landmark exists in the street in order to

use for orientation. (Figs. 3 (b), (c))



Fig. 3 (a) Pedestrian and cars in conflict (b) Entrance of park as a parking lot (c) Park as a pleasant pedestrian path, and lack of functions around it [Photo taken by author]



Fig. 4 (a) Pedestrian quality (b) cleanliness of the street (c) street furniture and bus stop location, cars blocked pedestrian path [Photo taken by author]

The functions of street include; shops, restaurant, offices, residential, hotels and other facilities. Organization of functions is random through the street, and relationships between the residential parts and other functions are weak. The street is not serving the daily needs of the nearby residents; due to this fact, local people who can access the street by walk do not use the street efficiently. Despite this weakness, the street seems to be attractive for the public in terms of 'brand shops', 'restaurants', 'cafes', 'banks', and 'offices'. The facade of the street is covered by different types of buildings in different height levels between 1 and 6 stories. There is no unity among them in terms of facade, height, material, etc. (Fig. 3 (a))

The street landscape is not well designed that there are some palm trees along the street which are not fully sufficient in terms of shading, thermal comfort and even from spatial perspective.

As mentioned before, there is no public seating element along the street, also street furniture which includes bus stop, dustbin, lighting element are in low condition and located in inappropriate locations. Also about cleanliness of street, every shop owner is responsible for the area in front of his/her shop. It becomes even worse when you enter the residential area behind the street (Figs. 4 (b), (c)).

A positive feature of the street is the night time activities, which about 40% of the building facade on ground floor level are; cafes, restaurants and bars which are active up to the midnight. As Jacobs stated "in successful city's streets, people must appear at different times" [32]. Accordingly, the night image of the street is one of the most active ones in the city of Lefkosa in North Part.

b) Social Characteristics of Dereboyu Street

From social perspective, street is partially working as a socialization place, in cultural, political and economic dimension. Nicosia (Lefkosa) marathon road passes through this street and it is also used for any special events such as shopping festival, concerts and annual Nicosia carnival. Furthermore, the street is used as a site for protests.

Generally, this street can be known as sociable and successful street through 24/7, but this feature is mainly limited to restaurants and cafes. Therefore, people approach the street by car and not as pedestrians; this is one of the main problems of this newly developed street.

B. Chaharbagh Street, Isfahan/Iran

Isfahan is one of the largest and most traditional cities in Iran, which is located on the center of Iran. It flourished

particularly in the 16th century, when it became the capital of the Iran for the second time during the Safavid dynasty. Furthermore, the city preserved the past glory. It has been famous for valuable Islamic architecture, and especially its coherent urban pattern which contains many beautiful boulevards, palaces, minarets, mosques and covered bridges on the Zayandeh rood river. By transferring the capital from Ghazvin to Isfahan by Shah Abbas the king of Safavid, the south part of the old city became under developed by the idea of royal city. The new area is connected to the old city center by Isfahan Grand Bazaar. The city spread out toward Zayandehrood River by Chaharbagh Street which is one of the main streets in Isfahan from south part to the north part of River.

As explained before, Chaharbagh Street (four garden street) is a historical street which has been known around Iran. This street is 6-kilometer-long which connects the northern part of city to southern part. Sheikh Bahaei (Baha' ad-Din al-'Amili) who is the chief urban designer of the city had more stress on Chaharbagh Street in city planning of Isfahan. He designed the urban pattern based on Shah Abbas's garden city theory. Also, street is designed according to two main keys of Shah Abbas's master plan. It makes the connection of the Naghshe Jahan

square to the southern part of the city as the main aim of design. Generally, the street is divided into three main sections; Chaharbagh Paein (downward Chaharbagh) that is located on the northern part of the city; Chaharbagh Abbasi (middle part) that connects the Naghshe Jahan square to the Zayandeh rood River; Chaharbagh Bala (upward Chaharbagh) that is in the southern part of the city.

a) Environmental Characteristic of Chaharbagh Street

(1) Natural Environment

As mentioned before, Chaharbagh Street is one of the historical and important streets in Isfahan. Isfahan is located in the Zagros foothills. The climate of the city is long hot-dry summer and cold-dry in winter. Chaharbagh Street, whose names come from Four Garden, has been designed based on Persian Gardens to make balance between hard climate and human thermal comfort condition. The street continues by a mild slope toward the Zayandeh Rood River. In Safavied period, there was a stream at the middle of the street. Unfortunately, later the stream was blocked and lost its positive effects on the environment (Fig. 5).



Fig. 5 Chaharbagh Street past and currently conditions [29]

Chaharbagh Street seems as a green line from top view with the lines of old trees by more than 50 years old along the street. Existing tall trees make a pleasant space for citizen and tourists. Zayadeh Rood River, which is one of the most important factors of identification of Isfahan, has an important rule on the identity of Chaharbagh Street, which the north parts of street are connected by Allah Verdi khan Bridge (Si o Se Pol) to the south part. The Niasarm and Negarestan streams as water channels which are parallel to the Zayande Rood River and perpendicular on the street have positive effects on feature of street as well.

(2) Man-Made Environment

Chaharbagh Street is a street based on the grid pattern which has a specific unity between its components such as street pattern, facade, skyline, street furniture, urban landscape, and also its form and functions. According to Fig.

6, Chaharbagh Street is defined into five separate paths ways which two of them are the main vehicle path and three of them are used as pedestrian path.

The main pedestrian path is located in the middle of two vehicle paths has specific characteristics which make this street walkable. This path is specifically designed with the aim of sustainable transportation for pedestrian and bicycle drivers. Landscape design of the pedestrian path way has good quality of urban furniture, pavement and suitable lighting which make a safe, comfort and pleasant walkable space (Figs. 7 (a), (b)). The two other pedestrian pathways (sidewalk) are mostly used for shopping passage, window watching and other activities. Furthermore, existing of new construction site of subway line under the Chaharbagh Street made much physical, social and also aesthetical problem for the street. This project as a huge construction project in city context has many negative effects on the circulation of vehicle pattern, disturbs

some parts of pedestrian paths and also damages landscape and greenery of the space (Fig. 7 (c)).

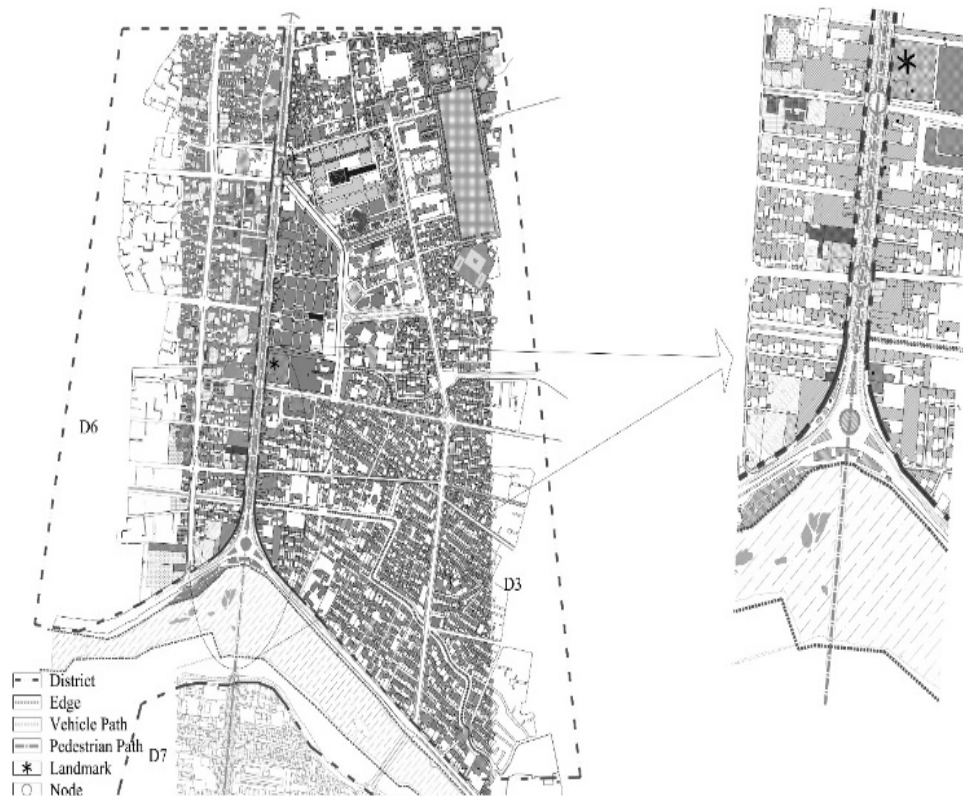


Fig. 6 Lynch analysis of Chaharbagh Street, Isfahan/Iran



Fig. 7 (a) Vehicle path (b) Bike and pedestrian path (c) Subway construction, [30]

Chaharbagh Street has been known as a multifunctional street specially used as shopping and entertainment space. Multifunction of street has made this it live street in 24 hours of 7 days. Also existence of historical and monumental buildings in this street present the space as an identifiable street which is memorable for users even the once visiting. Façade of the street made by this building has unity along the street, even they were for a different historical period. The height level of the buildings is average between 1 to 3 stories

and makes a space according to human scale. Unfortunately, some parts of the eastern facade of the street are renovated by concrete and break, which made some problems in unity of this part even designer tried to use Islamic arch shape in the facade but it was not completely successful (Fig. 8 (a)).

Skyline of the street in both sides has a strong character and unity based on new development part and also renovated historic buildings.

Based on Lynch analysis, along 6 kilometer street, one of the most important nodes is the intersection of Zayanderood River by street. Si o Se Pol Bridge could be known as a powerful node at this point. In opposite side of bridge, municipality clock tower also adds special identity to the street as a node. There are many monumental buildings along the street, but as a landmark, Chaharbagh school minaret and its tomb could be identified.

Chahrabagh Abbasi and Chaharbagh Paen (Lower) have a same and simple landscape design which clarified the vehicle path in parallel by pedestrian path that made a place in accordance with human thermal comfort for users. But the in pedestrian path of Chaharbagh Bala (southern part) which is more newly developed part by different building characteristics, designers made some changing in design to create different and attractive place for users (Fig. 8 (b)).



Fig. 8 (a) Renovated facade of Chaharbagh Street (b) New development section of Chaharbagh Street (Southern part) (c) Street furniture [photo taken by author]

To complete the coordinating elements of landscape, street furniture has an important role to make a comfortable space. As it is clear in Fig. 8 (c), there are many seating elements with various shapes and materials to make street as successful public space to be free of charge for different users in different socio-economical levels. Also efficient lighting element makes a safe place during the night time and helps to activate the area for nightlife. Furthermore, dustbins in correct locations make a clean space for citizen and users.

From the public transportation view, there are sufficient and clear bus and taxi stations which positively helps to reduce the level of private traffic which makes street a sustainable street from a transportation perspective and also encourages people to use public transportation.

b) Social Characteristics of Chaharbagh Street

Chaharbagh Street is a fully sociable place from socio-cultural, socio-political and socio-economic perspectives. The street itself has different types of users in different age levels; it is also attractive for tourists and has an important role in tourism activities. There are various different events such as festivals, parade, and even protest take place in the site of the street. Furthermore, the street has an important influence on public health as a walkable street and is attractive for different range of users to pass their time and relax there as public open space.

V.COMPARISON

In this study, the cases are selected with two different backgrounds, one of the historic quarters and the other from the newly developed areas of different cities in different countries. On the other hand, one of the main similarities

between two cases, which was the main aim of this study, is the multifunction of them which made both as mixes used street and approximately are as main shopping and entertainment space with the high levels of user's participation. Chaharbagh Street has been developed through a long period of time by the people and for the people, specifically for pedestrian use. Accordingly, the pattern of Chaharbagh Street is more proportional in human scale and the architectural quality of the buildings in most of the parts is well developed. Furthermore, pedestrian path is clearly separated from vehicle pathway. Most of the components work together to make safe and successful space for the users. But in general, there are some negative points which reduced the space's identity such as renovation of some parts of street's facade without respecting to the historic buildings and also the prevailing harmony.

Dereboyu Street is a randomly shaped street and architectural richness of the building is low (Fig. 8). Development of the Dereboyu Street was unplanned and haphazardly. Consequently, it does not meet some of the fundamental needs of the local communities as an urban public space. Moreover, street itself is designed as a street without noticeable element (only the park); it gives the observer a sense of corridor. There are two plazas in the street, but both of them are used as car parking and disturb the visual view of the street facade. In some parts, it is a soft and enclosed space, palm trees are providing shading and good view in some parts (Fig. 8 (b)).

TABLE I
COMPARISON BETWEEN TWO CASES IN DIFFERENT DIMENSIONS BASED ON STUDY OBSERVATION

Identity/Walkability characteristics	Dereboyu Street (Lefkoşa, North Cyprus)	Chaharbagh Street (Isfahan/Iran)
Accessibility and linkage	It is mainly accessible by cars, Pedestrian accesses are weak	High level pedestrian accessibility Good relation with residential area.
Public transportation	Inefficient bus system	Efficient bus and taxi system
Disable accessibility	Weak, sidewalk, it is full of obstacles, cars, and the discontinuity of sidewalk levels makes it worst.	Good disable accessibility, but in some parts of sidewalk different levels of height, makes some difficulty for disable accessibility.
Vehicle and pedestrian conflict	Usage of vehicle is more preferable than walking	Usage of pedestrian is more preferable than vehicle because of easy access and existing of different parking lots.
Connection between space and surrounding buildings	Connection with park is weak Buildings are not following any pattern	Connection with surrounding is well and existence of well-defined entrance to buildings and also monumental buildings
Visibility	The space is fairly visible; it is possible to see the street in perspective. No significant landmark.	The space has high level of visibility; also existing of landmarks makes specific legibility for space.
Visual Permeability	Weak	Approximately well.
Comfort and image	Car parkings are disturbing the view Quality of sidewalk is low	
Architectural Quality	Buildings do not follow any pattern, they are randomly shaped	Buildings have unity and follow Islamic, modern and postmodern pattern.
Proportions	Human proportions are weak Some of residential buildings are turned to offices and shops	Human proportions are strong Some of renovated buildings disturb the general unity of street in some parts
Silhouette/Skyline	Unplanned architectural development Corner treatment is weak Random skyline	Unplanned new constructions Corner treatment is well-defined Consonant and harmonic skyline
Sitting opportunities	Only inside the cafes and restaurant Only public sits are available in park	Efficient public and private seating
Thermal comfort	Only in cafes and restaurants, No natural ventilation, Only in the park it is strong	Thoroughly thermal comfort by natural ventilation
Cleanliness	Not good Partially by shop owners	Approximately good
Variety of functions	Brand shops, expensive cafes and restaurants, Lack of daily need shops.	Existing of different function such as, shops, cafes and restaurant, cinema, offices and also daily needs shop specially in residential part
Type of users	Young adults, couples, mainly people are coming from other part of the city for shops and restaurants.	Full range of age group
Time of Activities and usage	Active in different times of day and night Lack of cultural activities and people participation	Active in different times of day and night

VI. CONCLUSION

Evaluating the existing street identity factors in both streets show that there are many factors which have an positive and important role to identifying the space or disturbing the it and even has negative influence on place identity; accordingly studding the influential factors which make these space walkable and also identifiable would increase the quality of future planning. Analyzing of two case studies showed us the user's participation has been affected by place identity, is one of the critical elements which has an impressive influence on the level of walkability of places. People are effecting their environment and they get affected by it. The historic environment is created by the people during the time and they change it according to new conditions, therefore it works properly for their daily routine. Moreover, fast and un-planned development might create some problems; people cannot affect the environment but they got affected by it. A variety of users and activities are also important; Jacobs stated "Great Variety does mean a high proportion of small elements" [32]. This brilliant definition exists in the both cases, different functions serving a variety of needs from simple to complex. But, it is important to notice in street especially commercial zones, by elimination of local residents, the street might not work properly as a successful walkable street. Having different activities for different times of the day and night is also important. A successful walkable place without

participation of people is not really walkable space and also is not an identifiable place In general, place identity and walkability directly and indirectly have been affected by each other.

REFERENCES

- [1] E. Cerin, E. Leslie, L. D. Toit, N. Owen, and L. D. Frank, 'Destinations that matter: Associations with walking for transport'. *Health and Place*, vol.13: (3), pp.713-724, (2007).
- [2] B. T. Çavuşoğlu, "Problems in Creating Social Space and Suggestions for their Solution: The Case of Nicosia, the only Remaining Divided Capital City in Europe" 14th IPHS Conference, Turkey, Istanbul, (2010).
- [3] G. K. W. Chin, K. P. Van Niel, B. Giles-Corti and M. Knuiman, 'Accessibility and connectivity in physical activity studies: The impact of missing pedestrian data'. *Preventive Medicine*, vol.46: (1), pp.41-45 (2008).
- [4] S. Carr, M. Francis, L. Rivlin, A. Stone, public space, Cambridge university press, USA (1992).
- [5] G. Erdinç, "Dereboyu..." (in Turkish). Kıbrıs Postası. Retrieved 12 March 2015, (2015).
- [6] M. Fasli, A model for sustaining city identity, case study: Lefkosa in Cyprus, unpublished PhD thesis, EMU, Famagusta, North Cyprus, (2003).
- [7] A. Forsyth, and M. Southworth, 'Guest editorial: Cities afoot - pedestrians, walkability and urban design'. *Journal of Urban Design*, vol.13: (1), pp.1-3, (2008).
- [8] J. Gehl, and L. Gemzoe, Winning back the cities - the European experience, Australia: Walking the 21st century, 20-22 February 2001, Perth, Western Australia (2001).
- [9] L. Gemzoe, S. Kirknæs, and B.S. Søndergaard, 2006, New city life. Copenhagen: The Danish Architectural Press (2006).

- [10] B. Giles-Corti, and R J. Donovan, 'The relative influence of individual, social and physical environment determinants of physical activity'. *Social Science and Medicine*, vol.54, pp.1793-1812, (2002).
- [11] B. Giles-Corti, M H. Broomhall, M. Knuiman, C. Collins, K. Douglas, A. Lange and R J. Donovan, 'Increasing walking: How important is distance to, attractiveness, and size of public open space?' *American Journal of Preventive Medicine*, vol.28: (2, Supplement 2), pp.169-176, (2005).
- [12] B J. Goldstein, D C.Elliott, *Designing America Creating Urban Identity*, Van Nostrand Reinhold, New York, (1992).
- [13] S L. Handy, M G. Boarnet, R. Ewing and R E. Killingsworth, R E , 'How the built Environment affects physical activity: Views from urban planning'. *American Journal of Preventive Medicine*, vol.23: (2, Supplement 1), pp.64-73, (2002).
- [14] M. Hauge, *Out of Place, Restoring Identity to the regional landscape*, Yale University press, Yale, (1990).
- [15] K. Keshishian, *Romantic Cyprus*, Romantic Cyprus Publications, Nicosia, (1993).
- [16] S. Kostof, *The city assembled* (p. 46). London, (1992).
- [17] H. Lin, W. Lee, "City change and place identity: Authenticity in the historical settlement of Taiwan", www.dcpac.libksu.edu.tr, (2006).
- [18] K. Lynch, *The Image of the City* (Vol. 11). MIT press, (1960).
- [19] K. Lynch, *City Sense and City Design*, MIT press, Cambridge, (1990).
- [20] V.P. Meiss, *Elements of Architecture*, van Nostrand Reinhold, London, (1990).
- [21] C.O.C.T. Moughtin, & Tiesdell, S. (1999). *Urban design: ornament and decoration*. Routledge.
- [22] C. Moughtin, *Urban design: street and square*. Routledge, (2003).
- [23] D. Oktay, *The Quest for Urban Identity in the Changing Context of the city*, Northern Cyprus, (2002).
- [24] J. Puncher L. and Dijkstra, "Promoting safe walking and cycling to improve public health: Lessons from the Netherlands and Germany". *American Journal of Public Health*, vol.93: (9), pp.1509-1516, (2003).
- [25] A. Rappaport, *Human Aspect of Urban Form*, Franklin Book Company, USA, (1994).
- [26] M. Sepe, "Sustainable walkability and place identity". *International journal of social sciences*, 1(3), 148-153, (2007).
- [27] R. Tolley, *Calming traffic in residential areas*. Tregaron: Brefi Press, (1990).
- [28] I. Vojnovic, C. Jackson-Elmoore, J. Holtrop and S. Bruch, 'The renewed interest in urban form and public health: Promoting increased physical activity in Michigan'. *Cities*, vol.23: (1), pp.1-17, (2006).
- [29] A. Ashraf, *Characteristics of Urban History in Iran*. Social science letter. First set. Social Science University. Tehran. Iran, (1974).
- [30] www.payvand.com
- [31] www.spadanabike.ir