

## Enhancing Identity through Streetscape Composition

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### 1 ABSTRACT

Each city or an urban space has a unique identity and a character of its own. Therefore, there is a special pleasure in looking at a city and its components. The lived experience added to a place is considered significant to people through time. Think of a city and directly its streets come to your mind, according to Jacobs (1961). People experience the city through moving in a linear path formed by elements, such as; building façades, trees, curbs, and other elements. Streetscape skeleton, along with other physical design elements, form the vista that any individual recognises when arriving at an urban place or a street. Due to the dynamic development of cities, a key question concerning the quality of life is always asked. According to the World Health Organisation (WHO) the standard indicators of the quality of life is physical and mental health, and social belonging. This paper aims to identify the most important physical features in streetscape design elements according to users, as well as showing which of the physical features could enhance identity and character of a place. Literature reviews and the analysis of a case study in downtown Alexandria in Egypt are used as the research methodology and procedures for this paper. The results show a hierarchical ranking of elements to take into consideration to design a future guideline or a framework to enhance the identity of a street or an urban space. Findings show that the Physical Setting is the most noticeable quality of place to users. It is also clear that the Softscape elements are considered the most important when answering the question of the important physical features with the largest impact on identity and sense of comfort.

Keywords: Streetscape, Character, Urban Design, Identity, History

### 2 INTRODUCTION

When Kevin Lynch (1960) explained the five elements of a city, i.e. landmark, path, node, district, and edge, he stated that the path is the most important element. IN 1961, Jane Jacobs said in “The Death and Life of Great American Cities” that “Streets and their sidewalks, the main public places of a city, are its most vital organs. Think of a city and what comes to mind? Its streets. If the city’s streets look interesting, the city looks interesting; if they look dull, the city looks dull”. Scholars suggest that streets are used as social spaces rather than just movement channels. Universal design principles of streetscape elements may bring streetscapes to become more user-friendly, sustainable, and functional.

As people use urban places in their daily life, they are affected by the experience. This lived experience is affected by various dimensions, such as morphological, perceptual, social, visual, functional, and temporal dimensions (Carmona et al., 2010). The elements that contribute to these dimensions are the streetscape elements and their composition. That is why the design of streetscape can determine the people’s perception of the city’s identity and character (Wibisono, 2001). Unlike squares that need something, an object or an event, to keep people coming, streets are necessary urban spaces (Gehl, 1987).

The case study chosen is characterised by its remarkable history and significant buildings, which create the identity of the place. The unique location of Alexandria has made it an attraction to various civilisations ever since the Ptolemy times. This has caused Alexandria to become the window to the cultures and arts from European countries. Ever since Muhammed Ali and his family allowed for interactions with foreign colonies, Alexandria has witnessed its own renaissance during the second half of the nineteenth century, resulting in a city with a unique character. However, in the past century, Alexandria has witnessed a rapid change due to globalisation and urbanisation. This change was clearly uncontrolled, causing deterioration of the existing conditions of heritage spaces as a result of general cultural ignorance, lack of maintenance and regulations, and natural conditions. These factors directly impacted the urban environment and hindered the preservation of its historic part (Getty, 2009).

Historic Urban Landscapes (HUL) have received more attention after the United Nations Educational, Scientific and Cultural Organization (UNESCO) recommendations in 2001 aimed at protecting historic

urban settings from deterioration and fragmentation resulting from uncontrolled urban development (Bandarin, 2015). Governments and cultural heritage organisations appreciate the importance of preserving diverse physical cultural heritage through various ways. The question that remains is whether they understand the importance of cultural memory and whether they take account of social identity in their plan in order not to affect the human psyche negatively.

### 3 THE METHOD

Interactive and comparative methods of research are used to explore the dimensions of the paper. Two-phases of data collection have been employed. The first phase is the literature review on identity, its components and principles and its relation with streetscape design and elements. The second phase are surveys conducted both on-site and online. The on-site survey was aimed at static users; those who have constant contact with the place such as shop owners, vendors and residents, and the online surveys aimed at mobile users; those who are considered visitors and shoppers. The survey questions aimed to identify the importance of the case study in terms of memory and identity, as well as the important physical streetscape features. The qualitative data resulting from the surveys will show the important physical attributes in streetscape design that enhance identity and character.

### 4 IDENTITY

#### 4.1 Place and Space

The terms “space” and “place” tend to be used interchangeably. However, after being better defined the two terms represent separate concepts, interacting in a dynamic relationship. According to the English Longman Dictionary (2001), place is defined as “any area, place, position or status in space” and “a point, particularly within a wider area”. It defines space as “the amount of an area available to be used”. Specific to an architectural aspect, spaces are conceived as abstract geometries explained in terms of distance, direction, shape, size, and volume, detached from material form and cultural interpretation (Gieryn, 2000).

According to Edward Relph (1976), in order to change a space to become a place, meanings, individuals, groups, or societies are added. Yi-Fu Tuan, a Chinese-American geographer and philosopher, said “Place is security, space is freedom: we are attached to the one and long for the other”. Mumford (1961) wrote of the modern metropolis, that it is a place where individuals “are progressively reduced to a bundle of reflexes, without self-starting autonomous goals”. In Proshansky’s, “The city and self-identity” he defines place identity as “those dimensions of self that define the individual’s personal identity in relation to the physical environment by means of a complex pattern of conscious and unconscious ideas, beliefs, preferences, feelings, values, goals, and behavioural tendencies and skills relevant to this environment”. All these views argue along the same axis, that eventually a space is a part of the creation of a place. Space is considered a blank slate that is yet to be coloured with personal experience to add meaning and memory.

#### 4.2 Urban Identity

Identity is a subjective feeling of self-sameness and continuity over time in different places and social situations (Kroger, 2000). Identity implies the distinction from other things and the recognition as a separate entity. It is not in the sense of equality with something else, rather the individuality and oneness. Identity serves as the base for recognition. In parallel, Lynch (1981) also defines identity as “the extent to which a person can recognise or recall a place as being distinct from other places”. Goldstein and Elliot (1994) assert that “the word identity has distinctive advantages in terms of open spaces, streets, and spaces between buildings because it encompasses the notion of a specific location and the unique relationship between the place and its context”. Identity in an urban environment is to a greater or lesser degree defined by the environment’s elements and activities or events taking place within that environment (Cheshmehzangi and Heath, 2012; Zakariya and Harun, 2013). According to Kevin Lynch (1960), “an environmental image may be analysed into three components: identity, structure, and meaning”. These three components work together to present a workable image.

Due to rapid urbanisation, industrialisation, and commoditisation of place, placelessness lies deep in globalisation that generates standardised and inauthentic urban landscapes (Arefi, 1999). In this regard, Relph (1976) describes placelessness as “an environment without significant places and the underlying

attitude which does not acknowledge the significance in places”. This phenomenon affects the identity of many local urban places. The loss of meaning in a place results in the inability to continue to feel, to practice and to recall experiences (Hull et al., 1994). This loss could be the result of change or transformation of spaces or buildings, or the changes of uses and functions, or other reasons. However, it is eventually resulting in a feeling of detachment, thus weakening the place attachment, therefore; loss of identity. Researchers argue that the incapability of the modernist approach in facing the contemporary issues, including the deterioration of historic or unique streets and spaces, will lead to disintegrated self or group identity (Salama, 2009). Therefore, there needs to be an approach to conceive places contextually and understand the complexities of what gives places their identities.

### 4.3 Components of place

The concept of place is physical as well as psychological. Theorists, such as Canter (1977), Edward Relph (1976), Montgomery (1998), and Falahat (2006) have stated the three components of place, as shown in Fig. 1. They each classified the components into three categories differing in naming but with the same meaning. The three components are; physical setting, activities, and meaning. The physical setting is the real physical being of the place. It consists of the buildings, landscape, and the aesthetic quality. The physical setting influences the symbolic meaning of the landscape. The activity component is the events that take place in any space that respectively results in the experience of the user. The meaning is the resulted outcome based on the human interaction with the place or the activity. Place attachment is embedded in the feeling, emotion, and behaviour reflected by people from interactions. These three components do not effectively exist individually, but rather the wholeness of their complex interaction helps define the identity and character of a place.

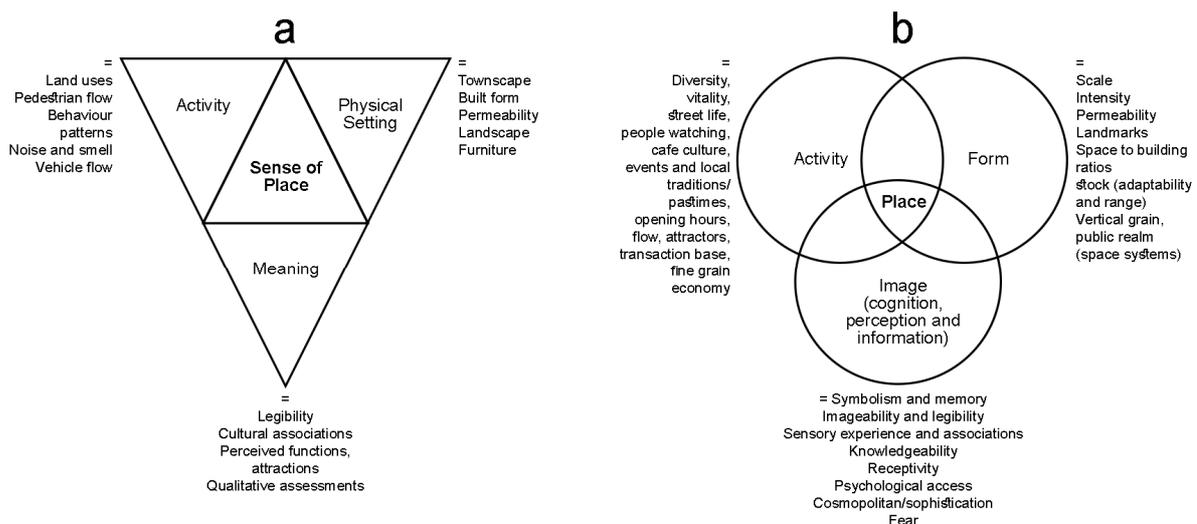


Fig. 1: Components of Place suggested by (a) Punter (1991), and (b) Montgomery (1998), adapted from Carmona et al. (2010)

It is important to note that a place could not be separated from people who invest meanings in them, as stated by Soja (1996) and quoted in Gieryn (2000), “places are also interpreted, narrated, perceived, felt, understood, and imagined”. Meeting the biological, mental, and social needs of a human, the physical setting will be the result of a series of perceptions, satisfaction, and finally a sense of place (Falahat, 2006). Places are dynamic and will continue to regenerate as people struggle to adapt to new meanings that might detach them from their culture and identity.

The loss of the sense of place, or the identity of the place, will result in affecting people’s perception and attachment to places. It is recommended by researchers that in order to capture the meaning of a place, the physical setting, the activity, and the sense of place should be complementarily taken into account (Agnew and Duncan, 1989). Therefore, it is clear that assessing the significance of people’s psychological connections with places eventually results in the assessment of place quality.

### 4.4 Qualities of Place (Principles of Identity)

The identity of a place is enhanced by five main qualities, or principles, stated by theorists, such as Breakwell (1986), Twigger-Ross and Uzzell (1996) and later added on by Lalli (1992) and Vignoles (2006),

as shown in Table 1. These qualities are: distinctiveness, continuity, significance, compatibility, and cohesiveness. These qualities can either strengthen or weaken the identity of a place. They are also called principles of identity of place. The purpose of these qualities, or principles, is to show the relation between places and the way people identify with them.

Theorists	Qualities of place
Breakwell (1986)	Distinctiveness Continuity Significance (self-esteem) Compatibility (self-efficacy)
Twigger-Ross and Uzzell (1996)	
Lalli (1992)	Cohesiveness (rootedness)
Vignoles (2006)	

Table 1: Qualities of place according to various theorists (by author)

The first four principles were identified by Breakwell (1986) and later on modified by Twigger-Ross and Uzzell (1996) and Lalli (1992). The first principle, distinctiveness, explains the uniqueness in the relation that a person has with his/her environment distinct from any other relationship. Research by Feldman and Hummon (1990) focused on settlement identity as the distinctiveness associated with being a ‘city’, ‘town’, or ‘country’ person. This distinctiveness associates the lifestyle with the place to create a memory. Lalli (1992) discussed that specific place identification is that “the bond to a particular part of town also contributes to one’s differentiation from residents in other town areas”. This explains that place identifications can be a great contributor to the distinctiveness principle.

The second principle, continuity, refers to the long-term relationship between people and place created by their life experience over time. There are two types of continuity; place-referent continuity and place-congruent continuity. Place-referent continuity is explained by various theorists as when the place acts as the referent to past selves and actions and that for some people, maintenance of a link with the place provides a sense of continuity to their identity. This is “maintained by fixing aids for memory in the environment ... creating coherence and continuity in one’s self-conceptions” (Korpela, 1989). Therefore, place-referent continuity refers to the maintenance of continuity via specific places that have emotional significance. On the other hand, place-congruent continuity differs from place-referent continuity in terms of specificity. It refers to the maintenance of continuity via characteristics of places which are generic and transferable from one place to another. People will choose an environment that manifests the values that they highly esteem and personified of objectified in their objects of identification (Graumann, 1983).

The third principle, significance, also referred to as self-esteem by Twigger-Ross and Uzzell, shows “the positive evaluation identified concerning a person’s feeling of worth or social value” (Twigger-Ross and Uzzell, 1996). There is a significant difference between evaluation and the feeling of self-esteem itself. If, for example, a person says “I like the Docklands”, this is called evaluation. On the other hand, saying that “living in the Docklands makes me feel good about myself”, this is called self-esteem (Twigger-Ross and Uzzell, 1996). There is also a clear evidence of positive self-esteem through association with a prestigious place (Lalli, 1992). The two are related; however, an evaluation may affect the person positively, but not convey the same positiveness on a person’s self-esteem.

The forth principle, compatibility, also referred to as self-efficacy by Twigger-Ross and Uzzell, shows that the environment has the capabilities to meet individuals’ demands. Self-efficacy is “regarded as high when the individual believes he/she can perform an act or complete a task”, as explained by Twigger-Ross and Uzzell. This results in creating a manageable environment where residents can develop a predictive system that allows them to judge whether a setting supports their goals and purposes (Winkel, 1981).

The fifth principle, cohesiveness, also referred to rootedness by Lalli, refers to maintaining a sense of intimacy, homogeneity, and compactness in the built environment. It’s also emphasised by the emotional ties or the personal belonging developed by an emotional connections. This principle strengthens attachment which results in reinforcing personal identity of place.

In conclusion, the principles of identity have clarified the meanings and role emotionally salient places have on a person's identity. Thus, suggesting that identity process has a dynamic relationship with the residents' built environment. Breakwell's (1986) identity process theory was designed to examine threats to identity; showing that there is a clear link between identity and the physical environment.

## 5 STREETScape

Streetscape is a distinct component of street design and it must receive separate planning and design attention. Streetscapes are the three-dimensional outdoor spaces that surround roadways and are outlined by buildings that form the "streetscape skeleton". The overall design of streetscape is affected by various design elements. However, the proportions and scale of streetscape skeletons are significant factors in affecting the comfort and productivity for users (Alexander et al., 1977; Cullen, 1971; Gehl, 2010; Jacobs, 1961).

Enclosure provides streetscape with a sense of spatial identity (Cullen, 1971). Enclosure helps intensify the feeling of negative space, thus the perception of the boundaries and components of the space itself. Enclosed spaces are perceived by users as safe-feeling and memorable, thus; an identity is linked to the space for the user. While enclosure speaks of proportions it does not account for scale. The terms "scale" and "human scale" are commonly used interchangeably. However in urban design literature, there are definitive interpretations of the boundaries of human scale (Alexander et al., 1977). Scale is conveyed by furniture, planters, ornaments, or even by the size of surrounding structures and spaces. Theorists also discuss that scale can be conveyed by the context of speed, given that a wide street may feel more appropriate when cars are in high speed (Ewing and Handy, 2009). On the other hand, human scale refers to the appealing scale for users on foot, or pedestrians. There are several interpretations of specific dimensions and limits of perception and social interaction prescribed by various theorists and authors to specify efficient design guidelines for the ideal feeling of human scale.

### 5.1 Streetscape Character

The character and design of streetscape are some of the determining factors in the success of highlighting the city's cultural identity (Pegler, 2006). Streetscape character is affected by design guidelines and design elements. That explains the approach of using streetscape as a focal urban aspect in many cities to invigorate places and enhance the sense of place with all the accompanied values and harmonies.

The appearance and relationship between the exterior features of a city and the design elements of the street determine the character (Wibisono, 2001). Streetscape spans from the façades of a building on one side to the other. According to Hartanti (2012), streetscape consists of three layers; vehicular lane, public frontage, and the private frontage, as shown in Fig. 2.

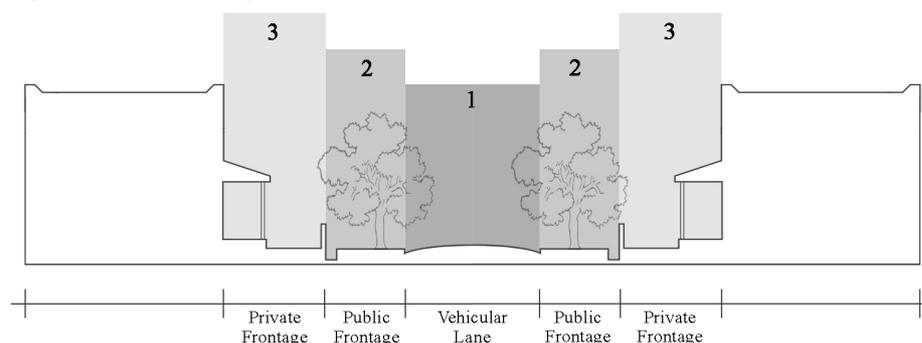


Fig. 2: Layers of streetscape according to Hartanti (2012), adapted by Aurbach (2005)

The private frontage is the privately owned land extending from the building façade to the plot boundary. That space may include arcades, porches, stoops, fences, yards, alleys and in-fill spaces, special activity spaces, and special event spaces. The public frontage is the publicly owned space extending from the private plot boundaries to the edge of the vehicular lane, and it is known as the roadside. That space includes sidewalks or pathways, street corners and curbs extensions, street planters, trees and other vegetation landscaping, and other street furniture as fixtures, seating, and utilities. The vehicular lanes are the spaces extending from curb to curb, or from pavement edges from one side to the other if there are no curbs. This space is used as thoroughfare including travel lanes and parking lanes.

According to Mansouri and Natsumoto (2009), streetscape composition is divided into two systems; static system and dynamic system. The static system includes the buildings envelope, the street sky, openings, the road, urban furniture, and green infrastructure. The dynamic system includes the mechanical system, which is the vehicles, and the human system, which are people and creatures.

## 5.2 Streetscape Design Elements

Streetscape design elements - according to the Downtown Development Association of the City of Cheyenne in Wyoming and the Downtown Alliance of the Grand Rapids Neighbourhood in Michigan - are divided into sidewalks, street corners and curb extensions, trees and landscape strips, movable and fixed planters, seating, trash/ash receptacles, public art, screening, fencing, railings and walls, café spaces, special event spaces, alleys and in-fill spaces, fixtures or utility zones, utilities, and lighting. Streetscape design elements can be divided into four main categories: hardscape, softscape, furniture, and external influencers, as shown in Table 2. Buildings and trees may also be called streetscape skeletons, given that they are dominant objects according to their proportion and scale.

Main categories	Sub-categories
Hardscape	Sidewalks (pathways)
	Street corners and curb extensions
Softscape	Trees and landscape strips
	Planters (movable – fixed)
Furniture (fixtures)	Seating
	Trash/ash receptacles
	Signage
	Screening
	Fencing, railing, building façades and walls
	Fixtures and utility zones
	Utilities
Lighting	
External Influencers	Special activity spaces
	Special event spaces
	Alley and in-fill spaces
	Public art

Table 2: Categorization of streetscape design elements (by author)

## 6 CASE STUDY: ELMANSHEYA SQUARE IN ALEXANDRIA, EGYPT

### 6.1 Background of Alexandria

Alexandria is the second capital of Egypt and its major port. Due to its strategic location and rich lands, Alexandria has been a jewel amongst the Mediterranean cities. It features a fusion of communities; Greek, Italians, Armenians, Muslims, Christians, and Jews. Given that it is one of the oldest cities in the world, Alexandria holds a rich history and a piece of mystery around every corner. Ever since Muhammed Ali and his family allowed for interactions with foreign colonies, Alexandria has witnessed its own renaissance. During the second half of the 19th century, this renaissance resulted in a city with a unique character.

For the past few decades, due to urbanisation and globalisation, significant rapid change has taken place in Alexandria. The struggle between its symbolic Mediterranean significance, history, urban form, identity, and economic and political agendas and new cultural interventions is causing the historical districts to lose their identity and sense of connection to the past. This change, over time, was clearly uncontrolled, causing deterioration of the existing conditions of heritage spaces as a result of general cultural ignorance, lack of maintenance and regulations, and natural conditions. These factors directly impacted the urban environment

and hindered the preservation of its historic part (Getty, 2009). As a result, certain historical features in old streets and urban plazas started to fade away, causing Alexandria to suffer from a loss of identity.

## 6.2 Background of ElMansheya Square

ElMansheya Square is located in the district of AlGomrok, part of the city centre. Over its history, this area had other names: Place d'Armes, Grand-Place, Place des Consuls, Place Mohamed Ali, and now Midan ElTahrir or "Liberation Square". During the 19th century, ElMansheya Square was considered the commercial centre of Alexandria. The commercial centre later moved eastward to Saad Zaghlul Square, where the Cecil and Metropole hotels are still located.

When the French expedition led by Bonaparte embarked in Alexandria in 1798, the area of ElMansheya was an open field. The military maps of this period mark an undefined open space as an "Esplanade", also known as a promenade (Awad, 1996). In 1814, the site was described by the British traveller Bramsen: "The large square near the sea is spacious; it has been improved and covered with gravel by the Europeans who came here to breathe the sea breezes". This confirms with Captain W. H. Smith's map of 1833 indicating the space as "parade gravée". During the second half of the 19th century, Ali Pasha Mubarak, an Egyptian public works and education minister, described the area as partly open vacant land, used by Bedouins. It was also called "Kom ElHallah" (Awad, 1996).

The square appears fully developed in Charles Muller's map of 1855, as shown in Fig. 3 to the left. The new Place des Consuls was developed by Mancini, who also designed most of the buildings surrounding the square. The surrounding rectangular buildings are three or four stories high residential buildings of an Italian-oriental aspect, similar to those of Italian cities such as the port of Trieste in the mid-18th century Austro-Hungarian Empire.

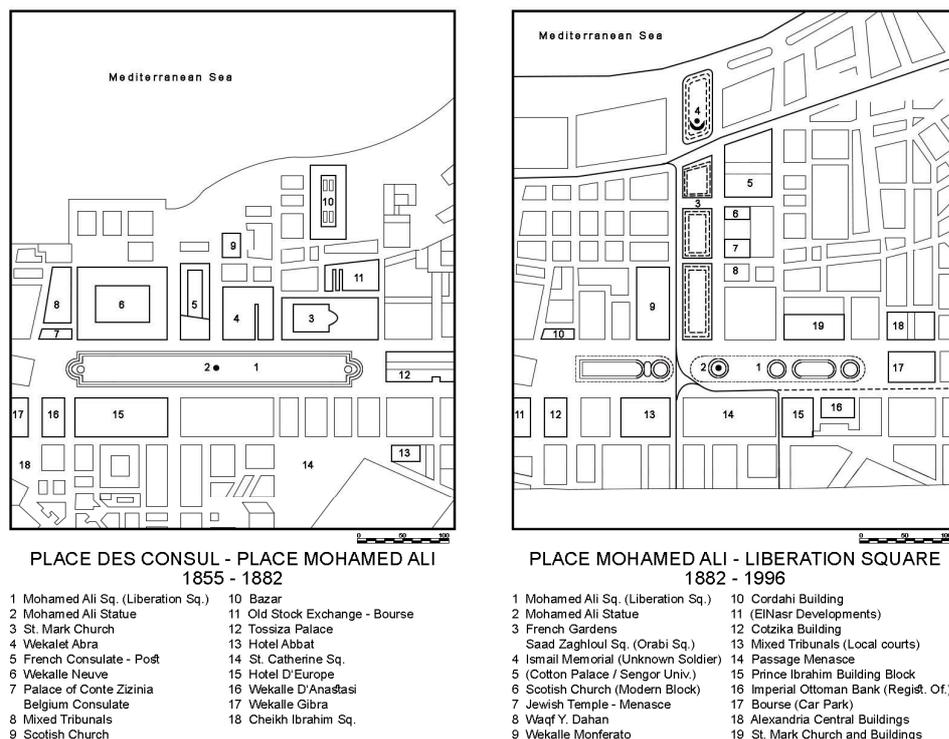


Fig. 3: Place Des Consul (left) by Charles Muller, and Place Mohamed Ali (right) by Mancini, adapted by Awad (1996)

## 6.3 French and Italian Influences

The Palace of M. Tossiza, the Greek Consul, was designed by Macini. It stood majestically on the Eastern location of the square, along with the elegant Palais of Count Zizinia, Belgium's acting Consul. The Place Des Consuls was dominated by commercial and business activities. They ranged from numerous large wakalas, which are buildings famous during the Islamic period that housed merchants and their goods serving as a centre for trade, storage and transactions, such as Gibra, D'Anastasi, and Neuve, with ground floors reserved for commercial enterprises and public services and the upper floors reserved for offices and residential use.

In John Murray’s “Handbook for Travellers in Egypt” in 1880, he mentioned that among these commercial enterprises were David Robertson and Co. Booksellers, Rocheman Jewellers, Boret the hairdresser, and photographers as Fiorillo, and general outfitters like Cordier. Also there were numerous cafés; such as the glamorous Le Café de France No27, hotels; such as Hotel d’Europe, and restaurants. Other businesses included insurance companies; such as Peel & Co., the Lebon Gas Co., and the Italian postal services and banks like the Anglo-Egyptian Banks.

The most noted building on the square was the French Consulate. Its gardens were open to the public on weekends and special occasions. In 1866, La Bourse building, for stock exchange, was created. The Tossiza Palace was used to house the new stock exchange building.

Some of the religious buildings included the Anglican church of Saint Mark, and located near the square were the Scottish church, the German and French Protestants, the Roman Catholic, the Greek Orthodox, the Maronite and Armenian churches, and ElCheikh Ibrahim mosque. The presence of Muslim, Coptic, and Jewish places of worship in proximity to one another affirms the multi-ethnic composition of the cosmopolitan city of Alexandria.

During the ruling of Khedive Ismail, a statue of Mohamed Ali was designed by the French sculptor, Jacquemart. The equestrian statue of the city’s modern founder with its white carrara marble base, later designed by French architect Ambroise Baudry 1871-1873, stood as a landmark in the Mohamed Ali Square.

Place Mohamed Ali was targeted and destroyed by the bombardment of July 11th, 1882. Only two buildings survived of the destroyed square, namely the stock exchange and the Saint Mark church. A military tribunal was set up in front of the Tossiza Palace, called the Ismail Memorial or the “Unknown Soldier”.

The rapid post-1882 development and government compensations resulted in a climate of political stability, sustained economic growth, and administrative reorganisation. A small group of notable family names controlled most financial activities in the city. These agents and bankers, who have become real estate promoters and main shareholders of development companies, were responsible for the development of a great part of ElMansheya, rue Sherif Pasha, and buildings on rue Rosette. They also created the Municipality of Alexandria in 1890, thus controlling the city’s fate. This gave them the opportunity to further promote the European character of the city.

At the beginning of the 20th century, the Europeanisation of the urban morphology continued, creating a new urban space, La Place des Jardins Français in 1909. The Place des Jardins Français was enhanced by the elegant new French consulate in 1909 designed by the French Bureau of Public Works and led by the French architect Victor Erlanger. French influences seemed to have inspired the area and complemented the French garden landscape (Awad, 1996). The gardens were in the French style characterised by an ordered and symmetrical geometric plan. The French influence continued during the Post World War I period, and due to the increase in the price of cotton, Egyptian economy prospered and enriched the city’s merchants.

In the 1960s, the gardens were completely removed and replaced by a bus station, making it one of the most crowded areas of the city. Then in the 1980s, a new plan was generated and the station was removed, turning it once more into a public square. However, the new design wasn’t the original French Gardens, as shown in Fig. 4.



Fig. 4: Four photos of Oraby Square during different historic times showing different plans of the square. (a) French Gardens in the 1930s, (b) Tram and bus station in the 1950s, and (c) Current state of Oraby Square in 2008, all adapted by F. Hussein (2020)

## 6.4 Current state

The urban character of ElMansheya Square is continuing to degenerate due to various factors. The main reasons of such degradation were the lack of maintenance and lack of strict regulations and application of such regulations on the state's behalf. The degraded of the urban environment is very clear by observation, given the current state of the buildings, the crumbling sidewalks, and flooring of the passages. Demographic pressure has led to overcrowding in public spaces. Traffic chaos and the presence of street vendors occupying every available inch of pavements in a poor state are a consequence of mismanagement and the decline of the state's role in the conservation of the built environment and the organisation of urban space.

The current state of ElMansheya Square decreases the possibilities that the square could hold as an open public urban space. The unique design of the gardens, the statue of Mohamed Ali and the Unknown Soldier as landmarks, the skeleton of the heritage building façades, and the timeless importance of the area, all provide social, economic and environmental values that could generally enhance the quality of life of the inhabitants of the area, as well as providing stable, secure and profitable revenue capable of sustaining their future and the future of the square.

## 7 PUBLIC PARTICIPATION

Kevin Lynch (1960) developed the concept of imageability, which is the ability of urban elements to evoke a strong image for an observer. As cities grow, planners and designers strive to improve liveability in the built environment, thus improving the quality of life. There must be an accurate framework that contributes to quality streetscape. One of the effective methods to ensure quality streetscape is taking public opinion into consideration. Public participation can present variables that help develop an urban space or a liveable street better to carry out the intended activities and create memory as well.

Traditional surveys and hand-out questionnaires may have some spatial scale limitations leading to lack of precision and measurement inaccuracies. However, given the developed web-based strategies to record crowd-sourced perceptions, more precise and spatially extended measurements are available. Therefore, surveys have become an indispensable tool for collecting data. The survey questions aim to identify the importance of the case study in terms of memory and identity, as well as the important streetscape elements with the highest influence.

### 7.1 Survey

The surveys conducted in this case study were both on-site and online. The on-site survey was aimed at the static users; those who have constant contact with the place, such as shop owners, vendors, and residents. The online survey was aimed at the mobile users; those who are considered visitors and shoppers. Interviewees were told a brief introduction about the qualities of place and the main four categories of streetscape elements. It was also explained to them the main effects of streetscape elements on the qualities of place, and vice versa. The architectural and urban design principles were briefly shown to interviewees through different examples in the city of Alexandria, as to further show the streetscape elements surrounding any user. The qualitative data resulted from the survey will show the important design attributes in streetscape design that enhance identity and character.

The survey sample was calculated according population. According to demographic statistics from the Central Agency for Public Mobilisation and Statistics (CAPMAS) (City Population, 2021), the population of ElMansheya is estimated to be 24,087 covering an area of 0.6523 km<sup>2</sup>. In order to conduct the survey, a sample of about 300 interviewees was targeted, allowing a margin of error of 5%. Therefore, the required number of interviewees is estimated to be around 1200 interviewees to achieve an estimated response rate of 30%.

The survey questions aimed to explore the memories, emotions, and experiences between the interviewees and the case study. The survey was divided into three parts. The first part consisted of general questions about gender, age, reasons of visiting ElMansheya Square, duration of time spent on site, and the frequency of visits. The second part addressed the local identity of ElMansheya in terms of the existing memories of visitors and inhabitants and the ranking of the qualities of place. The third part consisted of likert questions that investigated the level of agreement of the interviewee with the streetscape elements of the site and the ranking of the important physical features that could enhance the identity and character of the site.

## 7.2 Survey Results

As a result of the nature of ElMansheya Square, being a commercial centre for downtown Alexandria, and the wide variety of products available, shopping was expected to be the main reason for visiting ElMansheya Square. Also, given the fact that a garden exists, it was expected that a fair number would visit ElMansheya Square for leisure purposes as well, such as jogging, walking and just enjoying the gardens. However, this purpose was presented in only 22% of the interviewees. About 20% visited ElMansheya Square on a regular basis a few times a month. Only 13% visited the gardens daily, and it is expected that the majority of this percentage were workers in the site. A vast 52% of participants visited ElMansheya Square and spent hours there. Given the fact that the most important reason of visiting was for shopping, then it is expected that the hours were spent in the shops and the commercial centres rather than in the gardens themselves.

A vast majority of 57% agreed that the Square was not linked to any personal memories and that was mainly because of the result of the current state of the Square. Many participants agreed that if the Square was in a better state, then maybe it would have been linked with memories and the possibility of future memories as well. This shows the strong relation between the physical aspects of the place and the memories it shares with participants.

Concerning safety and comfort, approximately 57% agreed that they do not feel safe and comfortable in ElMansheya Square as opposed to the 43% who did. The main reason that explained this reading was the lack of security members and the constant presence of homeless people and street vendors. Also, a major factor that contributed to this percentage was the lack of proper maintenance of lighting fixtures for a well-lit safe garden space.

About 62% agreed that ElMansheya Square had a unique identity. This high percentage proves that the Square already has potential to stand out and just needed some tweaking. The potential and scope of improvement expanded when the participants acknowledged the unique identity and special character that ElMansheya Square had.

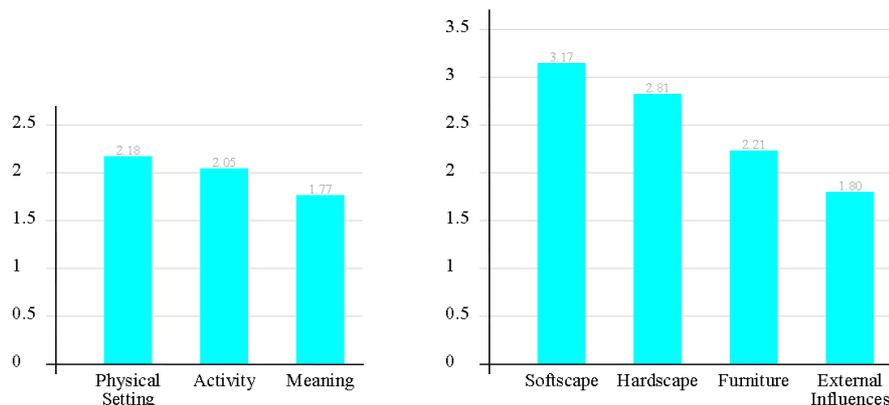


Fig. 5: Scores for the ranking of "Qualities of Place" left and "Elements of Streetscape" right, (by author)

When given the chance to arrange the qualities of place, participants agreed that the main quality was Physical Setting ranking first with a score of 2.18, followed by Activity and Meaning with respectively, as shown in Fig.5 to the left. This reading shows the strong impact of the Physical Setting on a space. It also shows that the possibilities behind a well-prepared and maintained setting are vast and encourage a large scope of improvements.

Also the most important element in streetscape composition was the Softscape elements ranking first with a score of 3.17, followed by Hardscape, Furniture elements, and External Influences respectively, as shown in Fig.5 to the right. Many participants agreed that the softscape features, most significantly tree canopies and grass cover, made a strong impact on the sense of comfort of the space. Another important aspect was that the greenery increased the feeling of "fresh air" and canopies and hedges somehow acted as a buffer from the vehicular lanes surrounding the gardens. Various older participants asked that facilities for elderly and handicapped users should be added, such as ramps, benches, and properly paved walkways.

Another important reading was the 71% that agreed that ElMansheya Square was properly used as an open space. This compliments the 57% that agree that the gardens encourage a wide range of activities, but only if well-prepared and constantly maintained. Along the survey, several participants noted the same things to be

changed in ElMansheya Square in order for them to feel more of a sense of belonging to the space. Various participants asked for more security presence, pedestrian streets surrounding the gardens from specific sides, designated shops for current street vendors, and the total absence of homeless people and beggars. Other aspects consisted of suggestions such as no fencing for the gardens' perimeter; however hedges were a preference, better pavements and ramps, constant maintenance of furniture elements, cleanliness of gardens, and increasing lighting fixtures.

In this context, related institutions must analyse public open spaces in the city from a participatory perspective to develop the three qualities of place. The improvement strategies suggested should be based on a combined approach of urban design principles and heritage conservation laws. This will provide for a more balanced way to provide a strong future basis for user-and-urban-oriented design decisions, with respect to the historic importance of the site and its envelope.

## 8 CONCLUSION

The findings in this paper indicate that application of streetscape elements composition requires a deep understanding of various factors, such as the urban context, existing environment, socio-economic, community, and cultural conditions, and the historic background. The community character and identity is strongly related to the values and traditions of a community and needs to be celebrated through elements and layers of streetscape, along with the overall imageability. Streetscape composition should focus on the main intervention tools that enhance identity and character. The introduction of theoretical guidelines to develop and revitalise historic spaces is crucial. Intervention tools can vary from removing unsympathetic elements and activities to completely redesigning a space with the surrounding envelope. The extent of each interventional decision taken is based on its importance and effectiveness.

However, all intervention methods were highly recommended in ElMansheya Square to better enhance the gardens in terms of identity and character. This will eventually result in a proper urban space that acts as the lung for the neighbourhood and probably surrounding ones, as well as an attraction point for tourists and outsiders given the historic importance of such an amazing site.

## 9 REFERENCES

- Agnew, J. A. and Duncan, J. S.: *The Power of Place: Bringing together geographical and sociological imaginations*. Routledge, 1989
- Alexander, C., Ishikawa, S., Silverstein, M., Jacobson, M., Fiksdahl-King, I., Angel, S.: *A Pattern Language: Towns, Buildings, Construction*. New York, Oxford University Press, 1977
- Arefi, M.: Non-Place and Placelessness as Narratives of Loss: Rethinking the Notion of Place. *Journal of Urban Design*, Vol. 4(2), P. 173-193, 1999
- Aurbach, L.: *Traditional Neighborhood Development Design Rating Standard*. <http://www.epa.gov/smartgrowth/>, 2005
- Awad, M.: *The Metamorphosis of Mansheya. Alexandrie en Égypte: Méditerranéennes*. Last accessed 20/4/2021, <http://thewallsofalex.blogspot.com/2014/07/the-metamorphosis-of-mansheya.html>, Vol. 08-09, 1996
- Bandarin, F. and Van Oers, R. (Eds.): *Reconnecting the City: The Historic Urban Landscape Approach and the Future of Urban Heritage*. Chichester, 2015
- Breakwell, G. M: *Coping with threatened identities*. Methuen, London, 1986
- Canter, D: *The Psychology of Place*. The Architectural Press Ltd: London, 1977
- Carmona, M., Tiesdell, S., Heath, T., Ocas, T.: *Public Places, Urban Spaces: The Dimensions of Urban Design*. Routledge, Architectural Press, 2010
- Cheshmehzangi, A. and Heath, T.: *Urban Identities: Influences on Socio-Environmental Values and Spatial Inter-Relations*. *Procedia – Social and Behavioural Sciences*, Vol. 36, P. 253-264, 2013
- City of Cheyenne: *Streetscape/Urban Design Elements: Definitions, Principles, and Rules for Success*. Otak, Inc., Carbondale, 2012
- City Population Website, Africa, Egypt, Administrative Division of Al-Iskandariyah, Sub-division of Al-Manshiyah. Last accessed 26/04/2021, [https://www.citypopulation.de/en/egypt/admin/02\\_\\_al\\_iskandariyah/](https://www.citypopulation.de/en/egypt/admin/02__al_iskandariyah/)
- Cullen, G.: *The Concise Townscape*. New York, 1971
- Ewing, R. and Handy, S.: *Measuring the Unmeasurable: Urban Design Qualities Related to Walkability*. *Journal of Urban Design*, Vol. 14(1), P. 65-84, 2009
- Falahat, M.: *Sense of place and the factors affecting it*. *Fine Arts Magazine*, Vol. 26, 2006
- Feldman, R. M.: *Settlement Identity: Psychological Bonds with Home Places in a Mobile Society*. *Environment and Behavior*, Vol. 22, P. 183-229, 1990
- Gehl, J.: *Life Between Buildings: Using Public Space*. New York, 1987
- Gehl, J.: *Cities for People*. Washington, Island Press, 2010
- Getty: *Historic Urban Environment Conservation Challenges and Priorities for Action: Experts Meeting Report*. The Getty Conservation Institute, 2009
- Gieryn, T. F.: *A Space for Place in Sociology*. *Annual Reviews for Sociology*, Vol. 26, P. 463-496, 2000
- Goldstein, J. B. and Elliot, C. D.: *Designing America: Creating Urban Identity*. New York, 1994
- Graumann, C.: *On Multiple Identities*. *International Social Science Journal*, Vol. 35, P. 309-321, 1983
- Hartanti, N.: *Streets as Livable Space in the Urban Settlement*. *Proceeding of International Seminar on Livable Space*, Jakarta, 2012

- Hull, B. R., Lam, M., Vigo, G.: Place Identity: Symbols of self in the urban fabric. *Landscape and Urban Planning*, Vol. 28, P. 109-120, 1994
- Hummon, D.: *Commonplaces: Community Ideology and Identity in American Culture*. State University of New York Press, 1990
- Hussein, F., Stephens, J., Tiwari, R.: Cultural Memories for Better Place Experience: The Case of Orabi Square in Alexandria, Egypt. *Urban Science Journal*, Vol. 4, Issue 7, 2020
- Jacobs, J.: *The Death and Life of Great American Cities*. Penguin Books, London, 1961
- Korpela, K. M.: Place Identity as a product of environmental self regulation. *Journal of Environmental Psychology*, Vol. 9, P. 241-256, 1989
- Kroger, J.: *Identity Development: Adolescence through Adulthood*. Sage, 2000
- Lalli, M.: Urban-related Identity: Theory, measurement, and empirical findings. *Journal of Environmental Psychology*, Vol. 12, P. 283-303, 1992
- Lynch, K.: *The Image Of The City*. Cambridge, MA: MIT Press, 1960
- Lynch, K.: *A Theory of Good City Form*. Cambridge, MA: MIT Press, 1981
- Mansouri, A. and Natsumoto, N.: Comparative Study of Complexity in Streetscape Composition. *World Academy of Science, Engineering and Technology*, Vol. 3, Issue 6, 2009
- Montgomery, J.: *Making a City: Urbanity, Vitality, and Urban Design*. 1998
- Mumford, L.: *The City in History*. New York: Harcourt, Brace and World, 1961
- Pegler, M.: *Downtown Alliance Streetscape Design Guidelines: The Public Realm*. Michigan, 2006
- Proshansky, H. M.: The city and Self-identity. *Environment and Behavior*, Vol. 10, Issue 2. Sage Publications, USA, 1978
- Relph, E.: *Place and Placelessness*. Pion: London, 1976
- Salama, A. M.: Knowledge and Design: People-Environment Research for Responsive Pedagogy and Practice. *Procedia - Social and Behavioural Sciences*, Vol. 49, P. 8-27, 2009
- The Downtown Alliance Streetscape Steering Committee: *Downtown Streetscape Design Guidelines*, 2006
- Twigger-Ross, C. L. and Uzzell, D. L.: Place and Identity Processes. *Journal of Environmental Psychology*, 1996
- Wibisono, B. H.: *Transformation of Jalan Malioboro, Yogyakarta: The Morphology and Dynamics of a Javanese Street*. PhD Dissertation at Faculty of Architecture, Building, and Planning, University of Melbourne, 2001
- Winkel, G.: *The perception of neighbourhood change*. New York, 1981
- Zakariya, K. and Harun, N. Z.: The People's Dataran: Celebrating Historic Square as a Potential Temporary Market Space. *Procedia - Social and Behavioural Sciences*, Vol. 85, P. 592-601, 2009