Evaluating the Scarcity of Public Squares in the City of Nablus

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ABSTRACT

Public Square is an accessible space for all individuals and usually hard-surfaces surrounded by buildings and is considered an attractive place for the people's gathering. Public squares are one of the fundamental components of the urban environment. It affects the social life and the social coherence positively and encourages the interaction between the people in the community. However, in some cases, the squares are not used by the people or do not exist in a city due to various reasons, factors, and qualities such as the case of Nablus city in Palestine that has a special socio-political condition and it is chosen as the case study for this research. Two types of analysis were carried out; the first one involves the analysis of existing planning policies, and the socio-political characteristics of the entire city while the second focuses on the analysis of the selected squares in the city in terms of physical qualities, natural effects, and socio-cultural characteristics. Based on this study, it is found that there are clear weaknesses and deficiencies in the public squares in Nablus city such as the absence of effective planning policies regarding public square, the topography of the city, the small size of the existent squares, the culture of the people, and the socio-political conditions, all played a role in affecting the usage and existence of public squares in Nablus city.

Keywords: Public squares, City of Nablus, Physical qualities, Socio-cultural characteristics, Planning policies, Natural effects

ÖZ

Kamusal meydanlar, binalarla çevrelenmiş, insanların toplandıp çeşitli aktiviteler yapabileceği cekici alanlardır. Genelde sert yüzeylerle kaplıdırlar. Kamusal meydanlar, kentlerin temel bileşenlerinden birini oluşturmaktadır. Bu mekanlar, toplumsal yaşamı ve toplumsal uyumu olumlu şekilde etkileyen ve ayrıca toplumdaki kişiler arasında etkileşimi de teşvik eden alanlardır. Ancak, bazı nedenlerden dolayı, insanlar tarafından kullanılmayan veya kullanılamayan meydanlar da bulunmaktadır. Bu çalışmada, Filistin, Nablus kentinde yer alan meydanlar araştırılacak ve meydanların sayısının az olması ve ayrıca az kullanımlarının nedenleri ortaya konacaktır. Çalışmada, iki tür araştırma yöntemi kullanılmıştır; birincisi, kentin planlama politikası ve sosyo-politik karakteri ile ilgili dökümantasyon çalışması, ikincisi ise, seçilen meydanlarda fizikel kalite, doğal etkiler ve sosyo-kültürel değerlerin analizidir. Bu çalışma sonrasında, Nablus kentindeki kamusal meydanlarda belirli zayıflıklar ve eksiklikler olduğu söylenebilmektedir. Bunların başlıcaları, meydanlarla ilgili planlama politikalarının kısıtlı olması, kentin eğimli olmasından dolayı meydan yapımına uygun düz alanların azlığı ve mevcut meydanların küçük olması gösterilebilmektedir. Ayrıca, Kentte yaşayan halkın, sosyo kültürel yapısı ve kentin içinde bulunduğu politik durumdan dolayı da mevcut meydanların yeteri kadar kullanılamadığı söylenebilmektedir.

Anahtar kelimeler: Kamusal meydanlar, Nablus Kenti, Fiziksel özellikler, Sosyokültürel özellikler, Planlama politikaları, Doğal etkiler

DEDICATION

I dedicate this work

To my father and mother

Who supported me

To complete this Study

And to them I am grateful

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Chapter 1

INTRODUCTION

1.1 Introduction

Public space includes the outside are of our private zones like house or work (Rupa, 2015). While moving between these places, people are unquestionably going through the public space. Thus, public spaces are used in daily life activities by all people regardless of their age, race, or ideas (Rupa, 2015). Public spaces work as an attraction for social life and give the opportunity for users to meet people out of our zones of family, friends, and relatives, and they are the place for important events like presidential elections, religious activities, festivals... etc. Moreover, public spaces tend to be located in central locations within cities (Abbasian, 2016).

Public squares are one of the most important types of public spaces and are usually showing the soul of the city, its culture, and its identity. Urban public squares are also the place where the activities and life of urban environment takes place since the existence of the ancient cities like the "Agora" in the Greek cities which was used for the trade, politics, and sport contests (Memluk, 2013). Additionally, public squares are very important physical elements of the city which reflects the influence of the community on its shape (Mustafa, 2010).

In the city of Nablus, the issue of public squares has always been a matter of discussion due to the scarcity of such spaces in the city. It is a crucial need to have

high-quality public squares in a city so that the citizens have the opportunity to conduct their activities and to enhance their social life. However, the people in Nablus do not have such an opportunity due to the lack and deficiencies of public squares. Thus, it is important to clarify the reasons and factors affecting the scarcity of public squares in Nablus which will provide a framework for possible future solutions.

1.2 Problem Statement

In many countries around the world, public squares are constructed and distributed in a way which provides adequate and sufficient places for people to enjoy their time and to increase the liveability in the city. Nablus, a Palestinian city located at the north part of West Bank, experiences a problem of which there is shortage of public squares. Moreover, the disregard of public squares establishment can also be noticed in the new residential development areas in the city.

As a result, it is very important to conduct this study to understand the main reasons beyond this issue and to set up an effective framework for future solutions that can be used to facilitate the foundation of new public squares in the city.

1.3 Research Aim and Objectives

This thesis aims to discover the main reasons causing the scarcity of public squares in the city of Nablus. To reach this aim, the following objectives should be achieved:

- Understanding the concept of successful public squares.
- Studying and clarifying the main factors that affect the existence of public squares.
- Analyze the current situation of public squares in Nablus city.

• Provide recommendations which will facilitate the creation of public squares in the city of Nablus.

1.4 Research Questions

Many researches were made regarding public spaces in Nablus, but none of them specialized in discovering the main question that this thesis asks which is: what are the main reasons for the scarcity of public squares in the city of Nablus. Sub questions are:

- What are the definitions, forms, and types of public spaces and public squares?
- How the urban form of Nablus affected the existence of public squares?
- What are the ongoing facts and condition of public squares in the city?
- What is the role of the different decision makers in Nablus city regarding the creation of public squares?
- How the planning policies affect the existence and usage of public squares in Nablus city?

1.5 Research Methodology

This study will follow the frequently used method of finding clues and indicators from the theoretical background then reflect these indicators on the selected case which is Nablus city. A qualitative analysis will be carried out to create a comprehensive understanding of the public squares, the definition, types, and forms of public spaces in addition to the definition and forms of public squares will be explained in the first part of the study, followed by the clarifying the factors which affects the existence of public squares.

In the analysis part, the determined factors and indicators from the previous section are applied on the selected case of Nablus to create informative clarification about the public squares. The analysis depends on physical observation along different time periods, mapping, physical analysis using inventory forms, and documentary research to find the main reasons that dominate the public squares issue in Nablus city.

1.6 Limitations of the Research

There are some limitations that will restrict the scope of this study. This research is limited by the selected time periods for the observation of the squares which were in July, 2019 along two weeks, during weekends and weekdays, and during three time periods for each day; the morning time between 8:00 until 10:00, the afternoon time between 16:00 to 17:00, and the night time between 22:00 to 00:00. This research is also limited by the selected public squares in Nablus city based on the formal type, functional type, base plane, architectural frame, objects in squares, activities, socio-cultural characters, and natural issues. Another important limitation for this study is that the collected social data could not be presented due to the critical socio-political conditions in Nablus city.

Chapter 2

THEORETICAL BACKGROUND ABOUT PUBLIC SQUARES

2.1 Introduction

Cities can be seen as a structure which consists from two main parts; the built-up areas like buildings and the open areas like the open spaces that we use to move between the buildings (Hillier, 2005). Many definitions for the term of public space were set by different researchers, to mention a few, Stephen Carr and others, defined public space as the place which is open and accessible for all individuals, and also he described Public space as "the stage upon which the drama of communal life unfolds" (Carr et al.,1992, p.3). In his book 'Public Places and Urban Spaces', Matthew Carmona also defineS the public space from the perspective of accessibility as the place which is open and accessible to all individuals including the streets and the open green areas like parks which has no restrictions to access (Carmona et al., 2003).

Based on previous researches, the definition of public space in the urban areas (Urban Public Space) was summarized as the accessible space that exists between buildings in cities and urban areas which gives the opportunity for residents to meet and interact with each other and gives them the feeling of natural ambience (Li, 2003). Thus, public spaces are considered as the place for human activities and the

heart of the city which means the existence of such spaces can enhance the social and economic aspects in the city.

Public spaces can be the best solution for numerous social problems attacking our communities such as racism, segregation, class, and gender since it encourages the interaction between the different groups of the community and gathering them in one place by various social activities that will lead to a social cohesion and equality in a community (UN-Habitat, 2004). The existence of public spaces can achieve many other social benefits for the community. Firstly, it provides a place for children and young people to play, learn, make friends, and interact with the outdoor environment especially when trees and green areas are included (Taylor et al., 1998). Secondly, it reduces the crime rates and increases the feeling of security especially when it has sufficient lighting and used by large amount of people (Bogar & Beyer, 2015).

Public spaces include many forms and types, Li (2003) classifies the public spaces according to four aspects: Firstly, whether they are natural (like forests) or man-made (like streets). Secondly, according to the function of the space, spaces can be divided to four categories: residence, transportation, recreation, and work. Thirdly, land use pattern including residential use, urban public facility use, and greenbelt. And lastly, the location, it can be municipal level, street level, or district level (Table1). One of the most important and known type of public spaces is the public squares which will be explained in the following section.

Criteria	Category	Examples	
		Scenery Site	
		Protected Area	Waterfall, mountain, forests.
Natural/Man-		Reserved Area	Forest, wetland
made		Streets	
	Manmade	Squares	
		Park and greenbelt	
		Indoo	r spaces
	Residence	Community centre, ground for kids, etc	· · · · · · · · · · · · · · · · · · ·
Function	Function Transportation City entrance, crossroads, pedestristreet, etc. Recreation Park, amusement park Work Greenbelt in factory, municipal square		roads, pedestrian
			ırk
			y, municipal squares.
	Residential Use	Public service facilities in a community, outdoor space in a community	
Land Use Pattern	Urban Public Facility Use	Cultural, entertainment, commercial, financial, historical, and municipal facilities that open to the public	
	Greenbelt	Public greenbelt, urban park.	
	Municipal Level		e center, cultural and r, urban square, urban ervice serve all the
Location	District Level	District commercial greenbelt, etc. All th in the district	center, park, nis serve people live
	Street Level	Community center, etc. Those facilities around them	

Table 1: Classification of public spaces (Li, 2003, p.11).

2.2 Definition of Public Squares

The concept of public squares has been usually used to describe the beautiful and attractive urban spaces. However, this term is used very often in a completely opposite way to indicate the empty, unused, unfinished, neglected, urban spaces which do not even fulfill the minimum requirements (Penčić, no date). Thus, it is important to clarify the exact meaning and definition for public squares. According to Oxford dictionary (online dictionary), the term "square" is defined as: "open (usually four-sided) area surrounded by building". Lynch (1981, p.443) described urban public square by saying that "... it will be paved, enclosed by high density structures, and surrounded by streets, or in contact with them. It contains features meant to attract groups of people and to facilitate meetings".

Other researchers focused on the physical and spatial dimensions of public squares in their definitions, for example, Marcus and Francis (1998, p.14) wrote that public square is "mostly hard-surfaced, outdoor public space from which cars are excluded. Its main function is as a place for strolling, sitting, eating, and watching the world go by. Unlike a sidewalk, it is a place in its own right rather than a space to pass through". Public squares also defined as an open area commonly found in the heart of traditional towns used for community gatherings. Other names for town square are civic center, city square, urban square, market square, public square, plaza (Spanish), piazza (Italian), and place (French)" (Dyer & Ngui, 2010, p.3-8).

Based on the previous definitions, square are an accessible public space for all people and include different types of functions with different spatial forms. The next section will include the dimensions and functions of public squares.

2.3 Dimensions of Public Squares

In a simple manner, the existence of a public square public will provide a place for the people to interact and talk to each other, to have a drink or a fast meal, and sometimes to rest after work or after shopping in the surrounding streets. Moreover, the existence of attractive public squares can also affect the economy in a positive way by attracting commercial activities to open around the squares. All cities try to increase their investments and attract businesses, but in many situations, the availability of public squares will make the difference since it will attract more people to the area, which means more shopping and more trade which is the main thing that most of the companies are looking for. This fact will attract more investors and develop the local economy for the city. (Peiser & Schwann, 1993).

Public square has a significant importance in the physical, natural, social, psychological, aesthetic, economic, political, and symbolic aspects (Ercan, 2007). Each one of these dimensions will be explained separately. The Physical dimension of public squares incorporate apparatuses and facilities to meet the needs of everyday life of individuals. Squares give a stopping space to rest, benches and places to sit, and places for economic, social, and political activities like shops, ATM machines, post office, and facilities for cultural events, moreover, public squares increase the diversity of the public spaces in the urban area (Gül, 1993). The natural dimension includes the ecology and microclimate and it is mainly seen through the trees and vegetation within the squares, also more squares means more open spaces for pedestrians and fewer cars which contribute towards a healthier environment (Ercan, 2007).

One of the most important dimensions of public squares is the social dimension. Squares are an open area for everyone which makes it an ideal environment for the social interaction within a community, it is also the place which inside you can find different ages, religions, gender, and classes without any segregation between them (Tavakolian, 1990). Thus, the users can understand their surroundings and community better through the people in the public square (Shaftoe, 2008). Similar to the social importance of public spaces, the squares contributes significantly in achieving the social coherence in the community.

Regarding its psychological dimension, public squares improve the mental health for the users. According to Shaftoe (2008), some researches proved that health will be negatively affected; fatness and heart diseases are more often to appear when the lifestyle is "more sedentary" and this is what public square tries to reduce by providing a healthier life. Moreover, many public squares include green areas, also it is a place for social interaction with others, and these functions are irreplaceable points for the mental health because it reduces the stress and give the feeling of relaxation for the users (Carr et al., 1992).

The aesthetic dimension of public squares was highlighted by Sitte (1965) in his book "City Planning According to Artistic Principles" which mentioned that the aesthetic aspects are very important for the beauty of squares and cities. This aspect is mainly a visual one because it is mainly observed by the eyes of the users, moreover, there are other senses included in this aspect like hearing (when the noise of the traffic is isolated or when there is a sound of water and birds), smelling (flowers and fragrant roses), and touching (texture of the ground or the furniture), so the aesthetic role is a combination of different senses (Shaftoe, 2008). Since the creation of the 'Agora' in the Greek era, the economic dimension has a major significance in public squares since it has been used as a center for the trade and markets (Gehl, 1987). Although there are special areas in the cities for shopping and markets, but a clear relation exists between the squares and the economic activities since public squares attract the people and this cause a commercial activity and a financial benefits (Ercan, 2007). These benefits will lead to an increase in the prices of the surroundings real-states and create a better business environment (Shaftoe, 2008).

The fact that squares are public places makes it a perfect location for the Political actions and so public squares have also a powerful importance in the political life (Tavakolian, 1990). Due to its attendance by all people, public squares are considered the place of democracy and public speeches, where a group of people can express themselves freely (Shaftoe, 2008). The last dimension of public squares is the symbolic aspect, which is related very strongly to the identity of the place. The public square became the image of the city and its identity such as Trafalgar square in London (Lynch, 1960). Squares can also have a symbolic value for a group of people to conduct their religious, cultural, or artistic activities and they become related to this square in one way or another (Ercan, 2007). Due to all of the previous dimensions and roles of public squares, it became a very essential and attractive element in the cities and societies (Table2).

Dimension	Examples	
Physical	Architectural frame and street furniture elements	
Natural	Trees and vegetation	
Social	Encourage Interaction between people	
Psychological	Reduces stress and improve the mental health	
Aesthetic	Increase the beauty of the city	
Economic	Attracts investors and provide economic benefits to the surrounding facilities	
Political	Perfect place for public speeches and protests	
symbolic Strong relation with cultural and religious practices of t community		

Table 2: Dimensions of public squares (created by author). Based on (Ercan, 2007).

2.4 Types and Forms of Public Squares

The formation of public squares can be seen from two different ways. The first one is that public squares "developed naturally" which means that these spaces appeared spontaneously by allotment, using it by people for particular function during a long period of time, or due to dense presence of people because of an attraction or interest for them. All of these practices can be found in places that gather people for specific intents and then the importance of the place increased when people started depending on its existence for their needs like meeting, relaxing, political protests, or to sell goods. Such places can appear at the edge of a street, between buildings, or a vacant land in a neighborhood (Carr et al., 1992).

The second way of public squares formation is the "planned public square". Although it may have the same function for the naturally developed ones but its origin is different. The planned public squares are created by planners, architects, and landscape architects based primarily on a request from the related authorities such as planning department, municipality, or decision makers for the goal of public benefit. The emergence of such spaces can change the layout of the entire area because this can cause the change in buildings regulations, setbacks from the public square or its surrounding streets, buildings height issues, and other things. It can also attract the construction of new housing areas or commercial centers which will eventually change the city's fabric and layout (Carr et al., 1992).

According to Camillo Sitte (1965), the character that gives the square a special form is the 'sense of enclosure'. He emphasized this aspect and said that a public square is similar to a room, so it should have the feeling of enclosure to be considered a square (Sitte, 1965). In the following figure (Figure 1), different forms of enclosure are presented and it shows that the organization of the encompassing elements draws the borders of the central square (Childs, 2004). The enclosure is strongly required in public squares since it gives the feeling of safety and security. However, the principle of enclosure should not be the only concern in the public squares but the integration and the movement patterns (Carmona et al., 2003).

Different scholars have been attempting to clarify the shapes and forms of public squares. Rob Krier (1979) mentioned that public squares can be three main forms which are squares, triangles, or circles. Then these forms are changed by "angling, segmentation, addition, merging, overlapping and distortion" or it can be modified

by "walls, arcades, colonnades from the street around" to give new forms which can be regular or irregular.

Figure 1: Enclosure forms of Public Squares (Childs, 2004, p.120).

In a different approach, Moughtin (2003), in his book 'urban design, street and square' presented some important classifications for public squares such as the forms set by Paul Zucker who classified public squares to five forms:

- Closed square "where the square is self-contained" like Piazza del Campo in Italy (Figure 2).
- Dominated square where the space is oriented to the direction of a dominant building like Notre-Dame square in Paris (Figure 3).
- Nuclear square where there is a central element in the space such as Romerberg square in Frankfort, Germany (Figure 4).
- Grouped squares which are a combination of multiple 'spatial units'. A good example for this type is Palazzo del Podesta in Bologna, Italy (Figure 5).
- Amorphous square where there are no clear limits for the space like Washington Square Park in New York (Figure 6).

Moreover, under the principle of enclosure, Camillo Sitte set only two forms for public squares which are the 'deep' and 'wide'. These two forms have the same meaning of the 'closed' and 'dominant' from Zucker classification.



Captured by: Kenwiedemann



Source: URL1

Figure 2: Example for closed squares. Piazza del Campo, Italy.





Captured by: Godong Source: URL1 Figure 3: Example for dominated squares. Notre-Dame square, Paris, France.





Captured by: (unknown)Source: URL1Figure 4: Example for nuclear squares. Romerberg square, Frankfurt, Germany.



Captured by: Jansoone Source: URL1 Figure 5: Example for grouped squares. Palazzo del Podesta, Bologna, Italy.





Captured by: Capucho Source: URL1 Figure 6: Example for amorphous squares. Washington Square Park, New York.

Another classification of public squares is made based on their functions. According to Peter (1963), the functional categories of public squares include the following types:

- Religious square: the squares in front of churches and temples or within a religious place and used for the performance of ritual ceremony, including prayers, blessings and sacrifice, religious festivals and can be used by the public in the normal times (Peter, 1963). A good example for this type is St Peter's square in Vatican which is used for the religious festivals each year (Figure 7).
- Commercial square: refers to the public squares which are located within commercial areas or surrounded by shops, retails, shopping malls, or other kind of commercial facilities, also it can be a square used as an open market and act as

the buffer area for surrounding buildings (Li, 2003) such as Time's square in New York which has numerous shopping areas and malls (Figure 7).



Religious square (St Peter's Square)



Commercial square (Time Square)

Figure 7: Examples for religious and commercial squares, St Peter's Square in Vatican & Time Square in New York. (Photos from: CNN news agency)

• Leisure square: it includes the recreational squares for tourism and city's attractions and it creates a spontaneous interaction and gathering of people without the existence of a specific event or purpose but to enjoy the views or the weather (Peter, 1963), and also these types of squares can be used as dating venues for people to meet, an open theater to present arts and dramas, or for festivals (Li, 2003) like Trafalgar square in London which is a very important touristic attraction in the city (Figure 8).



Figure 8: Example for leisure square, Trafalgar Square in London (Captured by: Robin Stevens)

- Residential square: it is usually located in a central area within a neighborhood with sufficient population and residential houses located within a walkable distance to the square and used mainly by the inhabitance of the neighborhood (Lennard, 2018).
- Mix-use square: a mix-use square includes shops and commercial activities in the ground floors of the surrounding buildings while the upper floors are usually residential and it can combine two or more of the previous types (Lennard, 2018), this variety of functions can be found in Rawabi Q-center square in Palestine which includes shopping area, residential apartments, restaurants, and used for the religious festivals during the year (Figure 9).



Figure 9: Example for mix-use square, Rawabi Q-center Square (Source: URL2)

2.5 Physical Qualities of Public Squares

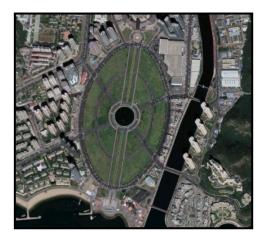
In order to create a successful and attractive public square, many aspects, principles, and qualities should be met; physical qualities like existence of furniture or functional qualities like activities that all contribute to the attractiveness and effectiveness of public squares. In this section, two parts will be discussed in relation to these qualities which are the physical space quality and the functional activities in squares.

2.5.1 Space Qualities of Public Squares

The space qualities of public squares are mainly about the physical elements which contribute the creation of a successful public square. These elements and components can be within the space itself or at the edges and borders of it. For further clarification these qualities are classified into three main categories; the base plane, the architectural frame, and the objects inside the public square.

2.5.1.1 Base Plane

The base plane of public square means the ground or the floor surface area which in this section will include square's size and materials. First of all, the size of public square depends mainly on the place where it is located and also it can reflect the character of the square, for example, Shaftoe (2008) explains that and extended large square can give the feeling of lost and unfriendly like Xinghai square in china which has an area of 176 hectares (Figure 10), also in the large squares people tend to stay close to the edges and hesitate to use the central area which diminish the interaction with other users in the public square (Gehl, 1987), while the narrow or small squares will give the feeling of 'claustrophobic'like Grande de Zafra square (Figure 10).



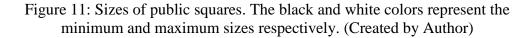


Xinghai Square in China (source:Grande de Zafra Square in SpainURL1)(source: URL3)Figure 10: Examples for large and narrow squares. Xinghai Square in China &
Grande de Zafra Square in Spain.

Consequently, it is important to find what is the best size and dimensions to be used to create a successful public square. Some researchers set recommended measurements for an ideal public square. Lynch (1971), proposed a dimensions of 12 to 24 meters for each side and this can be maximized to 100 meters in the large squares. Moreover, Gehl (1987) suggested a maximum value of 70 to 100 meters supporting Lynch's ideas. Other scholars like Ashihara (1975) said that the minimum dimensions should be $57m\times144m$ and the maximum 90m×180m. Opinions from others like Liu (1999) pointed out the minimum size to be 1.5ha while the maximum 5-6ha (Figure 11).

Usually, the maximum distance that allows two persons to recognize each other in a space believed to be between 30-35 meters (Gehl, 1987). These values are considered the main concern to determine the goal of the square. For example, if the intensive use was the goal, then the dimensions should be minimized, while if the goal is to create an attractive view for a landmark, then larger dimensions should be used.





The second important aspects in base plane of public square, is the used materials and their colors. The materials used in the ground or even buildings facades can affect the conditions of the square visually and physically. In a visual manner, each material's color gives a specific feeling for the user in the square. The warmer the color is the more the space feels tight and small such as Poznan old market square in Poland (Figure 12). In contrast, the cool colors gives a feeling of freedom and breadth which makes the space looks larger and wider like in Prague old town square (Figure 12) (Talebi & Farokhi, 2016).





Poznan old market square in PolandOld town square in Prague (Source:
URL4)(Captured by: Laurel Robbins)URL4)Figure 12: Examples for warm and cool colors in public squares. Poznan old
market square in Poland & Old town square in Prague.

The influence of colors and materials on the users and spatial perception depends mainly on the following factors; firstly, the way the color can be seen; secondly, the reflection degree of the used material; and thirdly, the ability to recognize and sense the colors. Each color can provide a different feeling and moral influence on the people, for example, orange or red, gives hope and liveliness while deeper colors like gray is related to the feelings of fatigue and frustration (Molanaie, 2017). From the physical manner, the crucial aspects of the materials used in public squares is the thermal issue since the pavement or even the building's facade influence the climate and the comfort in the square. Thus, it is important to understand the physical properties for the used materials and to choose the best option that accommodate with the location's conditions of the square to create a relief environment for the users (Dessi, 2011). Based on the previous explanation, using appropriate colors and materials is considered as the most efficient way to achieve the goals of the public square and to create calmness and peace within the users, moreover, it defines the public square and creates a sense of place and unity.

2.5.1.2 Architectural Frame

The architectural frame of a square means the buildings and structures surrounding it which can affect its shape, quality, and identity. The relation between buildings and public squares is fundamental, for researchers like Moughtin (2003, p.87) defines public square as "an area framed by buildings and an area designed to exhibit its buildings to the greatest advantage". When buildings are surrounding a square, it creates a kind of limits and borders, and this is what Sitte (1965) mentioned as the principle of enclosure and he said that "the main requirement for a plaza, as for a room, is the enclosed character of its space" (Sitte, 1965, p.20) which is the most related issue to the architectural frame.

The surrounding buildings can enhance the sense of enclosure by expressing different qualities like the roofs skyline, the height of the surrounding buildings in relation to the size of the square, the existence or absence of a unity in the architectural style, and the general shape of the space itself (Moughtin, 2003). And so, the buildings surrounding a square should have a continuity and harmony in the architectural characteristics. In order to achieve the best enclosure and continuity, the

effect of single structures should be minimized and the repetition of buildings or specific type of houses should be created (Figure 13).



Figure 13: Harmony and enclosure of architectural frame. St Peter's square (Source: URL5)

To decide the best enclosure ratio, researchers suggested different values for the height-width ratio in public spaces. Lynch & Hack (1975) suggested that the width of space should be two-times the height of buildings (1:2) while Alexander and other (1977) believed that the height of buildings should be equal to the space width (1:1). Different opinions presented by Nelessen (1993) who said that the ideal ratio should be (1:5) which means the width of the space should be five times more than buildings' height. These opinions and others are illustrated in Figure 14.

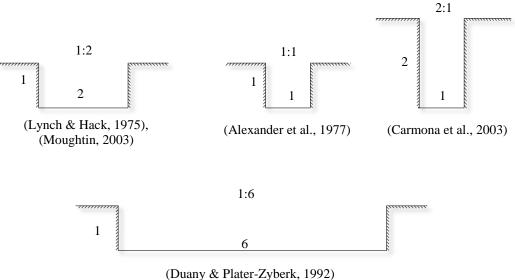


Figure 14: Scholars opinions for the Height-width ratio of public spaces (Created by author).

The ideal and the most agreed ratio of height to width between buildings and space is believed to be between (1:1.5) to (1:2). The reason behind this is clarified by Moughtin (2003). He explained that the angle of eyes vision is 45° horizontally and 27° vertically (Figure 15). Based on these values he concluded that "seeing the details of a building is best achieved at a distance equal to the largest dimension of the building" (horizontal vision) (Moughtin, 2003, p.100). Accordingly, the best distance to view the building as a whole (vertically) is twice the building's height (ratio 1:2).

The materials and colors (from the previous section) are also a part of the architectural frame. This is because buildings' colors and materials can have the same influence on the users within the square as explained before for the base plane materials. So if the buildings were colored with red orange and yellow randomly, this can give a feeling of happiness and activity, while dark colors can cause depression for the users.

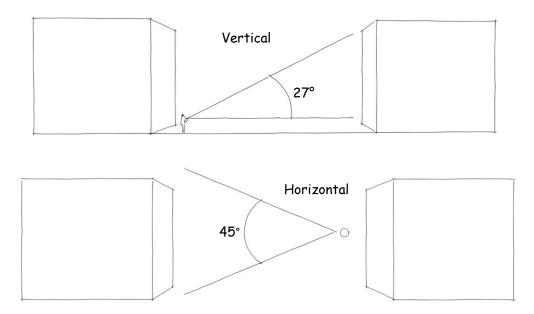


Figure 15: Human vision angles with 1:2 ratio (created by author).

2.5.1.3 Objects in Public Squares

Squares include many elements and objects such as benches, trees, shelters from sun and rain, lighting elements, sculptures, and other things. The seating elements are crucial objects in public squares. According to William Whyte (2009), the size and location are not the main reasons for a public square's success but the amount of places to sit, moreover, he emphasized that whatever activities and attractions the square has, the people will not stay unless there is places to sit. People's preferences are different regarding the sitting location; however, most of the people tend to sit away from the traffic and not too close to a sidewalk or entrances of buildings and mostly go to the square's edges (Marcus & Francis, 1998). Thus, it is important to provide seating elements in the places which users prefer.

There are two types of seating elements, which are primary and secondary. The primary seating places are the normal setting objects like benches, chairs, and any similar things (Figure 16). The secondary elements are the one which are not meant

to be used for seating but the users use it like stairs, ledges, small walls, some sculptures, and many other things (Figure 16). These secondary elements help to make the square look more friendly and vital instead of being limited on the primary seating elements which give a feeling of 'unwelcoming' (Marcus & Francis, 1998).





Primary setting elements (Source: URL6) Secondary setting elements (Source: URL7) Figure 16: Examples for primary and secondary seating elements in squares.

Other furniture objects in squares are shelters which provide protection from climatic conditions like sun, humidity, rain, wind, and snow. The main concern for a square is to ensure the comfort of the users, otherwise it will not be used by people, and so it is important to have such elements in the squares. These environmental circumstances can be controlled by the design and organization of elements around public square like buildings and streets in addition to the use of landscape components as well (Carmona et al., 2003).

Lighting elements in squares are very essential to make the space usable and comfortable especially during the night time. The degree of lighting should be adjusted in a way that gives a feeling of welcome and a feeling of safety and security for the users. The lighting for squares should provide a kind of balance between a clear vision for the entire square and a lighting style that makes the public square more attractive and charming (Unver, 2009), (Figure 17).



Figure 17: Example for Attractive Lighting style in public square (Captured by: Yuga Kurita)

One of the vital and attractive things in public squares is the landscape which is laid out in a square's space based on its character and function, and it also influences the integration of the squares with its surroundings (Jorgensen, 2016). Landscape is classified into two main types which are the soft landscape and the hard landscape. Soft landscape is a term used to describe the greenery areas of a space where trees, grass, and plants are distributed to improve the design (Figure 18). The parallel term is the hard landscape which means the construction materials used to build the hard surface of the space like concrete, tiles, or pavement, (Polackova, 2012), (Figure 18). The goals of landscape is not just to create some green areas in a square after it is built, but to achieve beauty and utility for the different uses of the exterior spaces (Lohmann, 1963).





Hard LandscapeSoft LandscapeFigure 18: Hard and soft landscape (KL Landscaping, 2019, p.15)

The last element to be discussed in this section is the public art. Public art is considered the most beautiful and appealing object in public squares and contributes in forming the identity and the image of the space (Childs, 2004). Public art includes sculptures, monuments, water fountains, and statues (Shaftoe, 2008). Urban sculpture was defined as "a three-dimensional volume with artistic form and expression that it can look into it from different aspects" (Sabouri et al., 2015, p.2). The major function of sculptures is to create a unique image, identity, and spirit of the public square. Other functions of sculptures were mentioned by (Shans, 2006):

- Upgrade the quality and create succulence in public squares.
- Contributes to a better awareness and understanding of the cultural meanings and values especially when the sculpture represents a special event in the history or culture.
- Presents new and different types and styles of art and give the people more visual knowledge about these styles.
- Provides a sense of harmony, order, and centralization for the square.

The creation of sculptures in public squares enhance the visual variety in these spaces along with the feeling of belong to the community. Sculptures can also affect

the improvement of comfort feeling and satisfaction of the users, reduce the pressure from the noise, work, and cities. Moreover, such elements proved its benefits in strengthening the artistic taste of people, assuming that instead of going to a museum, the museum appears in the middle of people (Sabouri et al., 2015). Figure 19 shows a sculpture in public square.



Figure 19: Example for sculptures in public squares. Trafalgar Square, London (Source: URL8)

2.5.2 Activities in Public Squares

Public squares should provide wide variety of activities and uses for users since they are being used by different groups of people (men, women, children...etc.). The activities which can be made is a public square are numerous, but researchers tried to classify these activities such as Gehl (1987) who clarified three main categories of activities in public squares; social activities, optional/recreational activities, and necessary/functional activities.

2.5.2.1 Necessary Activities

This kind of activities can be described as mandatory since the group of people in this category have no choice. For example, passing through the square to go to school, to work place, or waiting public transportation or someone (Figure 20). In other words, this category includes all the daily entertainment or tasks activities in public squares. Since these activities are necessary, they are not much affected by the 'physical framework'. Such activities will continue along the year, under almost all circumstances, and are relatively autonomous from the surrounding environment (Gehl, 1987).



Figure 20: Example for necessary activities (source: URL9)

2.5.2.2 Optional Activities

The activities that people do just when they have the intention and willing to, and when the timing and location are appropriate. These types of activities include walking to have a fresh air, watching the surroundings, enjoying the views, or sitting and exposing to sun (Figure21). Such activities exists when the exterior environment is convenient and when the weather is attractive. This relationship is significant for the aspect of physical planning because the majority of the entertainment activities and recreational ones are part of this category. The obvious difference between this type and the previous one (necessary activities) is that this type is dependent on the outdoor environmental conditions (Gehl, 1987).



Figure 21: Example for optional activities (source: URL10).

2.5.2.3 Social Activities

Social activities relate mainly to the existence of other people in the public square. The playing young people, the conversations between users, and any other similar social interactions, are all part of this category (Figure22). An important issue to be indicated is that many activities from this type are related in one way or another to the two previous categories because users are in the same public square, talking to each other, passing next to each other, or just seeing each other, in other words, when the optional or necessary activities occur under suitable conditions, the social type of activities results spontaneously (Gehl, 1987). Table 3 summarizes the different types of activities.



Figure 22: Example for social activities (source: URL11).

(Gehl, 1987)		<i>y</i>
Types of activities	Description Examples	
Necessary Activities	People have no choice but to do it (mandatory) • Waiting for the bus i the square	
		• Passing through the square on the way to school
Optional Activities	It depends on the people's desire and intention to do it	Enjoying the viewSitting and relaxing
Social Activities	It depends on other people's existence in the square	• Children playing together
		• Conversations between people

Table 3: Classification of activities in public squares (created by author). Based on (Gehl, 1987)

2.6 Factors Affecting the Existence of Public Squares

If a city has many public squares within its boundaries, a man may wonder why this city has this amount of public squares while other cities don't' have any. Surely there are many different circumstances and factors that play critical roles in this issue, therefore, this section will clarify the most related factors to the existence of public squares in cities which are the planning policies, socio-political characteristics of a society, socio-cultural characteristics, and natural characteristics.

2.6.1 Planning Policies

What is planning policy? A policy is defined as a system of rules and guides to lead and orient the decisions in a way that achieves the wanted goals. Policy is also showing the future intentions by following specific procedures while the main function of a planning system was mentioned by the royal town planning institute (1991, p.1) as "the management of change in the built and natural environments". So, the cities' councils are burden with the duty of establishing a planning system which ensures creating high quality public squares and to provide the proper protection, maintenance, and management for these spaces. This process should be done with the involvement of people (community-based planning) because at the end, the squares are made for the people.

It is a persistent mission of cities to create effective policies and set their goals to meet the needs and expectations of the citizens (Cullingworth & Caves, 1977). Different from other fields of planning policies, public squares are completely located under the responsibility of cities' councils whether this act was official or impulsive. To establish an active planning policy for public squares, all individuals who have knowledge in public squares or an experience related to this field should be a part of the policy preparation phases, moreover, a powerful, independent, and transparent institutional work can significantly ensure the creation of sufficient number of high-quality public squares in cities (UCLG, 2016).

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In the same context, there are some procedures and working methods which can effectively contribute to an efficient planning policy:

- The councils, municipalities, or decision makers should work with a strong cooperation with the community. The engagement of private sector with the middle and low-class groups will form a balance between the conflicting interests and so it will make a more stable public square and avoid the privatization attempts.
- The parallel work between stakeholders, decision makers, and national actors on public squares can guarantee the best practical application of the policies with minimum obstacles.
- The responsibility of the cities' councils and planning departments to acquire sufficient areas of lands to be dedicated for the use of public squares.
- For a long-term conservation of public squares, the local governments should ensure a continuous maintenance process including the landscape and furniture (UCLG, 2016).

Consequently, In the case of passing over these procedures, the planning policy may become ineffective and threaten the existence of public squares in the city. Moreover, there are many other constraints limiting public squares subsistence within the scope of planning policies: Firstly, the invasion occurring on public squares by private facilities like shops. Secondly, the poor financial management in local governments which leads to a dereliction of public squares, their creation and maintenance. Thirdly, ignoring the citizens' needs for public spaces and not considering these demands as a priority. Fourthly, the serious pressure from the real states' market. Fifthly, the urban plans and designs that ignore the definition of public use areas like squares (UN-HABITAT, 2015). In relation to these difficulties, the provision of public squares can be undermined by other factors such as "inadequate supply, unclear ownership, insufficient availability or accessibility, inadequate location and poor quality of location or resources" (HABITAT III, 2017, p.28).

In many the developing countries, the lands offered to public spaces in general and squares in particular are very limited, also there is almost a complete absence of mechanisms to solve such issues or to conserve and existent squares. Unfortunately, some of these countries tend to follow anti-square policies like making these squares under the control of private sector due to various reasons such as reducing the crimes rate but as a result it will also reduce the accessibility and in many cases ruin the main goals for the space (UN-HABITAT, 2015).

A forceful way to ensure the existence of public squares in the countries and cities is the 'National Policies'. Even though the creation of squares is the responsibility of city's council or local government, the national level can strongly help to implement future goals which have be achieved by the lower levels (local governments) like creating more public spaces (Daniel & Strickland, 2017). Such acts from the national level are highly recommended in the countries that have rapid urban growth to meet the needs for the increasing population; moreover, planning in advance is needed to supply sufficient areas of land for the public use (Shaftoe, 2008).

To sum up, if a city is facing a problem regarding the availability of public spaces or squares, then the provision of this issue should be included in the planning policies made by the national planning level which should set the guidelines and the base for the lower planning levels and governmental institutions (local governments, municipalities, councils). Thereafter, these institutions will start reflecting these national policies on their own contexts and decide the best way to conduct the practical actions in reality and examine the results (Figure 23).

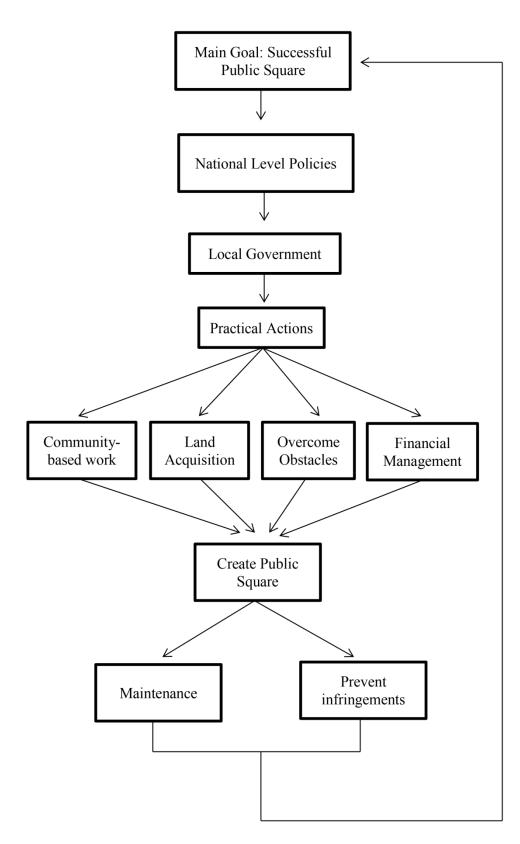


Figure 23: Summary of the Planning Policies section (based on the previous literature, created by author).

2.6.2 Socio-political Characteristics of a Society

This aspect can be seen from two different perspectives; the first one is related to the procedures and actions that work to provide the social requirements for a community and It is also about conserving the current orders and regulations against social classes and segregation, and so it is described as a protection plan to avoid unneeded struggles (Low & Smith, 2006). The second perspective is related to the political conflicts that affect the social life in a city like wars, protests, revolutions, and the conflicts between different parties (Mackel, 2015).

The first perspective of the socio-political characteristics is related to the policies, strategies, and actions which were explained previously in the planning-policies section, thus, this section will focus on the second perspective. From a political view, public spaces are seen as the place for contradictions and conflicts. These contradictions can be the ones between private sector (development projects) and the public sector which supports the people's right for public open spaces, or it can be within the people themselves between different groups and social actors in the normal life practices (Lofland, 1973).

Generally, political conflicts have undoubtedly a major influence on the urban development and on the way how people use public spaces and their perception towards it (Mackel, 2015) and there are many examples for these effects. Firstly, political conflicts like wars, protests, revolutions, or terrorist attacks means unstable civic life in a community and spread fear within the citizens to go out in the gathering places like public squares (Ibrahim, 2016). Secondly, unstable political situation always leads to a big decline in the economy which will push many talented architects and designers to leave their countries to look for better opportunities. As a result, leads to a low-quality development in their countries. Thirdly, major political events like wars cause a dramatic destruction of the infrastructures and housing areas. Thus, the focus of the decision makers and governments goes toward the urgent priorities like the reconstruction of dwellings and infrastructures while neglecting the planning for public squares and other social needs which will make it inapplicable on the long term (Mackel, 2015). Consequently, all of the previous events can directly affect the public squares, its existence and usage.

2.6.3 Socio-cultural Characteristics of a Society

The socio-cultural aspect is "related to the different groups of people in society and their habits, traditions, and beliefs" (Cambridge dictionary, 2019). And so it includes the costumes, the way of life, and the values that regulate the community. About the traditions, it is the name given to the cultural elements or activities which were not lost during the times of change but were preserved and continued (Graburn, 2001). The socio-cultural characteristics consist from many aspects like ethnicity, home environment, language, gender, social aspects, traditions, and the way of life (Ubale, 2017). Generally, culture can be studied as a phenomenon closely related to issues like economy, politics, society and environment and has a strong relation with the identity. It is also the individuals' behaviour towards environment and social life (Habib, 2008).

Culture can shape many sides of our environment; it can affect the architecture, the landscape, and the uses and forms of public spaces (kent, 1990). Culture is also considered as a critical aspect that affects public squares, their creation or devastation. According to Carmona (2003), although people are not passive, they affect and change the environment as it affects and changes them. Thus, the relation between human and environment is a two-way process. (Carmona, 2003).

Generally, culture is a very difficult term to define due to the different usage of this concept in different fields. Due to this, there are many definitions for the term of 'culture'. According to Avruch (1998, p.6): "Culture ... is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society". While others like Mastumoto (1996, p.16) defined culture as "the set of attitudes, values, beliefs, and behaviors shared by a group of people, but different for each individual, communicated from one generation to the next". Culture is also about the view of the world, the life style individuals practice, community values, image, and activities (Rapaport, 1977).

Consequently, culture is a social behaviour, a way of living, and a life characteristic. Due to its importance, many organizations called for considering the culture as a fourth pillar for the sustainable development. Culture can be seen through social groups and through the spaces and places (Pratt, 2014). The relationship between people's culture and the public space cannot be ignored and as Carmona (2003) mentiones "What happens in any particular environment depends on those using it" (Carmona, 2003, p.106). If we inspect Carmona's point of view within the context of public squares it can be understood that in some cases, and if the users (citizens) are not using public squares. In the same manner, Glastetter (2015, p.19) emphasized the relationship between people and the city and mentioned that "The individual and the family, the neighborhood and the region, business and industry, government and education: all shares in the rewards and penalties which result from the way we build and rebuild our cities".

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The society can be classified into two categories: the first one is called the 'cold society' which the individuals believe that their culture and traditions will keep repeating itself and the cycle of generations will conserve the culture, while the second type is the 'hot society' which include the people who are aware of change process and the irreversible effects of time (Graburn, 2001). Thus, decision makers in general, and designers in particular should design a space that calls up meaningful memories, outstanding experiences, and positive values, which will make it socially and culturally accepted and so it will be the place for the activities in a city (Madanipour, 2016). However, when the decision makers (designers) passing over the cultural and social roles for the users, and neglect the types of the society they are dealing with, they will create unsuccessful public spaces (Hoxha & Salaj, 2014).

2.6.4 Natural Characteristics

Each region in this world has its own environmental features and natural characteristics that should be taken into consideration when developing the built environment in these regions, and these development practices and methods are merged together to form on approach called the environmental design. It is defined as the design related to the "social aspects of the environment" and includes "improving understanding of the interrelationships between people, their built and natural surroundings, and helping to create environments responsive to human needs" (Masters, 2012, p.9). In this section, two natural characteristics will be explained, climate and topography since they have the most significant effects on public squares, their usage and designs.

Climate

In the design of urban environment in general and public squares in particular, it is essential to provide user-friendly conditions and comfort for the users, otherwise, it may not be used. Climatic effects like humidity, wind, snow, sunlight, rain, temperature, and shade, all can affect and change our experience in the space (Carmona, 2003). The need for environmental awareness in public spaces is one of the important responsibilities for urban designers such like orientation of blocks, the penetration of sun, the provision of shade, the natural ventilation from the wind, and the shape of spaces (Meltzer, 2014).

The limitations caused by climate have been widely observed by architects and researchers who emphasized the need to study the climatic effects on the creation of the built environment. Although these effect are significant and cause major changes in the built form (like Eskimo houses), there are still many cases where the decision makers implement a design are made to be almost 'anti-climactic' to achieve a maximum economic profit instead of achieving maximum comfort for the users which can result to a complete failure in such projects (Rapoport, 1969).

Moreover, in some other situations, specific pattern and forms of open spaces are brought from other regions and applied on a different place without questioning its suitability with the climate of the new place (Carmona, 2003). In other words, when the climate in a specific area is very hot (like Middle Eastern countries) it is important to provide shading elements and to limit the sun penetration, while in other places where it is colder (like some European countries) it is important to provide more sun penetration to give the feeling of warmth for the users (Shaftoe, 2008).

When designing public squares, a small space with high-rise buildings around will create dark space with no sun going into and so the high-rise and low-rise buildings should be distributed efficiently around the space in a way which allows a favorable penetration of sun and a refreshing path of wind (Shaftoe, 2008). While in hot climates, planting trees is a good solution to provide shading and cooling for the space, however, the designers should keep the number of trees acceptable in which not to change the square's character. The furniture of the square should be also chosen based on the climate by selecting appropriate materials that resist the climatic conditions in the target area (like hot weather or freezing temperatures) which will reduce the maintenance cost on the long run (Memluk, 2013).

In most days of the year – except the hot ones – users prefer to have a square where sunshine is available with elements to minimize the wind. Usually public squares and parks are deserted when they are in shadow or when the weather is windy while other squares with sunshine existence and wind protection are densely used (Gehl, 1987). This is mainly due to the fact that sunlight makes the public squares more enjoyable and attractive. Moreover, sunlight creates a healthier environment and gives the motivation for users to conduct outdoor activities (Meltzer, 2014).

The wind effect on public spaces is strongly considerable, and so it is necessary to take into account the forms and organization of buildings around a public square to avoid creating strong wind paths. This can be achieved by avoiding the layout of parallel buildings which will form a wind tunnel, and distributing the buildings in relatively irregular groups with minimum spacing between them (Figure 24).

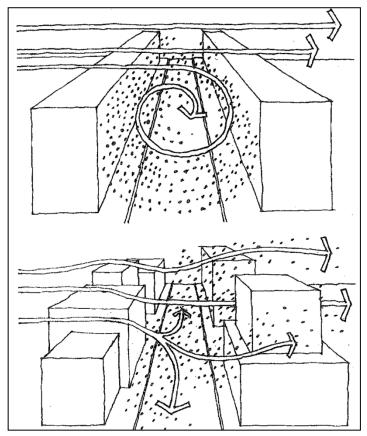


Figure 24: The relation between buildings' form and the wind's intensity (Carmona, 2003, p.196)

Topography

Topography is another important natural character that affects most aspects of design. It can also strengthen or weaken urban elements including public squares by the existence of high hills, valleys, or rivers which each of them have its own advantages and disadvantages on urban elements. This is why the majority of the attractive and successful squares (specially the old ones) are not completely geometrically formed but were constructed and evolved with respect to the topography and other natural limitations (Shaftoe, 2008).

The flat topography can be ideal for many activities like walking and cycling, while for public squares, when it is located on a high ground due to the topography of the area, this will enforce the designers to create stairs or ramps for the access ways which can make the square not easily accessible for certain groups (Gehl Architecture, 2011). However, as long as the terrains are not so steep, the users prefer this kind or variation in the public space and enjoy the three dimensional ground (Whyte, 1980).

There is a strong relationship between topography and climate, as we move up from the sea level to the high terrains like mountains, the temperature decreases and the wind becomes more intense. while in the coastal areas the climate is more humid, and significantly warmer. All of these facts can directly affect the design and the use of public squares since it is necessary to provide suitable elements and environmental solutions in public squares to minimize these effects in order to create a comfortable atmosphere for the users which in turn means a successful public square (Nels, 2017).

The topography can also affect the climate in public squares in a different way, when mountains are surrounding a public square this can make it completely shaded and dark during most of the daylight hours (Figure 25) in addition to a high potential for floods from the rain, also when mountains are in a parallel organization, this will create a strong wind path. These effects will reduce the quality of the public space and the comfort of its users and in some cases, the hard natural conditions may cause a complete absence for public squares in a city (Meltzer, 2014).



Figure 25: Shaded public square due to the mountains. Rjukan town square in Norway (Source: URL12).

2.7 Summary of the Chapter

In this chapter, the concept and definition of public squares was explained based on different researchers' opinions. The physical, natural, social, psychological, aesthetic, economic, political, and symbolic dimensions of public squares were clarified in addition to the formal types and functional types of squares. After that, the physical qualities of squares were identified such as base plane size and materials, the architectural frame which include the enclosure and the buildings around the square, the objects in the squares like benches and lights, and the activities in public squares. The last part of this chapter focused on presenting the factors that affect the existence of public squares including planning policies, socio-political characteristics, socio-cultural characteristics, and natural issues like climate and topography. Table 4 shows a summary of this chapter.

Indicators	Determinants		Summary
Formal and functional types of public squares	Formal types		Squares can be formed spontaneously or by planning and it has different forms: C and amorphous.
Puone oquines	Functional types		Public squares can be classified according to their functions to: leisure, religious,
Space qualities of public squares	Base plane		Includes size and materials of squares which should be adequate in a way nei smallness nor a feeling of loss and unfriendly.
	Architectural frame		The buildings around the square that influence its shape, quality, and identity. which is preferable to be 1:2 ratio of height to width.
	Objects in public squares		Any elements in the square like benches, trees, sculptures etc, and landscape w the quality of the square and the usage density.
Activities in public squares	Necessary activities		The mandatory activities like waiting a school bus or passing through the square
	Optional activities		It happens when the users want to do it when the timing and conditions are appro-
	Social activities		It Depends on the existence of other people in the square like the conversat spontaneously from the previous types.
Factors affecting the existence of public squares	Planning policies		The rules and guides that lead the development process to achieve the expected g assure the creation of sufficient number of squares in a city.
	Socio-political characteristics		The political conflicts that affects the social life in a city, cause unstable civic which will limits the development and prosperity of the urban environment and a
	Socio-cultural characteristics		The habits, traditions, and beliefs of the society which have to be taken into consi create a successful and attractive public square.
	Natural characteristics	Climate	Very important aspect in designing public squares to make it comfortable for the and rain otherwise the square may not be used by the people.
		Topography	The topography affects the design of squares by having steps or ramps in it; also was surrounded by mountains with a limited penetration of sun to the square.

Table 4: Summary of the theoretical background (created by author)

: Closed, dominated, nuclear, grouped,

s, commercial, residential, and mix-use.

either to give a feeling of tightness and

. It also creates the feeling of enclosure

which its location and distribution affect

e to the work.

ropriate like walking or relaxing.

sations between users. This type occurs

goals. Well organized policies can

c life and spread fear within the citizens affect the usage of public squares.

nsideration in the design process to

ne users by providing shelters from sun

to it can cause weakness of a square if it

Chapter 3

CASE STUDY: PUBLIC SQUARES IN NABLUS CITY

3.1 Introduction

Due to the great importance of public squares in cities, it is important to understand why these spaces are not given enough attention in some cities. This situation also occurs in the city of Nablus where there is a clear scarcity of public squares while the development of the city has increased dramatically over the last few years but without any awareness towards the creation of public squares. The lands are becoming less each day due to the rapid urban development.

To discover the reasons beyond the scarcity of public squares in Nablus, many aspects should be studied. Firstly, an overview will be made for the development and urban growth of the city, how it evolved though the history, and who are the nations that controlled the city. Secondly, clarifying the urban morphology of the city will help understand how the city was organized and planned over time, and discover if there were any squares in the city during the ancient times. Thirdly, explaining the socio-cultural aspect of the city by presenting the social life, the culture of the people, and how they interact with the public realm. And finally, presenting the socio-political conditions in Nablus and how the Israeli-Palestinian conflict affected the development of the city and the people's behaviour. These aspects will create a comprehensive understanding for the case and create a base for the analysis part.

3.2 General Information about Nablus City

Nablus governorate is located in the northern part of Palestine (north of West-Bank) and surrounded by Jenin city from the north, Tulkarem from the west, Ramallah and Jericho from the south, and Jordan valley from the east. Nablus governorate consists from 56 small towns and villages in addition to the city of Nablus (Yaish, 2017), (Figure 26). The area of the entire governorate is 605km² while the city itself has an area of 28.5km² (Nablus Municipality, 2019).

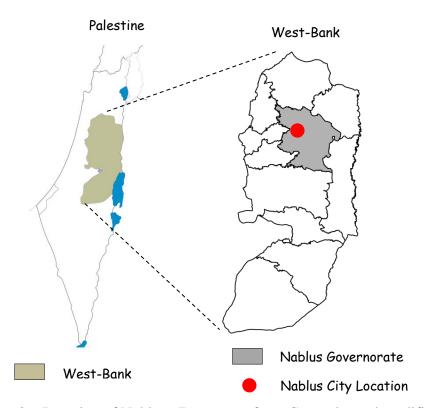


Figure 26: Location of Nablus .(Base maps from Geomolg, and modified by author)

Nablus city is considered one of the most ancient urban areas in Palestine and also an important commercial and political center. The city was marked by its continuous development and changes over the various eras in history with significant growth in the population and built up area (Mustafa, 2010). It is named the capital of the north

due to its numerous facilities of education, culture, commerce, and health which worked as an attraction for the northern cities (Qamhieh, 1992). For its geographical location, it is located between two mountains 'Eibal' from the north and 'Jerzim' from the south with a distance of 42km from the Mediterranean Sea and an altitude of 550m above mean sea level for the central area (Yaish, 2017).

According to the Palestinian central bureau of statistics: The population of Nablus reached 388 thousands in the year 2017 and it is described as a youth society due to the percentage of youth (less than 17 years old) which reached 41.4%. Regarding to the gender, the males' percentage is 50.7% while the females' percentage is 49.3% (PCBS, 2017).

Topography

Nablus is located between two mountains which are Eibal from the north and Jerzim from the south. The mountain of Eibal has an altitude of 951m above mean sea level while Jerzim has an altitude of 881m above mean sea level. The east and west parts of the city have an average elevation of 400m above mean sea level (Yaish, 2017). Consequently, the city is located in a valley and this topography affected the city's directions of growth and also caused the formation of many natural springs in the central area due to the gathering of rainwater from the surrounding mountains, this topographical nature of Nablus can be seen clearly while moving in the city and using its streets, and some of the roads on the mountains have a steep slope and high inclination, also due to the topography, the problem of landslide happened many times in the city during the construction works or by the heavy rain and damaged buildings and vehicles (Mustafa, 2010), (Figure27 & 28) shows the different elevations and the topography of the city.

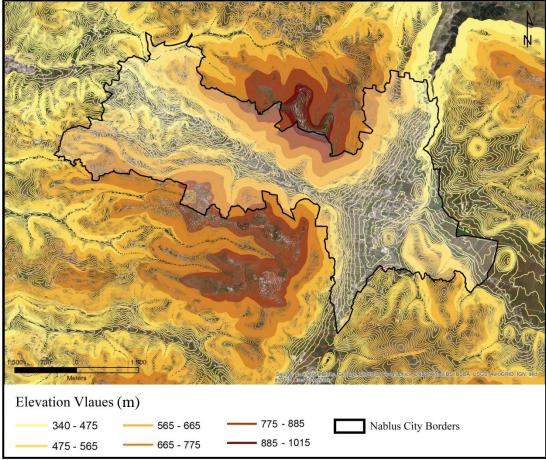


Figure 28: Elevation values of Nablus (data from Geomolg, map modified by author).



Figure 27: Topography of Nablus (captured by Abdelhadi, 2019)

Climate

Nablus city is characterized by a moderate Mediterranean climate as it is located in the Mediterranean Sea region on latitude 32.13, with a dry summer season of more than five months per year and a cold winter season which mostly does not exceed three months. Regarding the rains, as Palestine in general, rain fall is limited on the spring and winter seasons and specially between October to May which during this time period the amount of annual rainfall reaches 660.0 ml. 80% of the rains fall in the period between December and March (Palestinian Meteorology, 2010).

Mostly the northwest wind direction is the prevalent wind in Nablus region. The average annual wind's speed is 10km/hour, and due to the location of Nablus in the north of West-Bank within series of mountains, its temperature is usually lower than the other cities like Tulkarem or Jenin. In January which is the coldest month of the year, the average maximum temperature reaches 13.1 Celsius while the average minimum declines to 6.2 Celsius. In contrast, during August which is considered the hottest month of the year, the average maximum temperature is 29.4 Celsius and the average minimum temperature is 19.5 Celsius. Regarding the humidity percentage in Nablus, the annual average goes up to 61% (Palestinian Meteorology, 2010). And so, the values of temperature, wind speed, and humidity percentage varies over the year.

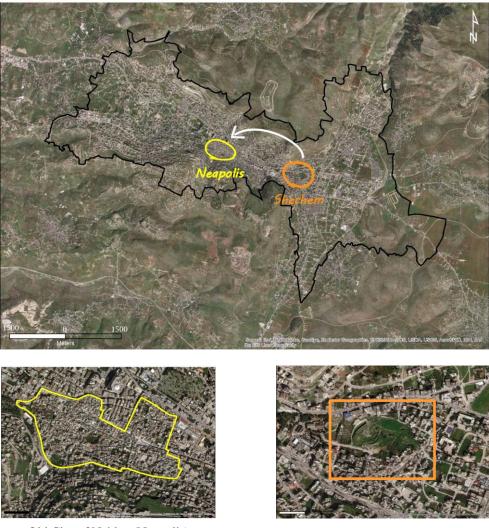
During the last few years, the changes in the weather and climatic patterns all over the world in general and in the Arab countries in particular were clearly noticed. These changes occurred as a result of the global warming. Because of this, the temperature during the previous summer seasons was significantly changed in Nablus where the maximum value reached 40.5 Celsius and the minimum was 16 Celsius between May and the end of October (Palestinian Meteorology, 2010).

Urban Growth in Nablus

It is believed that the area between the two mountains of Eibal and Jerzim was populated for the first time before 9000 years (Alhelw, 2000). The excavations showed that the Canaanite people, who left from the Arabian Peninsula, settled down in a location where water springs existed in the east part of Nablus in Tal Balata area (near to Balata village) and built their city Shechem in the third millennium BC (Alfanni, 1999).

So the first name for the city of Nablus was Shechem which had a great prosperity, Stability, and self-sufficiency. The city developed dramatically in the political power and size to become what was known as the 'city state' in the second millennia BC (Kalbunah, 1992). However, the location of the city and the benevolences that it controlled made its enemies covetous to take it. As a result, the invasions and wars rolled over it, and the city subjected to many acts of pillage and destruction until the Romans came under the leadership of the commander Titus in the year 67 AD and destroyed the city completely (Kalbunah, 1992), Figure 26 shows the location of Shechem city.

In the year 73 AD, The new emperor (Flavio Vaspasian) ordered the construction of a new roman city to the west of the city of Shechem and the stones from the demolished city of Shechem were used for building. The new roman city at that time was known as 'Neapolis' which means the new city and it was located at the same place where the old city of Nablus is now standing (Alhelw, 2000), (Figure 29). Since the end of its construction the city has gained a great importance by the Roman Empire, after Less than 90 years after its construction, it gained the name of the Empire city (Alfanni, 1999).



Old City of Nablus (Neapolis) Shechem City location Figure 29: Locations of Scheme and Neapolis cities (Base map from GIS and modified by author)

The city of Nablus became under the Islamic control in 640s AD followed by the Crusader control in 1099 AD until 1187 AD when the Muslims took it back. Between the years 1260 AD and 1516 AD, Nablus was under the Mamluk rule before the coming of the Ottomans under the control of Sultan Selim Othmani who made Nablus administratively a part of the state of Damascus (Kalbunah, 1992). After the Ottomans were defeated in the world war one, Palestine became under the control of the British Mandate in 1918, and the urban expansion in this year remained limited and unobservable (Figure 30). After the British took the full control, the city of Nablus was ruled by a military governor and his advisers were appointed in the municipality as well as establishing an administrative structure in the municipality that lasted until the end of the British mandate period. This Committee of advisors and military governor took over the work of organizing the construction of buildings in the city and the enactment of a law to called the 'Organizing the Palestinian cities' in 1921. This law included the work of urban planning, supervision of construction works, the opening of new streets, and expanding the existing ones (Mustafa, 2010).



Figure 30: Nablus City in 1918 from the west side (Palestine memories archive)

In 1927 the city was hit by a devastating earthquake that destroyed big parts of the city. After this event, the municipality provided shelters for the displaced families followed by permanent houses to the north-east of the city which formed the first wave of urban expansion outside the old city borders (Adabagh, 1988). Moreover, all of the plans prepared by the British mandate planners for Nablus were very basic and their main goal was limited on defining the city's borders and the important streets.

Up to the year 1948, the city continued expanding towards the east through the valley and four new refugee camps appeared in the city due to the 1948 war. After 1948, Palestine was divided to three parts; Israel, West-Bank, and Gaza strip. West-Bank which includes Nablus city became under the Jordanian control since 1950 and the development of the city continued in this period. This development progress remained until 1967 when the Israeli army invaded West-Bank and restricted the construction and development. This situation continued until the Palestinian National Authority took the control of West-Bank in 1993 and facilitated the building procedures (Qamhieh, 1992). Figure 31 shows the stages of urban sprawl in Nablus up to the year 2001.

After that, the construction and development became mostly focused on the infill and vertical expansion while the horizontal urban sprawl was limited. This trend caused a loss of the open spaces and vacant lands in the city. This development behaviour occurred due to political and spatial reasons such as the centralization of services in the city center area and the adjacent neighborhoods, the absence of water network and sewage system in some of the further areas and the limited areas for expansion (will be explained in the geo-political section) (Hudhud, 2007).

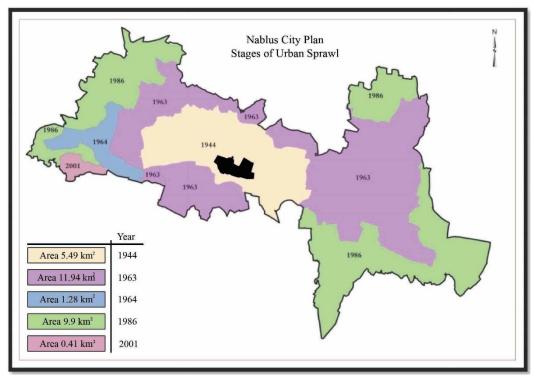


Figure 31: Stages of Urban Sprawl in Nablus (1944-2001), (Nablus Municipality, modified by author)

Urban Morphology

Explaining the urban morphology through the whole historical phases is not possible due to the scope of this study, and so this part will focus on the most important periods to be studied which are the old city up to the year 1948 and the entire city in the present time. The excavation work carried by the department of antiquities, showed that the city was built in three stages during the Roman era until it was completed. In the first stage (72 AD) three quarters were built which are: Al-Qaisaryyeh quarter in the east part which was used as a residence for the soldiers, Al-Qaryon quarter in the middle of the city, and Al-Sumarah quarter in the western part where the Samaritan people lived. In the second stage in the reign of Emperor Hadrian (130 AD), the city was expanded by building three more quarters; Al-Habale quarter in the north-eastern part, Al-Gharb quarter in the north-west, and Al-Yasmeneh quarter which is located between Al-Qaryon and Al-Sumarah quarters.

The third stage came in the year 244 AD when the seventh quarter was built and it is known today as Al-Aqaba quarter (Alfanni, 1999), (Figure 32).

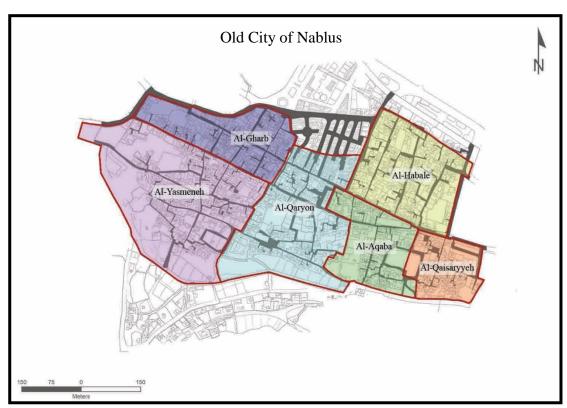


Figure 32: Quarters of the old city of Nablus (Base map form Nablus Municipality and modified by author).

The Romans used the grid system for planning the city which was followed in planning and building new Roman cities. The city consisted from many urban elements including streets, public spaces, Basilica, open theater, circus maximums, circular theater, public paths, temples, city walls, and city gates;

• Streets Network: the city had a linear shape extending from east to west with the main street in the middle which has columns on both sides (Cardo) and the secondary streets are connected perpendicularly with the Cardo (Kalbunah, 1992). The excavations showed that the width of the main street was 12m which is similar to the width of the same types of streets in other roman cities like Jarash and Qisareya (Alfanni, 1999). Due to the continuous redevelopment and

wars, the width of the main street was getting smaller until it reached the current width of 7m (Figure 33).

- The Forum: a public central space usually located in the middle of the city and adjoining the main street (Cardo). The studies indicated the original location for this space which is shown in Figure 33. Moreover, a part of it is still used as a public space nowadays and called 'Bab Al-Saha' (Alfanni, 1999).
- The Basilica: it was an important part of the roman city and attached to the forum. It worked as an administrative building, law court, and a market place. The location of the Basilica was discovered after many studies and excavation (Figure33) and a church was built in the same location during the Crusader occupation era but after the Ayyubids (muslims) took the city, they tranfered the church to a mosque which is known today as the big Salahi Mosque (Kalbunah, 1992).
- Open theater and circular theater: the open theater was discovered in 1979 AD to the south of Al-Qaisaryyeh quarter it has a dimensions of 100m for the outer diameter and 55m for the inner diameter, while the circular theater is located to the north of the city (Alfanni, 1999), (Figure 33).
- Circus Maximums: it was discovered to the north-west of the old city, it has 900m length and 91.5m width which indicated that Neapolis was important city for the Romans (Alfanni, 1999), (Figure 33).
- Temples: there were two main temples for the city, the first one was established on the top of Jerzim mountains and called Jupiter temple, while the second one was in the middle of the city and called God's Kory temple (the god of fertility) and its location is shown in Figure 33 (Bishawy, 1990).

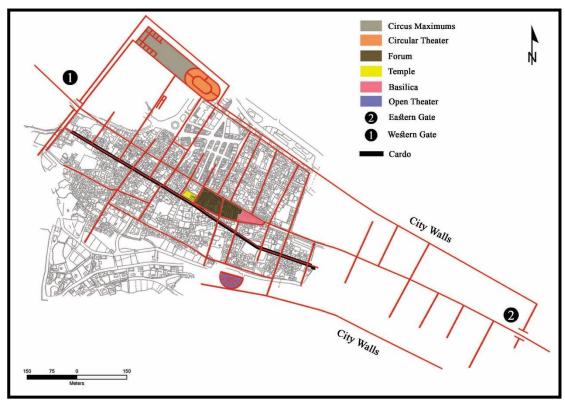


Figure 33: Roman city plan (from (Touqan & Abdelhamid, 2010) modified by author)

After the Islamic conquest in 636 AD, the city conserved the identity of the Roman planning system presented in the grid organization until today, The spatial configuration of the city's quarters and housing planning have changed to take into account the privacy principles of the Arab Muslim's community and also to consider the main rules of the Islamic law regarding the provisions of buildings and planning, However, due to the people's needs for dwellings, some parts of the public squares were transferred to built-up areas and other open spaces inside the quarters – due to the water abundance - were transferred to planted orchards. As a result, the public squares on the city created a hierarchy in spaces including public spaces (main streets and squares), semi-public (secondary roads), semi-private (the path to a group of houses), and private (the court of the house) (Qamhieh, 1992), (Figure 34).

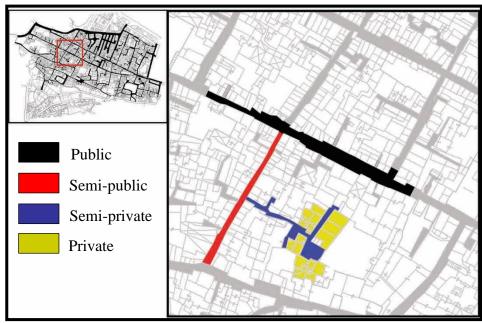


Figure 34: Hierarchy of streets in the old city of Nablus. (Base map from Nablus Municipality, modified by author)

During the Ottoman period and precisely in the 16th century, some new markets were built inside the city and the biggest change was creating 'Bab Al-Saha Square which was an orchard before (Al-Hadara orchard) and was floored to become a public square and a clock tower was built at the middle of this square in 1901 to mark the 25th anniversary for the assignment of Sultan Abdul Hamid II on the Ottoman rule (Nimer,1975), (Figure 35). During the British period (1918-1948), when the urban expansion of the city started to go beyond the borders of the old city, the types of buildings and the architectural style was changing due to the new building techniques and materials that were discovered at that time, and so the traditional houses which consisted of two stories and many rooms around a court became limited on the old city while the new buildings were following the modern styles. This new buildings style changed the whole fabric of the city during the followed years up to this day (Tuffaha, 2009).

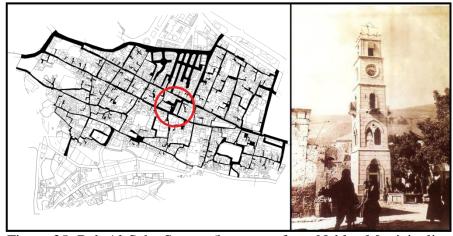


Figure 35: Bab Al-Saha Square (base map from Nablus Municipality and modified by author)

As mentioned in the urban growth section, the city expanded until it reached the current area of 28.5km² and a linear shape due to the topography. Most of the streets direction is east-west following the contour lines of the two mountains and as a result the development of buildings followed the streets direction. Different urban densities and buildings types can be found in the city where some areas are for high-rise buildings; others are for villas and luxury houses. These varieties are a result of the municipality master plan which divided the city into different categorize (Land use classifications) and each of these categorize has its own laws and building regulations such as residential areas A, B, and C, industrial area, refugee camps, public parks, public facilities, and other classifications. Figure 36 shows the master plan of Nablus and the most important land use classifications.

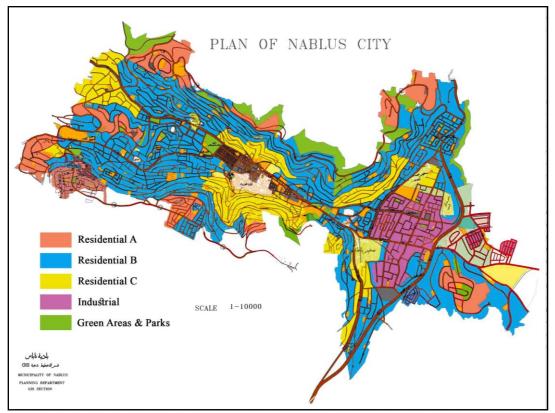


Figure 36: Nablus master plan (Nablus Municipality).

These classifications and other factors enhanced the appearance of different urban fabrics in the city represented in different areas. Firstly, the old city area which has its own land use classification to conserve its characters and architectural elements. Secondly, the refugee camps which is the most dense areas in the city. Thirdly, the residential area class B which allows a maximum height of 5 floors for each building. Fourthly, residential area class A which allows a maximum height of 3 floors. Moreover each type of these land uses has its own set-back values, streets width, and percentage of built up area on each plot. Figures 37-39 show some urban fabric types in the city.

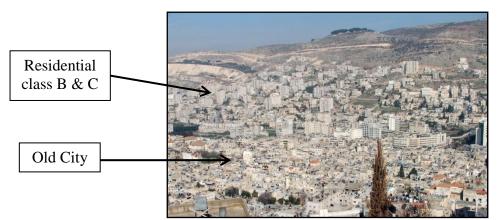


Figure 37: Urban fabric of the old city and the new buildings (Captured by Kawwa, 2015)



Figure 38: Residential area class A (Kawwa, 2011)



Figure 39: Balata Refugee camp (Yassen, 2017)

Socio-Cultural Characteristics

Nablus as any other city has its own social and cultural characteristics which can be quite similar to the adjacent Arab countries like Jordan. The essence of the social life in Nablus city has been mainly formed through the values and traditions of the different nations who lived in the region through the history. The social life in Nablus is very unique and includes strong links between the people. Moreover, the people in Nablus like to live close to each other with strong links to their families sharing all the happy moments like religious festival and traditional gatherings and the sad ones like death or illness within themselves. One of the manifestations for the strong links within the families is that each family takes the responsibility if any member of the family made a violation or a crime and works as a representative for this member in front of the society (PCECE, 2017).

Islamic communities in general and Nablus city as a case, have many principles and behaviors which some of them are based on the Qur'an and Islamic regulations such as the principle of privacy where many women prefer to gather in their houses or a closed place with no men instead of using outside public spaces (Hakim, 1986). A study about the old city of Nablus was made by Rania Taha (2010) showed some important facts about the city. Firstly, 82% of the families have relatives in the same area where they live and this is partially the same case in other areas of Nablus. Secondly, regarding the relation with the outside spaces, most of the families don't allow their children to play outside the house and even for the adult sons, the mothers are boasting if their sons are spending most of their time in the house than outside. The results of the study gave an impression that parents are afraid from the outside environment and they don't want their sons to be a part of it (Taha, 2010). These strong relations between individuals and families in the city can affect the use of public spaces in two different ways; on one hand, it can be a positive factor that encourage people go outside to meet other friends and relatives since in Nablus there is a big chance to meet someone you know by coincidence, while on the other hand, these strong relations between the people can be a restriction that limits the feeling of freedom for the users of spaces due to their feeling that they are always being known or seen by other people they know.

Regarding the cultural life in Nablus, the city has always been a place for many annual rituals and cultural activities. Moreover, the city has some special traditional habits and events of its own and one of the most popular events is the religious festival of Prophet's Mohammed birth anniversary which is always carried out in the main square in the old city (Bab Al-Saha) and it is important to mention that both men and women participate in many of these events (Figure 40). Due to the limited size of Bab Al-Saha Square and the fact that it is the only vital square in the city, other cultural events and bigger festivals are organized in theaters like the one in An-Najah National University.



Figure 40: Cultural event at Bab Al-Saha Square (Wafa news agency, 2018)

Socio-Political & Geo-Political Characteristics

The political situation in the city as other Palestinian cities is very tough and complicated and this is mainly because of the conflict between Israelis and Palestinians along 70 years. In order to understand the present socio-political life in the city, a brief overview about the history of the conflict should be given. In 1993, an agreement was signed between the Israelis and the Palestinians. Accordingly; the West-Bank was divided into three zones, Zone A which is completely under the control of Palestinian authority, Zone B which indicate that the civil life is under the control of Palestinians while the security control is shared between both sides, and Zone C which is completely under the control of Israeli administration and it is forbidden for Palestinians to build in these areas (Saleh, 2012).

Due to this agreement and land classifications, the city of Nablus has limited choices of urban expansion directions since it is surrounded by 'C' areas from three sides and two Israeli army bases in addition to two Israeli settlements (Figure 41). This situation in addition to the topography encouraged the infill development and forced the city to expand towards the west and south-west with a dramatic increase in land prices and therefore less opportunity for public squares or even open areas (Abdelhamid, 2006).

Regarding the effects of the political conflict on the social life, although the city is classified as 'A' zone, it is still experiencing a strong control by the Israeli army especially during the night hours as it becomes unsecure for Palestinians. These frequent violations formed a feeling of insecurity between the citizens which in turn was reflected on the livability of the city during the night hours and the desire of people to be outside their houses during these times.

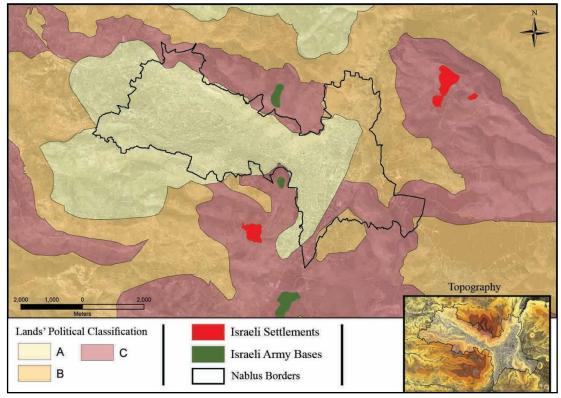


Figure 41: Geo-Political situation map for Nablus city (data from Geomolg, map modified by author).

3.3 Methodology of the Analysis

In order to find out the reasons beyond the scarcity of public squares in Nablus, the analysis section will be divided into two parts; the first part is the analysis of the socio-political and planning policies for the city as a whole, while the second part is showing the locations and distribution of the existing public squares in the city. Each square is introduced and analyzed separately to find the deficiencies and problems of these squares by using the following methods. Firstly, observation along different time periods which took place in July, 2019 along two weeks, during weekends and weekdays, and during three time periods for each day; the morning time between 8:00 until 10:00, the afternoon time between 16:00 to 17:00, and the night time between 22:00 to 00:00. This time is selected because the people tend to go out during summer times more than other seasons in Nablus and it is the peak time for

activities and events, therefore it will provide the best idea about the usage of public squares.

Secondly, physical analyses by using inventory forms to collect the needed data in a systematic way to evaluate the conditions of public squares based on the previously explained factors which are: formal type, functional type, base plane, architectural frame, objects in the squares, activities, socio-cultural characteristics, and natural characteristics. And so, the physical data will be collected by inventory forms while the social data will be collected by documentary research and observation along different time periods for the behaviour and activities of users (Table5). After finishing the evaluation, the weaknesses and strengths are clarified and mentioned as a part of the results section, followed by the recommendations part which will provide possible ideas and solutions to improve the public squares' reality in the city.

Indicators	Determinants	Evaluation method
Formal and functional types of public squares	Formal types	Physical analysis
	Functional types	Physical analysis
Space qualities of public squares	Base plane	Physical analysis
	Architectural frame	Physical analysis
	Objects in public squares	Physical analysis
Activities in public squares	Necessary activities	Observation
	Optional activities	Observation
	Social activities	Observation
Factors affecting the existence of public squares	Planning policies	Documentary research
	Socio-political characteristics	Observation & documentary research
	Socio-cultural characteristics	Observation & documentary research
	Natural characteristics	Physical analysis & documentary research

3.4 Evaluation of the Case Study

Within the municipal boundaries of Nablus city, there are two possible spaces that can be considered as public squares to be analysed and evaluated which are Bab Al-Saha Square in the old city of Nablus which maintained its existence since the Ottoman era, and Martyrs Monument Square in the east part of the city which was finished in 2018, (Figure 42). While the west part of the city faces a complete absence of any open spaces that can be considered as a public squares.

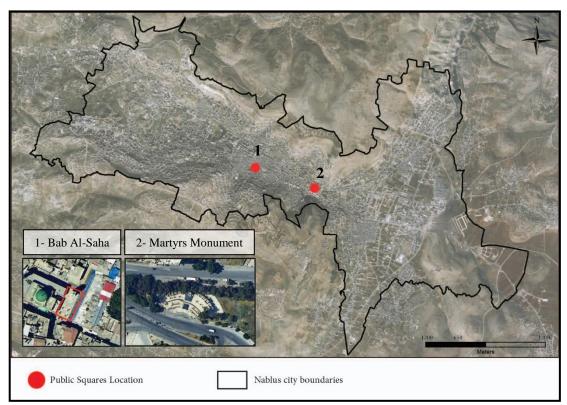


Figure 42: Public squares location in Nablus (Base map from Geomolg and modified by author).

The evaluation of the case study starts with analysis of the general factors that affect the whole city such as socio-political aspect and planning policies. The sociopolitical situation in the city has a clear effect on the public life. Although the last conflict between Israelis and Palestinians in Nablus city was in 2003, the control and influence of the Israeli military continued until the present time but mostly during the night hours. This situation created a critical socio-political reality which affected the public life including the usage of public squares (UNGA, 2015). Based on the observations during the night hours, the overwhelming majority of the citizens do not prefer to be outside their houses after 23:00 including public squares which is mostly empty at this time until the morning and this is mainly due to the sensitive political condition in the city which makes the city unsafe for people during this time.

Regarding the planning policies in the city of Nablus, it is prepared and implemented by two governmental authorities which are the Ministry of Local Government and the Municipality of Nablus. These policies aim to meet the needs of the citizens and achieve the priorities that are often concentrated in infrastructure projects, schools, streets, necessary services, and to find new areas for the rapid urban development, and therefore do not give sufficient priority for creating new public squares and other similar projects unless there is an available fund for such projects from donor countries and so it is not about community participation or needs but it is more about the availability of resources (Nablus municipality, 2019).

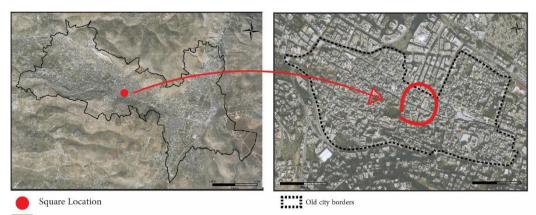
Recently, the municipality became more aware about this issue and started to catch more fund for public squares. These efforts started by improving and redesigning Bab Al-Saha Square in 2019 (Figure43) and has also established the Martyrs' Monument Square in the Eastern part of the city in 2018. However, there are many difficulties facing the Municipality, such as the limited lands owned by government of by the municipality and even when existed it is used to make investments in profitable projects instead of allocating them for public squares and also the topographic nature of Nablus, which makes it difficult to create a public square in most of the locations the thing that makes this task more difficult and complex. And so there are no clear policies, strategic goals, or future projects regarding the public squares issue in Nablus and most of the attention go toward the urgent needs like streets and water networks (Nablus municipality, 2019).



After Improvement Before Improvement Figure 43: Improving Bab Al-Saha Square (first picture captured by author 2019, second picture captured by Khalil Kawwa 2017).

3.4.1 Bab Al-Saha Square

Bab Al-Saha Square is considered as the main and the most popular square in the city. It is located at the heart of the old city within Al-Qaryon quarter and close to the new city center area, moreover, the square works as a vital connection between the two main roads in the old city and it is featured by the clock tower that built in 1901 (ottoman era) (Nimer,1975), and became the most famous elements in the city. The square is 5 minutes walking from the city center with a distance of 400 m and it can be reached by car during the early morning or late night hours before the shops open its doors and the pedestrians' density increase. Figure 44 shows the square's location.



Nablus Borders



Figure 44: Bab Al-Saha Location (Base map from GIS, photo captured by author, modified by author)

3.4.1.1 Formal Type

As mentioned previously, Bab Al-Saha Square was an orchard before, and transformed to a square in the 16th century during the Ottoman period. The geometrical shape of the square is rectangular, however, it does not have a clear formal type but it can be seen as a dominated square by either Al-Nasr Mosque or the clock tower since the attraction of the users always go towards one of these elements as seen in Figure 45 which shows Al-Nasr Mosque to the left side of the square and the clock tower at the middle of the square. Also it can be considered a nuclear square due to the existence of a water fountain at the center of the square, and so it has a combination of two formal types.



Figure 45: Al-Nasr Mosque and the clock tower (captured by author).

3.4.1.2 Functional Type

The square is used in different occasions and for different purposes. During Friday prayers and when the adjacent mosque (Al-Nasr) is no longer able to accommodate more worshipers, the square is used as a place for prayer and after the prayer is finished, some hawkers show their goods in the square and this happens only in Fridays; also it is used for a religious festival of Prophet's birth anniversary each year. During the weekdays the people use the square as a landmark to meet or to rest on the benches during their shopping activity in the old city while in the night hours just few youth males set there for a conversation, thus this square can be classified as mix-use square.

3.4.1.3 Base Plane

Bab Al-Saha Square, in comparison with the size of other big squares like St. Peter's Square as an example, is very small. The square's dimensions are 11.5m width and 25.8m length with a total area of 296.7m² (Figure46). This small and limited size usually provides a feeling of 'claustrophobic' and restriction which can make some

users do not prefer to use the square, on the other hand it can create strong interaction between the users due to the limited distance between them. The material used for the square's floor is the light yellow squared stones and dark yellow lines of stones separating the light floor makes the user feel that the square is wider and larger and gives breadth and freedom. The type of the used floor has likable thermal properties and does not provide heat during the sun hours and the base plane as a whole is mostly hard surface with very small soft surface spots.

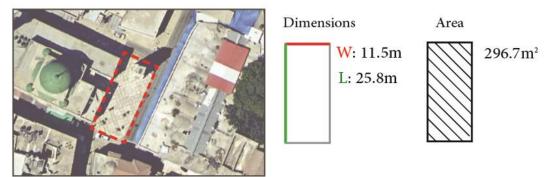


Figure 46: Base plane measurements for Bab Al-Saha Square (Base map from GIS and modified by author).

3.4.1.4 Architectural Frame

The square is surrounded by buildings from the four sides; however, there are three small streets passing between the square and the buildings from the south, north, and east sides. Firstly, from the west side, Al-Nasr Mosque (religious use) is located and has stairs connects its door with the square since the praying area is elevated from the ground level while the ground level has one shop for clothes and another one for houses furniture. Secondly, the east side has a small street and next to it there are many shops including furniture shops, clothes shop, and a restaurant. Thirdly, the north side is facing an institutional building in the first floor and furniture shops in the ground floor. Lastly, the south side has the main old city street and behind it two furniture shops in the ground floor and residential use in the upper floors (Figure 47).

The heights of the surrounding buildings have significant variations; Al-Nasr Mosque for instance, is a 2 floors building with 8m height for its façade that faces the square while the shops on the eastern side of the square are a ground floor stores with 3.5m height. The height-width ratio from the west side is around 1:1.5 while from the east side is 1:3 and so the enclosure of the square can be considered as a moderate enclosure since it is good from one side but weak from another and in general it is compatible with the human scale because of the small size of the square and the relatively low heights of the surrounding buildings (Figure48).

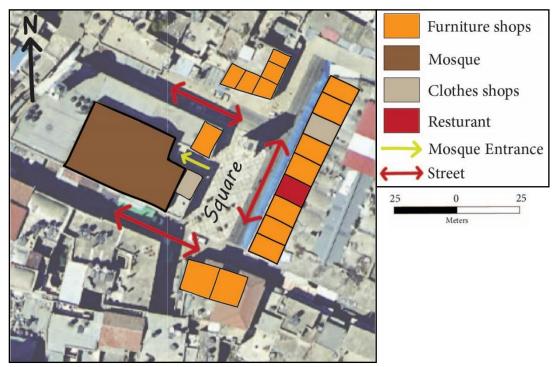


Figure 47: Functions around Bab Al-Saha Square (Base map from GIS, modified

by author).

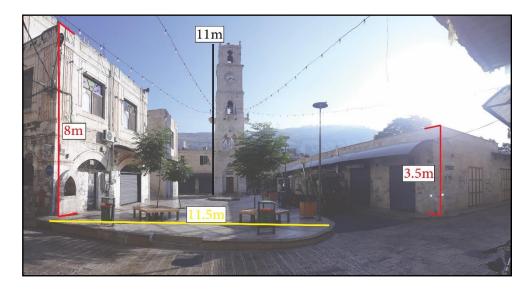


Figure 48: Height-width ratio for Bab Al-Saha square (captured and modified by author).

3.4.1.5 Objects in Public Squares

The most important and remarkable object in Bab Al-Saha Square is the clock tower which has a height of 11m and horizontal dimensions of 3.4m×3.4m and it is a strong attraction element in the square due to its historical and symbolic importance, other objects are two primary seating areas (wooden seats and benches) and one secondary seating area which is the stairs that leads to the mosque door and there are many trash cans distributed around the square. at the middle of the square there is a small water fountain but it is out of service, and light poles around it that give a very good lighting and feeling of safety in the square during the night hours. The square does not have any shelters to protect the users from rain while some trees works as a shading elements above the seats. Regarding the landscape within the square, it has four trees and three planting ponds and as mentioned before, most of the square is hard surface so it has a minimum soft landscaping (Figure 49).



Figure 49: Objects in Bab Al-Saha Square (Captured by author).

3.4.1.6 Activities in Public Squares

Due to its vital location at the center of the old city and the existence of the main commercial area around it, Bab Al-Saha Square is used by different groups of users for different purposes. After conducting the field observation along different time periods, it was found that two types of activities can be found in this square which are the necessary and the optional activities. Firstly, the majority of the users who were observed use the square to pass through to go from one area to another in the old city and also they have to use it when they go to Al-Nasr Mosque since the entrance of the mosque is adjacent to the square and this is why this type of activities is called necessary activities since it will proceed every day and there is no choice for the users not to do it, moreover, this type was clearly dominant on the public square users. Secondly, some of the users attend the square to set and rest while walking in the city center or just to meet a friend at a well-known landmark (Figure 50).



Figure 50: Example for optional activity in Bab Al-Saha square (Captured by author).

3.4.1.7 Socio-Cultural Characteristics

In order to understand the socio-cultural characteristics in the city of Nablus regarding the usage of public squares, the field observation was conducted while taken into consideration the documentary research for previous studies about the culture and social life in the city to compare the observed behaviour with these studies to understand how the usage of public squares is affected. And so it was observed that the usage of the square was male dominated since the males use the square for different purposes which were clarified in the activities section such as passing through the square, setting, going to Al-Nasr Mosque, or meeting others, while the majority of the females use it only to pass through and not to set or to meet someone due to their need for more privacy by having their own imaginary space with a sufficient distance from the other people who are setting or walking through the square and this is one of the socio-cultural needs for females in this community (Abbas, 2018). However, during the time periods when there are few people in the

area, the females tend to use the square more since they have a psychological feeling of privacy.

3.4.1.8 Natural Characteristics

In one hand, the natural aspect include the trees and the green coverage in the square which in Bab Al-Saha is existed in a very small amount, in the other hand, the natural characteristics include the climate and the topography. The climate plays An important role in the usage of the square since it has no shelters to protect the users from the rain and cold wind in winter and it has few shading elements to protect the users from the hot summer days, however, the existence of Al-Nasr Mosque on the west side creates a shaded area during the hours between 14:00 until the sun set and the shops on the east side which work as shading element from the sunrise until the midday which encourage some users to rest in the shaded area (Figure 51). Despite its location between two mountains, the sun penetration to the square is not limited because the mountains are located in the north and south while the sunrise and sunset is from west and east. Figure 51 where the mountains appear behind the square. Regarding the slopes within the square itself, it is completely flat with no elevation differences between its parts



Figure 51: Natural characteristics in the square (Captured by author).

3.4.2 Martyrs Monument Square

It is a new square constructed in 2018 on an empty plot to commemorate the people who died while defending the city. It is located in the East part of the city at the junction of two main highways that connect the city's neighborhoods together and connect it with the other cities. The square has a smaller copy of the clock tower in Bab Al-Saha Square and it is located 1.7 km and 20 minutes walking from the city center and can be reached by car or public transportation (Figure 52).



Figure 52: Martyrs Monument location (Base map from GIS, photo captured by author, modified by author)

3.4.2.1 Formal Type

The square is designed with a semi-circular shape oriented towards the highway and so it has a circular shape. Regarding its form, it is neither a closed square since it has no clear enclosure nor a nuclear one because there is no central element within its plane. Although it has a clock tower in the middle, the square has multiple structural elements going around its edge with arc shape and highway from the other side making it losing any possible chance to be dominant by a specific element and so it is also not a dominant square which leaves us with the last type which is amorphous square (Figure 53).



Figure 53: Formal type of Martyrs Monument Square (Captured by author)

3.4.2.2 Functional Type

The purpose behind building this square in this area was to develop the Eastern part of Nablus city and to make it more attractive. This square is considered the first stage of a project called Nablus Boulevard funded by the French government. The goal of the project is to create a better quality of public spaces in this area for the people and to find attractive places to visit and to have a safe and beautiful walking path within the area, but unfortunately, since the day the square was built (in 2018) up to now, it did not achieve the goal behind it and it is not used by any users or having any functions except for a few people passing along the sidewalk in front of it. Theoretically the functional type of the square is leisure while practically it will not be clear until the entire project is completed to examine whether it will be used by the people or not.

3.4.2.3 Base Plane

The base plane of Martyrs Monument Square has relatively small dimensions; it has a length of 55 m between its East and West edges and a width of 27 m between south and north edges while its total area is around 1500 m² which makes it four times bigger than Bab Al-Saha Square (Figure 54). The size of the space can be considered appropriate for the users since it is neither very large nor very small. The material used for the square's ground is prefabricated concrete pieces with square shape attached together to cover the floor (Figure 55). The dominant color of the floor is the concrete normal color (gray) which is not the best color to use in a public square due to its negative effect on the psychological condition since it provides a feeling of depression and fatigue (Figure 55). The base plane in the square has a good balance between hard and soft landscape and this is achieved by making some basins for trees and grass.

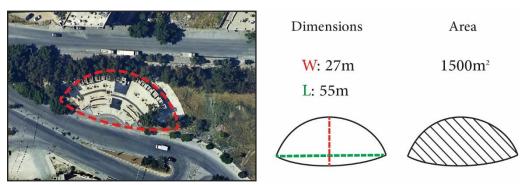


Figure 54: Base plane measurements for Martyrs Monument Square (Base map from GIS and modified by author).



Figure 55: Ground material in the square (Captured by author)

3.4.2.4 Architectural Frame

Due to its location between two highways from the south and the north, the square does not have any buildings directly attached to it while there are many buildings on the other side of the highways. Firstly, from the north side, the street is classified as commercial and all of the buildings on the other side of the street include shops, companies, and banks for both the ground floor and the rest of the buildings. Secondly, the south side across the street, there is a large land for governmental buildings like ministry of internal affairs, ministry of agriculture, mayor's office, a prison, and buildings for national security forces. Thirdly, the east side of the square include an empty land and next to it another governmental buildings which is the ministry of health. Lastly, the west side has the streets junction and behind it a building for weather forecasting which is the department of meteorology. Accordingly the area is dominated by the government buildings (Figure 56).

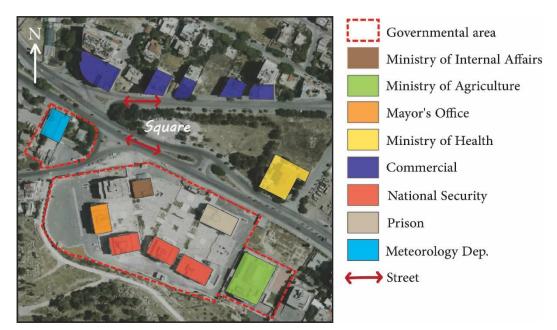


Figure 56: Functions around the square (Base map from GIS, modified by author)

There are no buildings surrounding the square to create any enclosure or limits, however, we can consider the structural elements that go around the square from the north side achieving a partial enclosure. The height of the clock tower at the central north edge of the square is 9m while the height of the other structural elements is 3.5m. By comparing these values with the width of the square, the height-width ratio will be 1:3 if compared with the height of the clock tower and 1:7.5 based on the height of the other elements of 3.5m. Moreover, the absence of proper enclosure makes the square undetermined. Regarding the human scale, it can be considered acceptable for the North side while it is unspecified from the south side since there is a highway but generally the square size is convenient for the human scale (Figure 57).

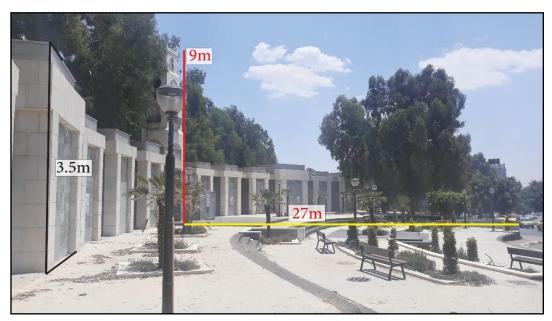


Figure 57: Height-width ratio for Bab Al-Saha Square (captured and modified by author).

3.4.2.5 Objects in Public Squares

Similar to Bab Al-Saha Square, this square has a clock tower as the central object and the biggest one with a height of 9 m and horizontal dimensions of $2.5 \text{ m} \times 2.5 \text{ m}$. The square contains primary seating elements like benches and secondary seating areas (stairs and small walls), moreover, it includes light poles distributed to provide sufficient lighting at night but the municipality does not turn it on, and two water fountains at the southern edges but they are out of services. The square does not have any shelters or shading elements for sun and rain. Moreover, the trees in the square are still new and small so it does not provide convenient shade. About the landscaping, there are trees and grass distributed in a good way within the square making a variety between soft and hard landscaping. Figure 58 shows the different objects in the square.



Figure 58: Objects in Martyrs Monument Square (Captured by author)

3.4.2.6 Activities in Public Square

As mentioned before and based on the field observation, the square is not used by anyone except for people passing by coincidence from the area and it is always empty due to the absence of attractions around it or any reason to motivate the people to come. Moreover, its location in the east part of the city which is considered the industrial and poor areas and it location on a highway which is not safe and too noisy (Figure 59), all play a clear role in the users' attendance and the amount of activities in this square. As a result, the square is rarely used by any people and does not have any type of activities.

3.4.2.7 Socio-Cultural Characteristics

In this public square, and due to the absence of users and activities, there was no chance to discover the socio-cultural influence on the users within the square. however, and based on the field observation and cultural values for the community, the location of the square on a highway made it very exposed and open in addition to its limited size and the orientation of the square towards the highway, all of these issues will eliminate any feeling of privacy or safety which will absolutely discourage any female from using the square which means that even if the square was attractive and used by some people, the same problem in Bab Al-Saha Square is expected to appear which is the males-dominance in the usage of the square.

3.4.2.8 Natural Characteristics

The natural elements in the square include trees and grass which is existed in a good percentage in the square while the climatic conditions have a big effect because there are no shelters from rain or shading elements to limit the sun heat in the square itself, however, the old big trees around the square help to create shaded areas during some hours of the day. The square is located at the narrowest point between the two mountains of Nablus but it is not affected by their shadows because of their locations in the north and south while the sun movement is east to west (Figure 59). The square itself is not flat and has different levels; it starts from the clock tower (highest level) and moves down until the street (lowest level) (Figure 60).



Figure 59: The mountain and trees around Martyrs' Monument Square (Captured by author)



Figure 60: The different levels in Martyrs' Monument Square (Captured by author)

3.5 Summary of the Analysis

This chapter started by presenting general information about the city of Nablus in order to create a comprehensive understanding for the conditions of the city. This knowledge helped to analyze the selected public squares and to find the reasons beyond the problem of scarcity of public squares in Nablus which was expected to be due to the topography and the steep slope of the mountains around the city, however, after conducting the analysis for each square separately, many weaknesses and issues were discovered such as the cultural effect on the usage of the squares, the undefined type of the squares, the socio-political condition in the city and its effect on the security of the users, and the unclear planning policies regarding public squares. The analysis also showed strengths in Bab Al-Saha Square due to the new improvements by the Municipality like its good enclosure, seating areas, lighting, trees, and other attractions. It is also important to mention that this square is considered a very famous landmark in the city and a part of its historical legacy in addition to its strategic location at the heart of the old city. All of these factors also gave this square more vitality and importance in the city of Nablus. In the following table, comparisons of the findings between the analyzed squares are shown (Table 6).

Table 6: Summary of the Analysis

Indicators and Determinants		Selected Public Squares		
		Bab Al-Saha	Martyrs Monument	
Formal Type	Туре	Undefined	Undefined	
	Shape	Rectangular	Semi-circular	
Functional Type		Mix-use	Not specified	
Base Plane	Material	Light yellow stone	Concrete (gray)	
	Area	296m²	1500m²	
Architectural Frame	H-W Ratio	1:1.5	1:7.5	
	Enclosure	Good	Weak	
	Dominant Function	Furniture shops	Government buildings	
Objects		Clock tower, benches, water fountain, trash cans, light poles, planting ponds	Clock tower, benches, water fountain, light poles, stairs, trees	
Activities		Optional & Necessary	Necessary only (rarely)	
Socio-Cultural characteristics		Males dominant usage of the square	Not specified	
Natural characteristics	Topography	Small effect – flat square	Different levels in the square	
	Climate	Moderate effect	High effect	
Socio-political characteristics		It affects the people safety and security during night hours and limits the usage of public squares		
Planning policies	nning policiesNo clear policies, strategic goals, or future projects regarding public squares.Inefficient policies that focus only on the urgent needs like streets, infrastructure, and to find new areas for urban development.		-	

3.6 Results and Discussion

Based on the analysis, it can be concluded that there are different factors which play important roles in the scarcity of public squares in Nablus. One of the important factors is that the usage of public squares in the city shows that the people in Nablus recognize only one public square which is Bab Al-Saha Square and this finding confirmed the research problem. Another factor is the planning policies adopted by the municipality that does not give enough attention to create or to maintain public squares but rather focus more on directing the rapid urban expansion of the city and the completion of development projects as fast as possible to keep up with this expansion and therefore most of the resources are consumed in this field, leading to neglect of many other issues, especially the public squares, in addition to the fund issue which is a critical problem for the decision makers.

The effect of the Socio-political aspect in Nablus was mainly focused on the feeling of safety for the users especially during the night hours which minimized the usage of public squares during this time and became limited on the daytime. Regarding the form of the squares, both of the analyzed square are amorphous and do not follow specific type (grouped, closed, nuclear ... etc) which can be considered a weakness for their design. One of the squares has mix-use function which appeared spontaneously without any previously made decisions or designs since it is a very old square while the other one does not have a clear function though it was designed to be leisure square. This situation indicates a weakness in the management of public squares in the city and if continued, none of the squares will achieve its expected goals. Regarding the base plane, it was found that the areas of the squares is small and do not meet the needs of the users and based on the documentary research that showed the women preference for wide spaces to create a feeling of privacy which according to the females means to have enough distance from the people in the square to feel comfortable and free which is the one of the important socio-cultural characters of the city which also affected the gender segregation in the usage of the squares and made it males dominated. Another important issue affected the squares in Nablus is the functions around each square which do not attract the users or support the success of the square where Bab Al-Saha Square was surrounded by furniture shops and Martyrs Monument surrounded by governmental buildings and highways.

Although the lighting is a very essential thing that should be provided in public squares, it was not working in Martyrs Monument Square; moreover, the water fountains do not work in both of the analyzed squares while the other objects like benches, trees, secondary seating elements, and the clock towers were in a good condition. The public square in the old city has two different types of activities (optional and necessary) but also affected by the socio-cultural aspect since the optional activities are mostly dominated by males, while the other square in the east side of the city does not have any activities as it is observed and some people only pass by it while walking in the area.

The last factor is the natural characteristics which do not have a significant effect on Bab Al-Saha Square since it has a good enclosure and shaded by buildings and trees. However, the topography of the city clearly affected the locations of the public squares as both of them are located in the flat area within the valley between the two mountains of Nablus (Eibal & Jerzim mountains).

Chapter 4

CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

Due to the importance of public squares in achieving social coherence in a community and developing the public life, this qualitative research has focused on this issue in Nablus city by choosing all the possible factors that can influence the existence and the qualities of the public squares like topography, planning policies, scale, form, activities, socio-cultural characteristics and other factors. These criterion were selected to achieve the aim of this study to discover the reasons that caused the shortage of public squares in the city. These indicators and determinants which are used in the analysis were obtained from the literature review after combining the various explanations, definitions, principles, and scholars' opinions in a logical and sequential manner.

In the first chapter of this study, the problem of the research is clarified in addition to the research aim, objectives, and research question. Also the methodology that is used during the study is explained in addition to different limitations. The second chapter focused on the theoretical background about public squares, starting with the definitions, dimensions, types, and forms of the squares, then presenting the physical qualities of the squares like size and activities. The second chapter also included the factors affecting the existence of public squares in a city such as planning policies, socio-cultural and socio political characteristics, and natural issues. The third chapter is the analysis chapter, it started by presenting the case study of Nablus city and evaluating it as a whole from the socio-political and planning policies perspectives then choosing two public squares to be analyzed according to the indicators and determinants then presenting the findings at the end of the chapter. The fourth chapter is the last which includes the conclusion and recommendations.

Based on the collected knowledge, the selected indicators and determinants were applied on two public squares in Nablus city and deeply analyzed all the possible aspects on these squares using also the physical analysis, and the field observation for users and their behaviour along different time periods to find out the negative aspects of the analyzed factors and the deficiencies of the public squares which will be the basepoint to provide convenient and effective recommendations for the decision makers and the designers to be taken into consideration for any future solutions for the problem of scarcity of public squares in Nablus. The findings included some deficiencies and weaknesses in the city as a whole and in the selected squares. These weaknesses like the absence of efficient strategies and planning policies regarding public squares and the topography of the city which limited the areas that can be used for squares. Moreover, the weak enclosure, the location, and the small sizes of the squares all played a big role in the existing problem.

The citizens of Nablus have a limited awareness regarding the importance of public squares in the urban areas since most of them did not have the opportunity to experience the existence of this type of spaces in the city, however, and according to the analysis, if the public squares were attractive and have a suitable design for the cultural needs of the community, then it will be used more by the people.

This study presented a very important issue for many cities and especially for Nablus and tried to find the true reasons for the problem of public squares based on the present real data and conditions of the city and the people. This study can be considered as the starting point for a better public life in all cities that have similar problems in general and in Nablus city in particular, and it forms a framework for future solutions that can be used to create successful and attractive public squares in cities and communities by taking into consideration all of the explained factors and aspects that will affect the usage and the quality of any existent or future public square in any city..

4.2 Recommendations

In Nablus city, lack of public spaces in general and public squares in particular has always been a controversial issue between different opinions of the decision makers. However, there is a promising potential for the current squares or for the future ones to make it more adequate, successful, and attractive for the different groups in the city. This can be achieved by solving the existing deficiencies and avoiding them in the future projects.

According to the analysis of functions, forms, activities, and all of the other studied factors, it showed that these squares can be appealing for the users and enhance the social life if it was adjusted in a way that removes the current weaknesses and create more strengths. And so the following points present some possible solutions and suggestions to develop the public squares in Nablus and improve their qualities;

• Creating effective planning policies that pays more attention for finding appropriate lands for public squares and maintaining the existing ones.

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- Changing the functions around the squares to make the area more attractive for the people to set or visit like opening restaurants, cafes, and any other similar functions.
- Taking the socio-cultural characteristics into account by expanding the areas of the existing squares if possible or making the future public squares large enough to give the opportunity for females to use the squares and feel more comfortable.
- Involve the community in the decision-making process regarding the public squares especially their locations.

This thesis showed the importance of public squares and how the people are willing to use these spaces when it meets their needs and respect the cultural aspects. And so this study can be considered as a framework to be used in the future by other researchers for further studies about related topics or by the Municipality of Nablus and governmental authorities for new projects related to public squares.

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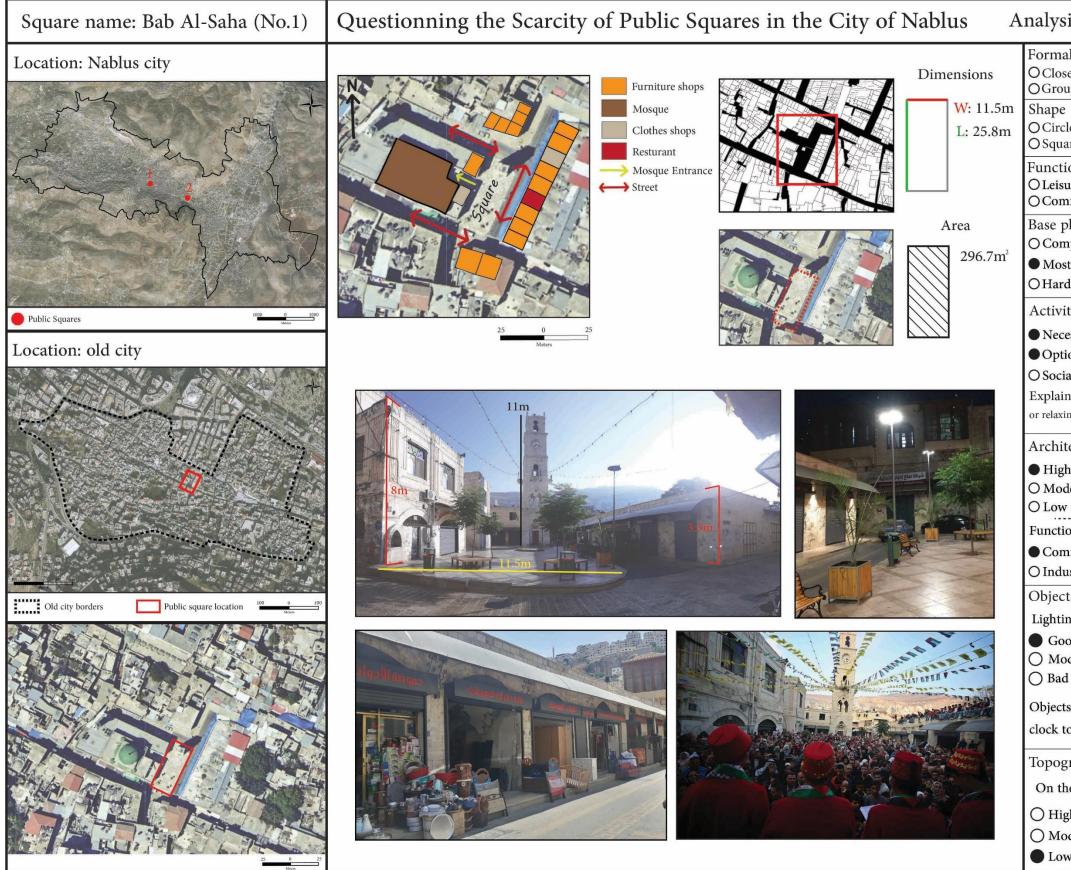
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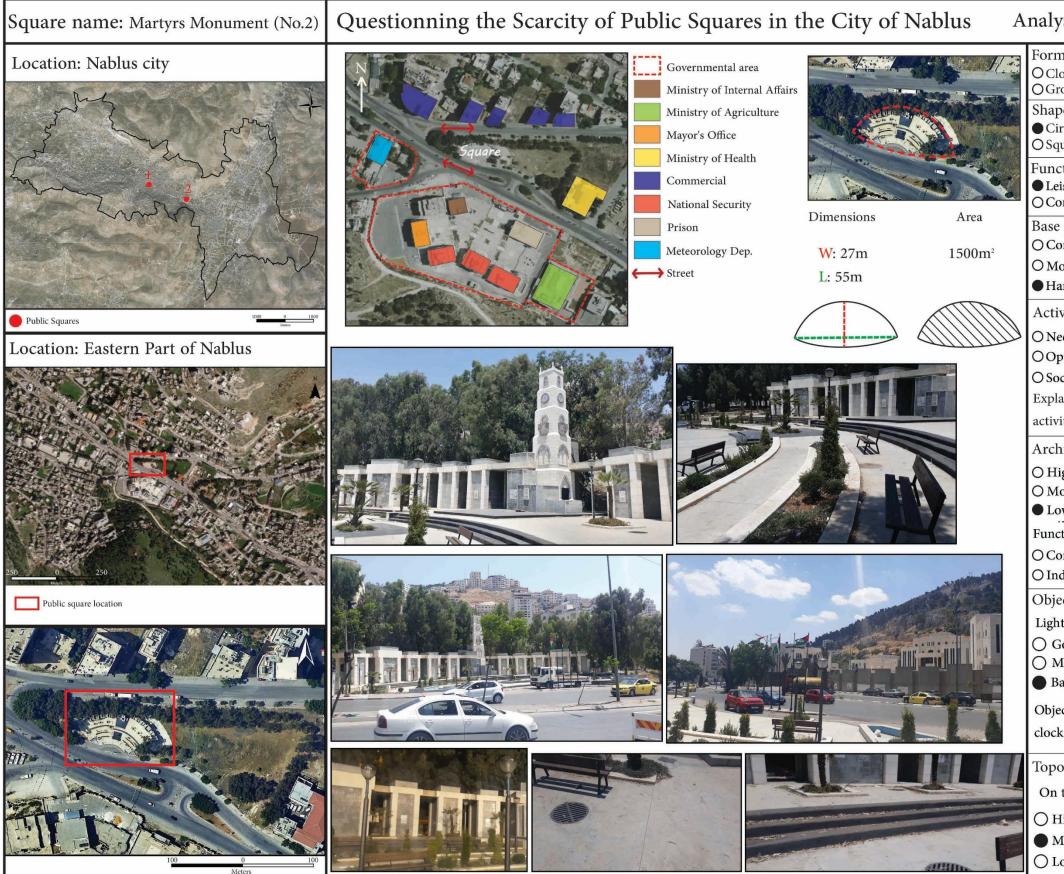
APPENDICES



Appendix A: Inventory Form – Bab Al-Saha Square.

vsis a	&]	Eval	uation	Form
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mal type losed ○Dominated ○Nuclear rouped ●Undefined
pe ircle ●Rectangle OTriangle quare OAmorphous
ctional type eisure OReligious ●Mix-use ommercial OResidential
e plane ompletely hard surface lostly Hard surface ard and soft surfaces in balance
ivities
ecessary activities ptional activities ocial activities lain: passing through the square axing and setting on the benches
hitectural frame Tigh enclosure Human scale • Yes ow enclosure Cions around the square ommercial O Residential odustrial OInstitutional
ects in the square
nting at nightLandscapeGoodO AdequateModerateFewBadO Not existed
ects: trees, benches, stairs, ligh poles, k tower, water fountain, trash cans
ography effect
the design On the sun light
High effectO High effectModerate effectO Moderate effectLow effectLow effect



Appendix B: Inventory Form – Martyrs' Monument Square

Analysis & Evaluation Form

mal type				
Closed O Dominated O Nuclear				
Grouped • Undefined				
npe (Semi-circle)				
Circle O Rectangle O Triangle				
quare OAmorphous				
nctional type				
eisure OReligious OMix-use Commercial OResidential				
e plane				
Completely hard surface				
Aostly Hard surface				
Iard and soft surfaces in balance				
tivities				
Jecessary activities				
Optional activities				
ocial activities				
blain: The square does not have any				
vities				
chitectural frame ;				
High enclosure Human scale				
Aoderate enclosure •Yes				
low enclosure ONo				
actions around the square				
Commercial O Residential				
ndustrial Institutional				
jects in the square				
hting at night Landscape				
Good • Adequate				
Moderate O Few				
Bad O Not existed				
jects: benches, trees, water fountains,				
ck tower, stairs, light poles.				
oography effect				
n the design On the sun light				
High effect O High effect				
Moderate effect O Moderate effect				
Low effect Eow effect				