

THE IMPACT OF WAR ON THE PUBLIC REALM AND THE RECONSTRUCTION IN CITIES AFTER WAR CASE STUDY: IRAQ, MOSUL CITY

Kimia BELADI¹, Erfan BAGHERIYAR², Marwah ISAM MOHAMMED³

¹Department of Architecture, Altınbaş University, İstanbul, Türkiye, kimiabeladi@gmail.com

([ID](https://orcid.org/0000-0001-7983-1111) <https://orcid.org/0000-0001-7983-1111>)

²Department of Architecture, Altınbaş University, İstanbul, Türkiye, erfangebheriyar@gmail.com

([ID](https://orcid.org/0000-0001-5848-4309) <https://orcid.org/0000-0001-5848-4309>)

³Department of Architecture, Altınbaş University, İstanbul, Türkiye, marooshnon@gmail.com

([ID](https://orcid.org/0000-0002-4346-5954) <https://orcid.org/0000-0002-4346-5954>)

Received: 14.02.2023

Accepted: 13.02.2024

Published: 30.06.2024

*Corresponding author

Research Article

pp.23-51

DOI: 10.53600/ajesa.1251178

Abstract

The social life, history, and customs of historic towns are all influenced by the public domain. The urban planning and architecture of the public domain establish the distinctive identity of old towns. They help to bring people together and form social bonds. In this phase, urban planning and architecture are vital. The public realm's historical character is essential for social interactions. The purpose of this study is to investigate and evaluate the impacts of conflict on the urban public realm (market places) in Mosul's war-torn region. Because they are largely responsible for the synthetic feeling of multidimensional space, the combination of urban and architectural influences was evaluated. These goals were fulfilled by employing an interpretative historical analysis methodology based on original assessment criteria. The data were used to categorize parts of the public domain that needed revitalization. By re-establishing the proper balance of economic, social, and cultural forces, revitalization programs aid in the preservation or revitalization of desirable places. The study found that the orderly and harmonious preparation of the public domain has a significant impact on people's perceptions of space.

Keywords: public realm, revitalization, reconstruction, war, post-war cities

SAVAŞIN KAMUSAL ALAN ÜZERİNDEKİ ETKİSİ VE SAVAŞ SONRASI KENTLERDE YENİDEN YAPILANMA ÖRNEK OLAY İNCELEMESİ: İRAK, MUSUL ŞEHİRİ

Özet

Tarihi kentlerin sosyal yaşamı, tarihi ve geleneklerinin tümü, kamusal alandan etkilenmektedir. Kamusal alanın kentsel planlaması ve mimarisi, eski şehirlerin ayırt edici kimliğini oluşturur. İnsanları bir araya getirmeye ve sosyal bağlar oluşturmaya yardımcı olurlar. Bu aşamada, kentsel planlama ve mimarlık hayati önem taşımaktadır. Kamusal alanın tarihsel karakteri, sosyal etkileşimler için gereklidir. Bu çalışmanın amacı, Irak, Musul şehrinin savaştan zarar görmüş bölgesinde çatışmanın kentsel kamusal alan (pazar yerleri) üzerindeki etkilerini araştırmak ve değerlendirmektir. Çok boyutlu mekanın sentetik hissinden büyük ölçüde sorumlu oldukları için, kentsel ve mimari etkilerin kombinasyonu değerlendirilmiştir. Bu hedefler, orijinal değerlendirme kriterlerine dayalı bir yorumlayıcı tarihsel analiz metodolojisi kullanılarak gerçekleştirilmiştir. Veriler, kamusal alanın yeniden canlandırılması gereken kısımlarını sınıflandırmak için kullanıldı. Yeniden canlandırma programları, ekonomik, sosyal ve kültürel güçlerin uygun dengesini yeniden kurarak, arzu edilen yerlerin korunmasına veya yeniden canlandırılmasına yardımcı olur. Çalışma, kamusal alanın düzenli ve uyumlu bir şekilde hazırlanmasının, insanların mekan algıları üzerinde önemli bir etkiye sahip olduğunu bulunmuştur.

Anahtar Kelimeler: makale, yazarlar için talimatlar, makale şablonu

1. Introduction

Since the dawn of urban life, public spaces have played a crucial role in expressing the identity and function of towns and cities. Public spaces have a special and ageless value in this regard. From ancient times to the middle Ages and into the contemporary age, public spaces have been a permanent part in the building of cities/towns and the lifestyle of urban communities (SM, MA, & Faizah, 2015). People's relationships with physical environments,

individual and collective activities, and meanings all contribute to place as a where dimension. Some notions that potentially characterize the nature of people's connection with a place include 'Place Attachment,' 'Place Identity'. Sense of place is a term employed in the study of living person bonding, connection, and place significance (Geipel, 1991). A sense of place is typically characterized as an overall impression that encompasses the broad ways in which individuals feel about places, experience them, and attribute concepts and values to them. This article highlights sense of Public Realm as among the most prevalent notions in location-based research. Taking into account characteristics of sense of place was always useful for examining public place connection and pro-environmental sentiments toward these locations. The development or preservation of a place identity is critical to preserving the environmental quality and also the integrity of humankind within it (Shamai, & Ilatov, 2005). Since Public places are multiplied in terms of feeling and importance in countries that are exposed to natural or artificial disasters such as wars, forced displacement and demographic change of the population, as they are linked to their collective memory and their daily journey to work or the market. This is what will be discussed in this paper.

2. Methodology

Public spaces have played an important role in contemporary society and this is beyond doubt. This paper deals with public spaces, their role and characteristics in the foreground, and then talks about public spaces, especially in areas where wars and unrest have occurred. It tries to identify the impact of these wars on public space in this city, and the change in individual behavior after these spaces were bombed and demolished, and how this led to a change in ideas and practices in these public places. The city of Mosul will take as a model - a city in northern Iraq that was controlled by the terrorist organization ISIS in 2014 - which has an estimated area of (33,313) square kilometers and a population of three million and 720 thousand people (CSO, 2018), and it fought a violent war in 2017 in order to liberate it and return it once again to the control of the Iraqi state, we will try to identify what happened to its public space, markets and important intersections, and how they were destroyed and the repair and reconstruction processes in that area.

3. Research questions

1. What do we mean by public realm and the element of public realm and its function?
2. How war can affect the public realm and people's life and people's behavior?
3. How war can affect the people look and memories about their city and how reconstruction be?

4. The physical public realm

Almost all definitions of urban design include a reference to the public domain and the features that constitute it. The public realm is characterized as public space that is shared by the general public. The concepts of universal access, common land, and shared facilities are all intertwined with public space (Lang, 2006). For experts working in any of the environmental design professions, the public domain is split into two sections: The first focuses on the physical environment's public elements (both manmade and natural) in which behavior takes place, while the second demonstrates how governments and the markets make collective decisions as outlined by a country's constitution.

The first influences how people think about urban design features, whereas the second influences how people think about urban design as a process (Madanipour, 2003). The structure and function of communities, as well as everyday interactions at the group level, are influenced by public spaces (Lang, 2006). The public realm is essentially a gathering place for people to come together as a group and experience place. This can occur in such way where the user of public realm is either directly or in directly participating in the public life (lang, 2006). Public realm consists of outdoor realm such as: Streets, squares, and parks, as well as pedestrian sidewalks, are examples of outdoor spaces, and Indoor realm such as: Arcades, halls of train stations and public buildings, and other spaces to which the general public has access, such as the interiors of shopping malls, are examples of indoor space (Marmot, 1982).

5. The elements of the physical public realm

Any definition of what constitutes elements of the built public realm is likely to change over time. It will be determined by a political viewpoint and will assist in the definition of that stance. The sun, sky, trees, steel, and cement, in that order of significance, are the primary elements of urban architecture, according to Le Corbusier in the 1930s. The light and sky are unquestionably important everywhere, and they have become commodities with which to barter in modern urban design efforts. Nonetheless, Le Corbusier's list isn't especially useful when considering the character of public space (Marmot, 1982). Consider the public sphere as a set of behavior contexts, as ecological psychologists originated the term in the 1960s. A behavior setting is made up of three elements: a standing (or recurring) behavior pattern, Milieu (built type pattern), and a time span. The ground's surface, buildings' and other physical constructions' surfaces, and the objects that both bind and form it internally make up the milieu. The variables are complex, as are their characteristics. Concerns like the sequential experience of the world as one passes through it, the ground floor operations, or lack thereof, that are housed in the milieu, and the attributes of the enclosing elements of spaces are all important in urban design (Rogers, 2003). The artificial environment that surrounds a person makes up the physical public sphere. The plaza, the trees, the building facades, the ground floor usage, and the entrances to the open areas make up the former (figure 1). The pieces are largely on a more normal street, the same but in a different form (Figure 2). If, but at the other hand, urban design is focused with the whole of human experience, it must also take into account the nature of the activities and the people who engage in them. It all comes down to the behavior settings and also how the environment promotes activities while also acting as an attractive presentation (Lang, 2006).



Figure 1. Sixteenth street, Denver in 1993.



Figure 2. Orchard road, Singapore in 2003.

A figure-ground plan of Rome was drawn by Giambattista Nolli in 1748 (Figure 4). It depicts the city's public space at ground level during Pope Benedict XIV's reign. The public had access to a lot of interior space (mostly in churches) and courtyards. It also shows how much open space was available in cities at the time. Much of it is hidden from view on the streets. The nature of the façades that compose these spaces is just as significant as the figure-ground interaction. What is their composition, and how are they fenestrated? What are the functions of the areas that face the open space? How many entrances are there on squares and on the streets? What is the purpose of the sidewalk or pavement? What is the height of the structures that enclose the spaces? What kind of lighting is used in the spaces? How do they behave at night? What are the patterns of activity that occur in the spaces? Who are the individuals involved in them? These are the characteristics that differentiate one location from another - one city from another, and one precinct, or neighborhood, within a city from another. The cutaway ground floor plan and bird's eye view of Mumbai's Banking District reveal a lot about the character of the public realm (Figure 3) (Madanipour, 1996).



Figure 3. Horniman Circle, Mumbai in 2003. (a) Bird's eye view and, (b) cut-away ground floor plan.



Figure 4. The Nolli map of Rome, 1748.

6. The importance and functions of the physical public realm

Today, large cities are typically identified by their extensive public realm, and the functional quality of these areas is one of the methods used to assess a city's power and ability to provide fun and entertainment, natural beauty, and open spaces for its residents. Cities have also profited from public spaces in terms of fostering and strengthening urban pride, boosting tourism and economic investment, and promoting health and improving quality of life (Foodmann, 1986). Public realm help people build a sense of trust and confidence and increase people's sense of solidarity and belonging, and in fact, these spaces are more than just places for fun (Pasaogullari, Doratli, 2004). These places are important components of our environment that, in addition to serving beneficial and necessary purposes, allow people to have fun, safeguard natural resources, and impact a variety of economic development decisions (Talen, 2000).

7. Investment in the public realm

1. Increases security and reduces criminal fear;
2. It has the potential to enhance suburban communities by preserving property values and growing their appeal to tourists.
3. Create prospects for economic and social change.

The vast network of streets, parks (green areas), and plazas that characterize the public realm are often incomplete, poorly planned, or designed without adequate citizen participation (Lofland, 2017).

7.1. Streets

They shape the urban form and transport the public services that keep a city running. They allow people to move and connect, as well as serve as a location for businesses and the exchange of services and products (figure 5) (Berman, 1986).

7.2. Parks and plazas

Park and plaza can be any gathering place on a street or between building or a street interaction with the statue (figure 6) (Hayden, 1997).



Figure 5. Israel Street / Jerusalem, Israel.

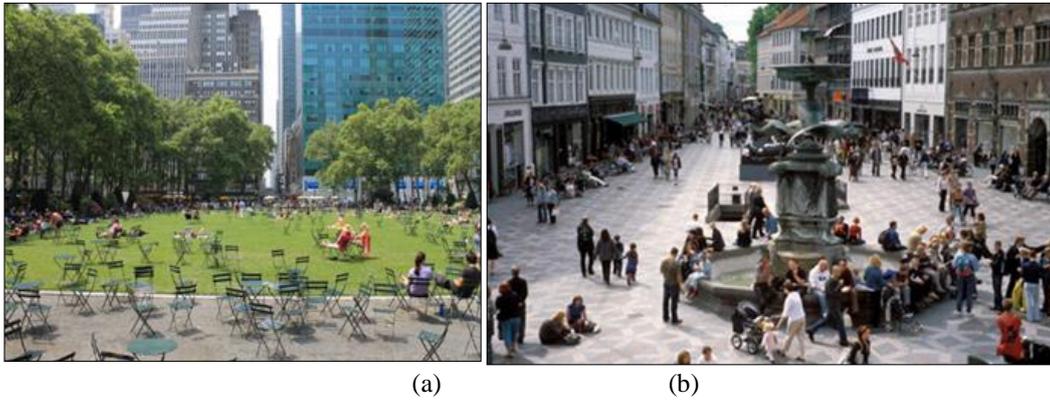


Figure 6. (a) Bryant park/ New York City. (b) The plaza mayor in Madrid.

7.3. Parks and plazas

In the open air Public art adds tremendous value to people while also encouraging a more artistic climate. As a result, sculptures, fountains, on-screen visuals, and other types of public art should be welcomed and recognized in the coming years to improve our public spaces (Hutter, 1997).

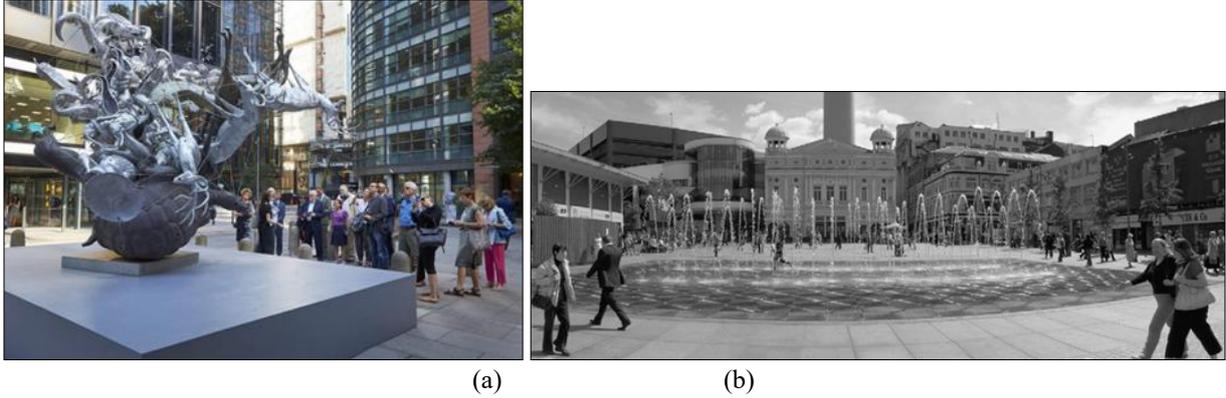


Figure 7. (a) Sculpture in the city of London. (b) The public realm implementation framework included the addition of fountains to Williamson square.

8. Properties of the public realm

8.1. Imageability

A public realm with sidewalks, native-plant-lined grass medians, and a central square enlivened by an outdoor community art show or a nearby farmers' market conveys not only elegance, vibrancy, and activity, but also a powerful sense of community (Moudon, 1992).

8.2. Accessibility

Since visual signals in the environment do not always communicate what spaces are or are not open to the public, there is always a fine line between private and public spaces. This can be avoided by using simple demarcations such as signs, vegetative barriers, and paving design, among other things, which can minimize confusion by improving legibility (Francis 1989).

8.3. Meaning

The ability to create images and their meaning are linked. Users of the environment are able to use space more easily when images are transparent, drawing from and adding to the context that already exists (Garcia-roman, Ortiz, Prats, 2004).

8.4. Continuity

Creating meaning in the world requires consistency. Continuity among buildings, roads, vegetation, and other elements, for example, can provide meaning, context, a "sense of arrival," and also continuity to the place experience (Tibbals, 1992).

8.5. Choice

Diversity in the environment or design versatility may provide opportunities for choice. Plazas, for example, can be built with moveable chairs so that people who use the room have a say in how they use it and feel relaxed in it (Worpole, 1992).

8.6. Flexibility

The creation of liveable communities requires a design that is versatile enough to allow for small scale changes (Aida, 2015).

9. Cities, war and architecture

Buildings are thought to be cabinets of memories, so attacking them aggressively means attacking people's memories. The architecture of a cultural community is inextricably linked to their national identity. As a result, an assault on the first even targets national identities. When this identity is targeted, the sense of national belonging and common memory begin to fade, and residents of the region feel alienated and alienated from their own neighborhood.

This tactic is used in politics and war because it lowers morale of citizens and armies, making them easier to overcome. As a result, the homeland is inextricably linked to people's identities. As a result, destroying and demolishing a community's homeland is the most effective way to obliterate its identity. The systematic devastation that happens in these kinds of wars does not strike at random. Buildings that reflect historical and symbolic values are chosen so that their destruction will instill feelings of despair and desperation in their inhabitants.

As a result, the destruction of these societies' cultural heritage would gradually lead to the disintegration of their beliefs, customs, and, eventually, their identity. The sites most often hit in culture wars are:

- 1) Traditional buildings that have strong values in the historical cultural memory that have been passed on from generation to generation.
- 2) Buildings and public places with symbolic ideals imbued in people's consciousness, such as memorials, ancient fortresses, city squares, and so on.
- 3) Religious and cultural structures.
- 4) Structures known to the general public as university and school buildings (Brian, 2011).

9.1. Flexibility

The physical history of a city, the local culture of its inhabitants, and its geographical features are all covered with presumed reminiscences to form urban identity. Furthermore, "City identity is a combination of the aspirations and experiences of the citizens and those who visit". A feeling of belonging to a location is expressed by perceptions of both the larger metropolitan region and specific physical locations (Hwang, 2014).

9.2. Post-war city reconstruction and saving city urban identity

Cities in post-war circumstances need projects of urban regeneration to achieve urban sustainability after devastation. These projects can only see the light through strategic post-war policies. Inner cities often decline and

saving heritage becomes a priority caused by the dangers of lost identity. Declining post-war communities need to work against harsh socioeconomic circumstances such as deactivated areas, the decrease of income as well as the destruction of the city whether it being in the form of bombed buildings or a devastated infrastructure. The purpose of urban regeneration is regarded as an essential sustainable urban progress. The goal of urban renewal is regarded as critical to long-term urban development. There should be consideration of three major aspects. The first is the restoration and renovation of historical and cultural centers, including the creation and use of urban central functions. The second priority is the provision of low income settlements to ensure residential prosperity and Policies also aim to maintain price and cost stabilization in the housing market. The third goal is to enhance the urban environment's environmental sustainability, including noise and energy consumption, by introducing environmentally sustainable and passive environmental performance measures (Boussaa, 2017). As a result, the revitalization of historic city centers aims to strengthen and cultivate the local residents' sense of belonging and identification within the context of the place's heritage (Hussein, Abdulla, Salih, 2019). Change in the metropolitan environment is unavoidable due to a variety of reasons, one of which could be war. However, reclaiming one's urban identity is important. A place's identity profoundly reinforces one's sense of belonging. And preserving a place's uniqueness can be accomplished by forethought urban regeneration that achieves the following goals:

1. Preservation of the existing urban fabric of the old city.
2. Triggering society's dormant potential.
3. Keeping a feeling of belonging to the city.
4. Reclaiming social and spiritual ramifications
5. The preservation of architectural traditions, structures, and technology.
6. Increasing people's interest in decisions affecting their city's future (Abdulwahid, 2009).

10. Case study: Mosul city, Why Mosul? What is its importance?

Mosul was founded in the sixth century on the western side of the Tigris River, just across the river from the ruins of the Assyrian city of Nineveh (Hussein, Abdulla, Salih, 2019). During the Abbasid period, the city flourished as well, and it was regarded as a major city for commerce and governance throughout history. As a result, it was rich in ancient ruins and historical traditional buildings that remained standing in the region until the ISIS occupation. Mosul's old city is a typical Islamic city with a historic urban center that is distinguished by its compact traditional urban fabric, small alleyways, and courtyard buildings. Because of the numerous roles held by IS, who used the compactness of the urban fabric for defensive purposes, a large section of the old city was attacked and bombed throughout Mosul's liberation. Each cultural community has its own architectural identity and tradition, which is linked to memory and gives the city its public realm (Boussaa, 2017). Historic urban centers, such as Mosul's old city, play a role in strengthening a place's memory, belonging, and identification. These historic centers have an effect on the identity of the larger city and its surrounding areas (Raadik-Cottrell, 2010). The preservation of cultural heritage is inextricably related to overcoming the post-war crisis and maintaining the region's potential economic

growth and security (Danti, 2015). Mosul is a major city in Iraq, along with the capital, Baghdad, and the city of Basra. Since Iraq was a province of the great Ottoman Empire, these three cities also served as the capitals of three Ottoman provinces of the same names: Mosul in the north, Baghdad in the east, and Basra in the south. Mosul is a fascinating and vibrant cultural melting pot because of its various ethnicities, including Arabs, Kurds, Yazidis, Shabak, and Armenian and Assyrian Christians. Mosul is the capital of the Nineveh Governorate, and it is surrounded by culturally diverse cities, villages, and suburbs. In terms of population, Nineveh Governorate is second only to Baghdad. It is the birthplace of a tens of thousands-year-old civilization. People exhibit such ethnic and sectarian plurality that the towns and villages of Nineveh embody the entire spectrum of Iraq. Because of its temperate climate in contrast to the rest of Iraq, it is regarded as the "mother of two springs." It is situated on the banks of the Tigris River and has historically been an important trade city due to its size (Abdulwahid, 2009).

10.1. Mosul after war

The battle the city has witnessed is the largest since World War II. After the end of the fighting that lasted for more than nine months in Mosul, its residents are now facing a catastrophic humanitarian crisis. The number of dead is estimated in the thousands, and the number of people who left their homes fleeing the battles that began in October 2016 raised over a million people. Entire neighborhoods have ceased to exist and their homes have been razed to the ground, the bodies of the dead are still under the rubble, and the streets are littered with unexploded ordnance, landmines, and traps. The extent of the damage is believed to be much greater than what the United Nations satellite imagery analyzes show, which estimates the damage to 10 thousand buildings completely destroyed. However, taking into account the destruction of buildings that cannot be detected by satellites, the United Nations estimates the real number of destroyed buildings at about 32 thousand buildings. The latest UN assessments have shown that all parts of Mosul have been damaged of some kind. But the western part of it had the largest share of devastation, as it was liberated from the grip of the Islamic State in July 2017, that is, six months after the liberation of the northern part of the city. Satellite image show entire neighborhood destroyed (Figure 8) (Figure 9) (Seherling, 2021).



Figure 8. Mosul before war/ November 2015



Figure 9. Mosul after war/ July 2017



(a)

(b)

Figure 10. (a) Mosul before War/ November 2015. (b) Mosul after War/ July 2017. Satellite image show the changes that occurred in the Great Mosque of al-Nuri and the surrounding urban area destroyed.

10.2. Numbers based on UN satellite study of building damage from October 2016 to July 2017

135 structures were damaged prior to the attack (50 percent public, 21 percent homes) various public structures were destroyed before to the battle, notably the al-Ghazlani military base, Mosul Airport, and the city's university (Seherling, 2021).

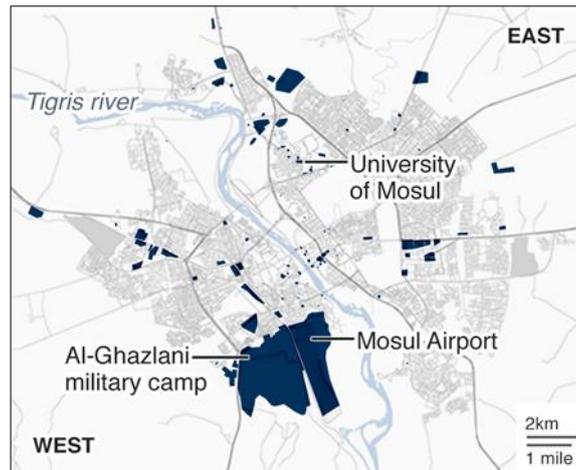


Figure 11. Building damage, October 2016 to July 2017

In the first five months of the attack:

1,240 structures were damaged (47 percent homes) during the initial phase of the war, strategic objectives such as highways and factories were targeted. The Tigris River's five bridges were all destroyed. Homes made up little under half of the destroyed structures (Seherling, 2021).

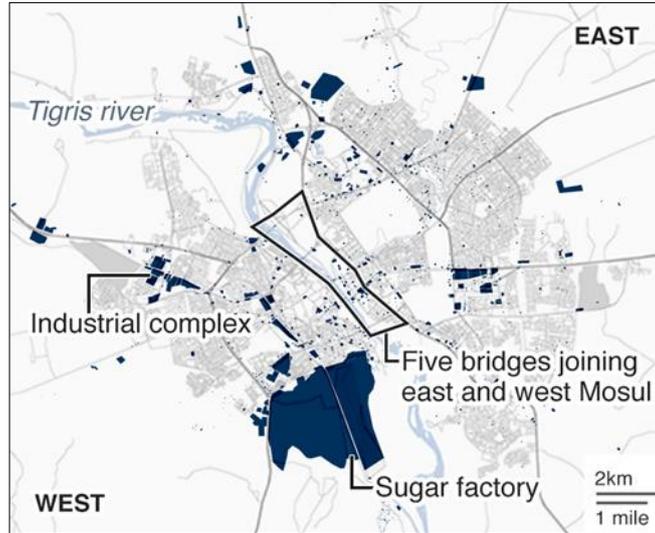


Figure 12. Building damage, October 2016 to July 2017

After eight months:

4,356 structures had been damaged (70 percent homes)

From March to June of this year, the number of structures destroyed nearly tripled, rising from 1,240 to 4,356. Seven out of ten of these were people's houses (Seherling, 2021).

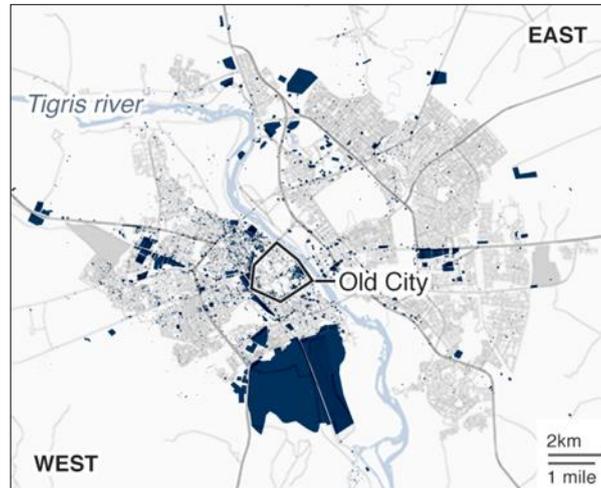


Figure 13. Building damage, October 2016 to July 2017

After almost nine months:

9,519 structures damaged (85 percent residences) (85 percent homes) Over 5,000 sites were destroyed in the closing weeks of the conflict. Approximately 98 percent of them were residential structures, the most of which were located in the Old City. The famous Great Mosque of al-Nuri was also demolished (Seherling, 2021).

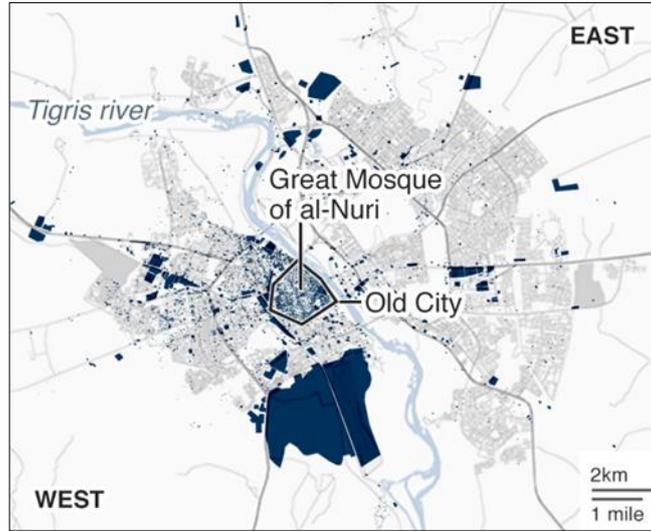


Figure 14. Building damage, October 2016 to July 2017

10.3. Types of buildings destroyed, numbers based on UN satellite analysis

The size of the destruction that this city witnessed is great, as we explained in the previous slides, the number and type of buildings that were bombed and destroyed, but the focus will be on public places as they are an eyewitness to what happened. Why?

- 1) It is the most influential in the collective memory of people, as it has been used by ISIS gangs to carry out executions, torture and arrests.
- 2) At the same time, they are places of history and importance in the western part of the city of Mosul, especially in the old region.
- 3) Most of these public squares are "markets" that represent the largest part of them, and they are old shopping area with domed ceilings or old buildings, buildings that formed between them a street or a narrow road that was used to become a market
- 4) It represents the identity of the city and the theater on which most of the events in ancient and modern Mosul history took place.

For these reasons and more, the name and location of these markets and how they were in the past before and after ISIS will be published and exposed, and if there is some poor and few reconstruction operations that happened to them (Alobaidee, 2012).

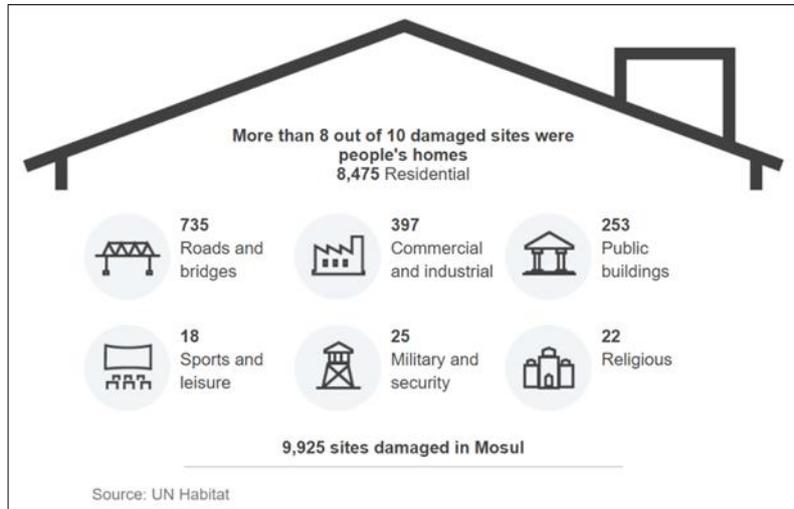


Figure 15. Types of buildings destroyed

10.4. Najafi street

Najafi Street, which connects Ninewa Street to the north and Bab Altoob to the south, was built in 1913. And called Al-Najafi Street because a substantial portion of the Najafi family's building, covering an area of 1200 meters, was destroyed during the street's construction. The street measures 250 meters in length and 5 meters in width. The street was occupied by a significant number of libraries in the 1950s. In the 1970s, the street became a pedestrian-only zone, and it was well-known for selling books, school supplies, and printing houses (Alobaidee, 2012).

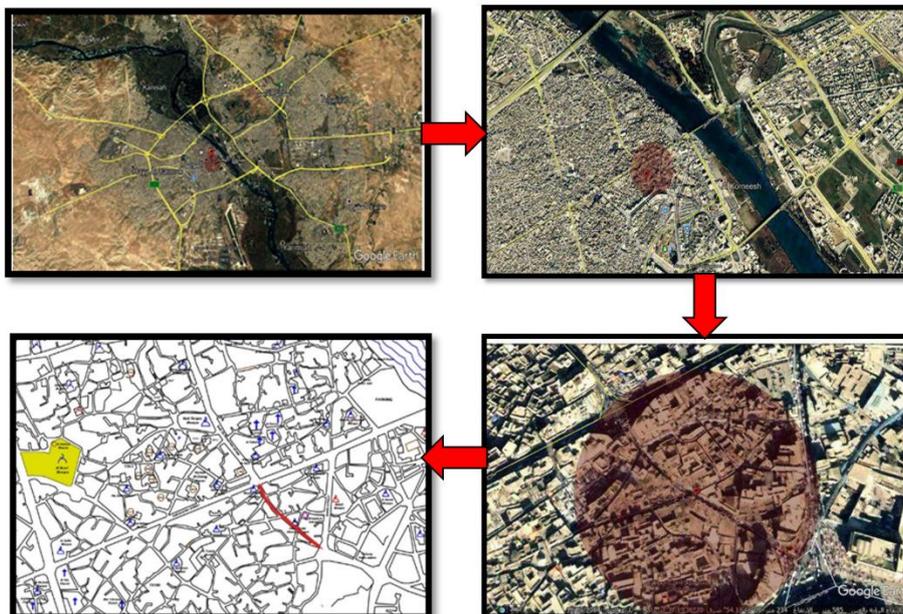


Figure16. Najafi street from Google map.

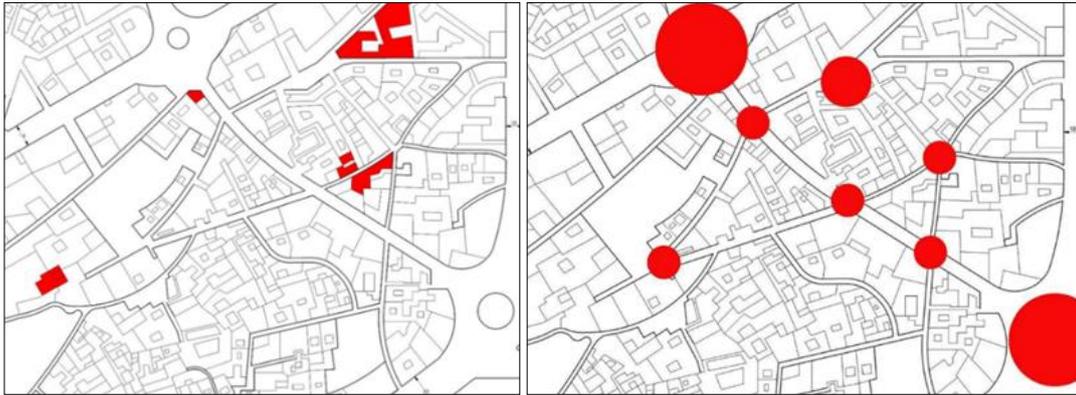


Figure 17. The historical buildings. Figure 18. Nodes and meeting points.

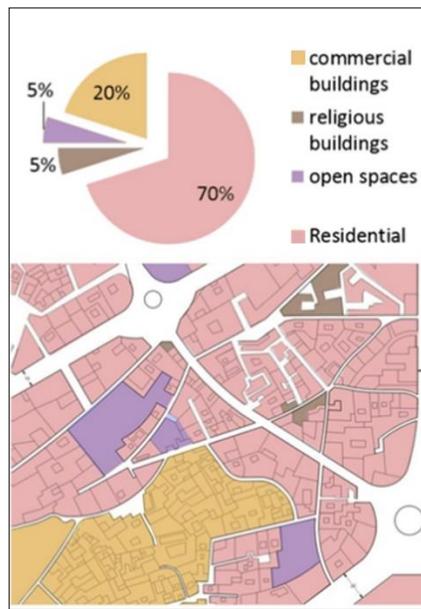


Figure 19. Land use of the area.



Figure 20. Solid & Void.

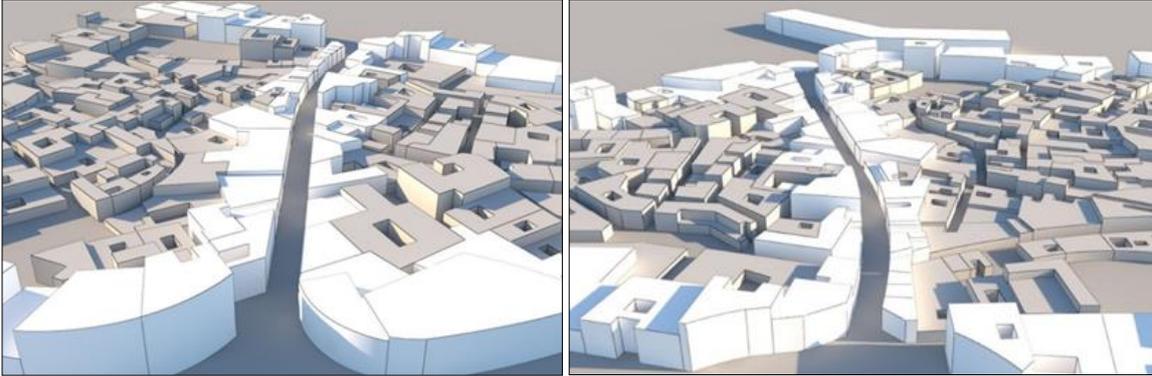


Figure 21. 3D visual picture of the area.

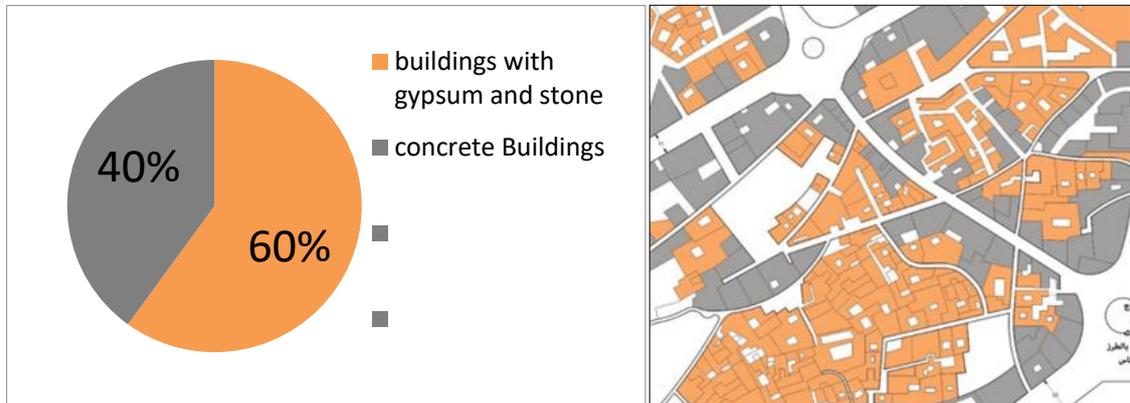


Figure 22. Materials



Figure 23. Najaf street in 2017/2020.



Figure 24. Al Najaf street in 1925.



Figure 25. A picture on the left shows a street after it was completely destroyed and bombed. On the right Al-Najafi Street appears in 2010, where it was pulsing with daily life.



Figure 26. Top picture shows the daily movement in the street and the books placed on the sidewalk. A picture on the bottom shows a street in (2021) after it was completely destroyed.

10.5. Gold street

The goldsmithing market is located in Sheikh Abu Al-Ela locality in Mosul, which was destroyed during the liberation operations in 2017 and has not been reopened yet, and the origins of the goldsmithing market in the city of Mosul dates back to the Ottoman era, as they opened a special market for goldsmithing during the reign of Governor Sinan Pasha (1590 AD)) It extends from Najafi Street to the north and ends in Ghazi Street and extends

in two lanes and small qaysariyyas, and the market became at the end of the nineteenth century and the beginning of the twentieth century includes two main sections: a section for goldsmithing, most of which is in the hands of Muslims, and a section for crafting silver, most of it in the hands of Sabeans. 50 Muslims, 18 Christians, and 16 Jews (Alobaidee, 2012).

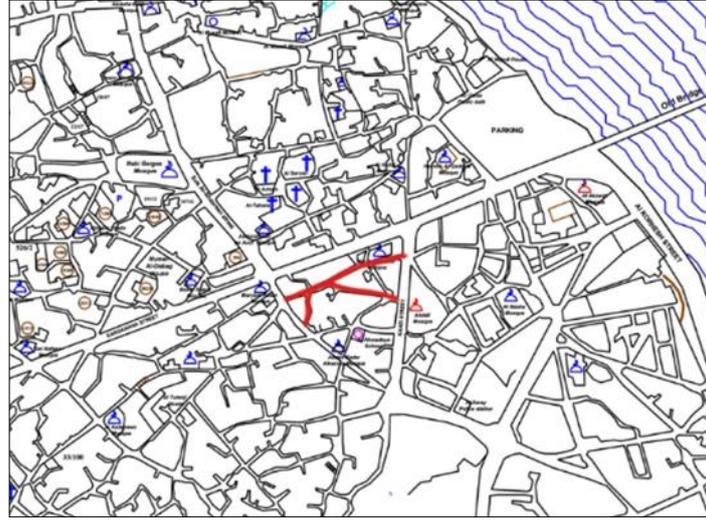


Figure 27. Gold street map.



Figure 28. Show the shape of the alleys of the gold market before it was destroyed.



Figure 29. Top picture shows the daily movement in the street. A picture on the bottom and right shows a street in (2017) after it was completely destroyed.

10.6. Aleppo street

Aleppo Street, which is more than 100 years old, this street that does not exceed 500 meters and connects between Justice and Republic streets in the right of Mosul and is famous for the presence of many cinemas, cafes and liquor stores, Aleppo Street is a street for men only and no woman entered it and it was not socially permitted in Mosul to enter a woman from known families. A street for art lovers, and as we do not forget, it contains many sewing shops (Alobaidee, 2012).

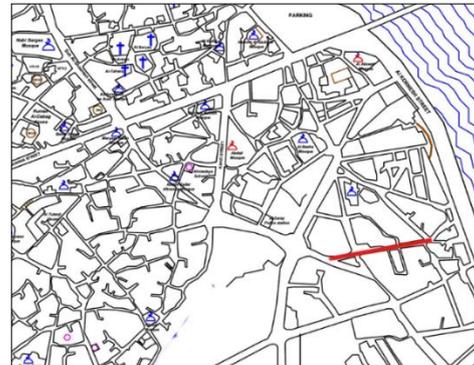


Figure 30. Aleppo Street in the early 1900's. **Figure 31.** Aleppo street map.



Figure 32. Top picture shows Aleppo street after war (2017). picture on the bottom and right shows a street in (2020) after reconstruction.

10.7. Sargakhana

The Sargakhana district is one of the old neighborhoods of Mosul, famous for its large market, known as the Sargakhana market, which specializes in selling various fabrics and various luxuries. The locality still bears the name of the market it is located in. The market (Sarrakhanah) or (Sarraj Khanna) was known by this name since the Mughal era, when saddles that were needed by horses were sold. It was the first street to open for vehicles and cars in Mosul, which was opened by the Wali Suleiman, the governor of Mosul, in 1914 (Alobaidee, 2012).



Figure 33. Sargakhana street after war (2017).

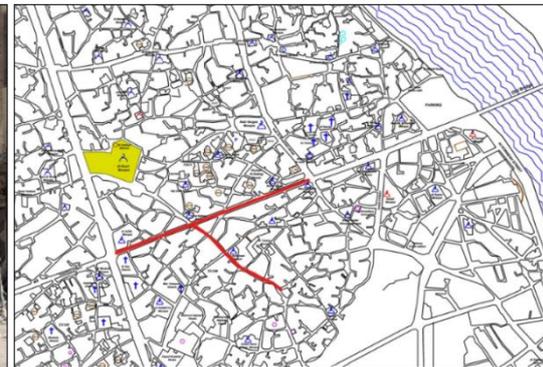


Figure 34. Sargakhanan street map.



Figure 35. Sargakhana street in the early 1950.



Figure 36. Sargakhana street in 2013.



Figure 37. Top pictures show Sargakhana Street in 2017/ bottom pictures where Sargakhana Street in 2020 after simple reconstructions.

10.8. After-before war destroyed Mosul city

Bab Al-Toub is considered one of the very important urban places in Mosul, where the urban field for many important and daily activities and markets. Therefore, his name is associated with the memory of every Mosulian individual, young or old. For these reasons, the Islamic State has tried to obliterate the features of this field and turn it into a place and a platform for executing young men on false charges (Mattar, 2004).

This is what happened in the Insurance Building, whose photo is presented below (Figure 40). It was designed by the Iraqi architect, Rifaat Chadirji, in the Mosul building. The unique architecture, with its unusual artistic formations, is present in a bright and impressive way. The distinctive location of the building overlooking an important urban square, which rises somewhat separately, away from its neighboring blocks, gives this architecture great clarity and serenity, and contributes to seeing its occupied details with a high degree of accuracy and subtlety. But the most notable here is the designer's choice of "stone" as the final structural material for the surfaces of his facades. It is the familiar, and even beloved, material of many of Mosul's builders, which, due to its continuous and

repeated uses, has become a part of the place's constructivist culture. With this choice, the architect yearns to remind us of the importance of the place on which his architecture rests. And then, in the days of liberation, the building was bombed and one of the important landmarks of Mosul was destroyed (Golany, 1978).

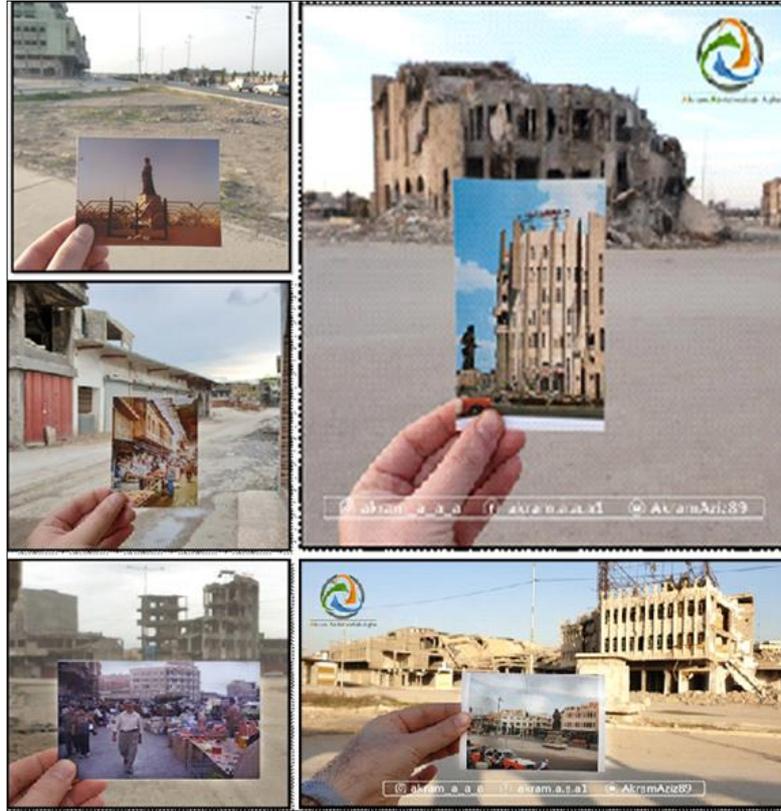


Figure 38. Bab Al-Toub area also the picture shows the Insurance Building by (Rifaat Chadirji) before and after war.

The Mosul Hotel is the second most luxurious hotel in Mosul shown in figure 39. It is located on the bank of the Tigris River in the Al-Rifai neighborhood in the west of the city at the entrance to the third bridge. The security forces recovered it from ISIS in May 2017, and were able to control its ruins, in addition to the third bridge. In January 2017, ISIS blew up the Mosul International Hotel after planting a large amount of explosives in it (Golany, 1978).

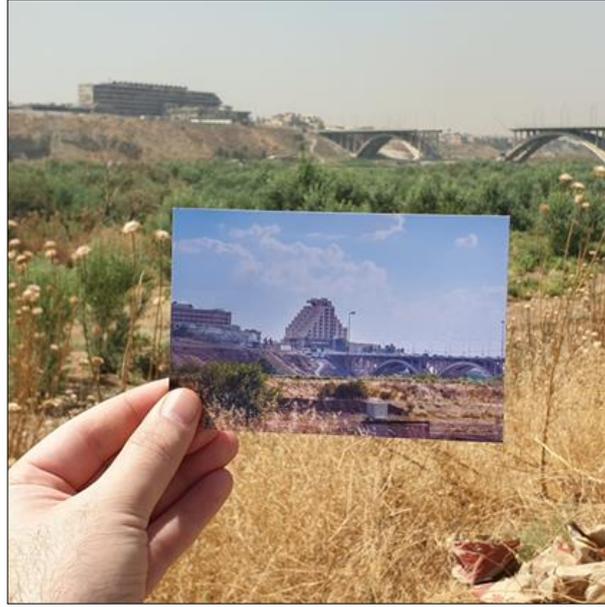


Figure 39. The Mosul hotel.

11. Recommendations for the reconstruction of cities after the war

The study generated a list of metrics that help the regeneration of the old city's urban identity. Mosul's old city's cultural identity is being reclaimed by urban redevelopment strategies.

- Strengthening and facilitating urban heritage traditions.
- Seeing the modern in the language of the old by Reclaiming buildings with architectural symbolism as a result of their relation to the people and sense of belonging. Buildings of this kind, once destroyed, leave a void in the area's past and contribute to problems of missing identity for future generations.
- Aligning principles of the original houses, whether they are intact, in need of redevelopment, or completely demolished.
- Integrating new urban proposals into the city's old fabric, while trying to create a physical landscape that encourages sustainable prosperity while not adding new obstacles to the war-torn region.
- “Identity” is inextricably linked to time and place. It is therefore the portrait and outcome of a society's collective decisions. As a result, it is constantly evolving as a result of societal, cultural, environmental, and technological transformations. Since it is a reflection of culture, it must have consistent and relating characteristics (Hussein, Abdulla, Salih, 2019).

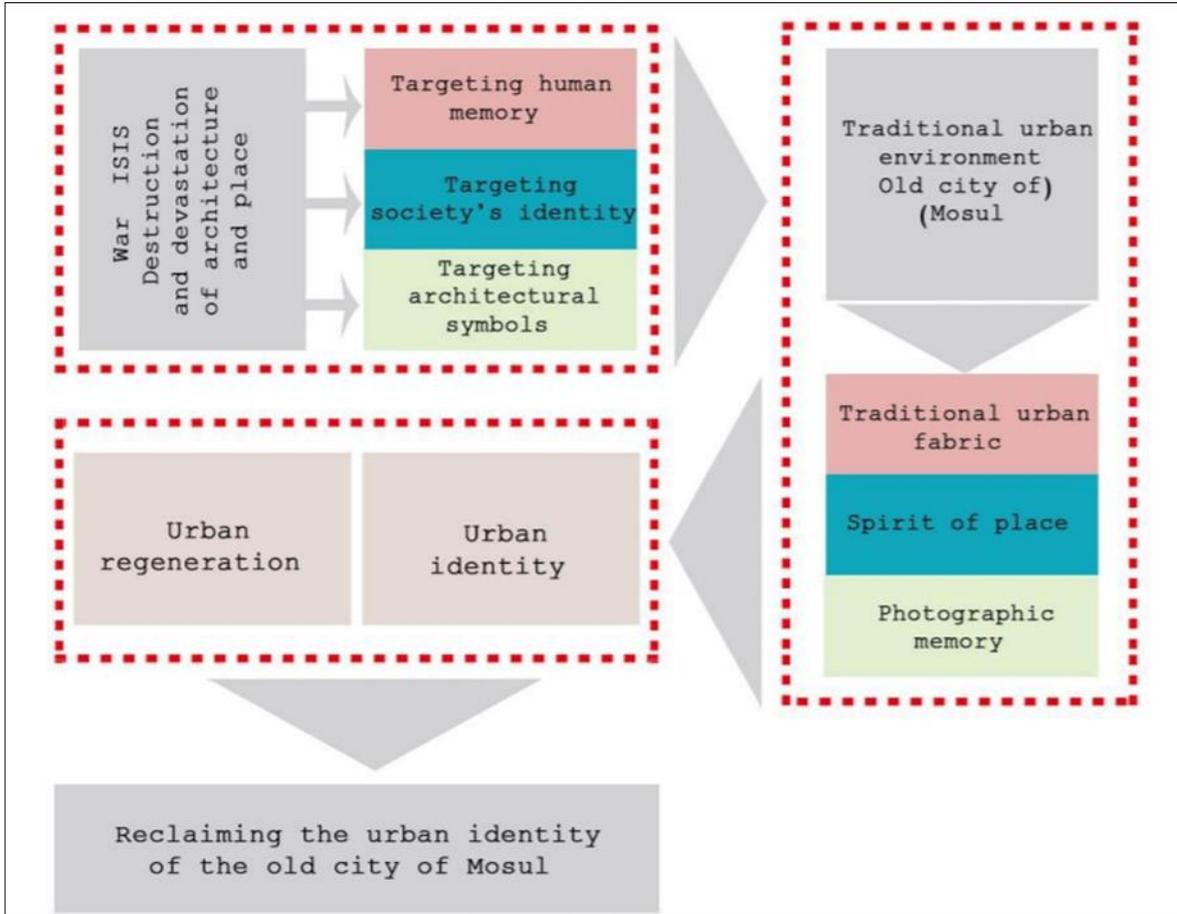


Figure 40. A diagram illustrating the study's result of using urban regeneration to restore the city identity.

12. Conclusion

The urban environment is a complex system formed as a result of human interaction with his surroundings. It has a multiple dimension, a fundamental concept, and an economic system as well. Human activities are primarily responsible for the formation and shaping of urban environments. As a result, they adopt the values, beliefs, and cultural value of communities that arise and change over time. They evolve as communities, habits, and the global economy evolve. As a result, they constitute the physical manifestation of metropolitan identity.

The importance of the public realm in shaping urban identity as well as collective memory cannot be overstated. Changes in urban settings on a regular basis might erode their place in communal memory. This may make it impossible to pass on cultural legacy to coming generations, and it may contribute to the development of communities without character, where people have no affinity to the location.

Municipalities in ancient cities must be more cautious when it comes to urbanized areas. There really is no alternative method to ensure that cultural legacy is passed down through generations. After wars, revolutions, and tremendous disasters, Paris, Prague, and Rome seemed to have crossed the ages without disrupting the continuity of life.

The city government has significant responsibilities in this area. Leaders and their beliefs are subject to change. Must then, however, stay true to the city and preserve its history, character, and the memories of the society that lives there.

References

- Abdulwahid, A. (2009). "Popular Architecture in the Old City of Mosul / The Architecture of the traditional House", from Conference: ICANAS 38 At: Ankara, Turkey.
- Aida, H. (2015). "War against Architecture. identity and collective memory International Journal of Development Research," Vol. 5. Issue. 02. pp. 3415-3420.
- Alobaidee, H. A. (2012). Changing Market" Anthropological study of the market of mosul. *Dirasat Mosiliya*, (37).
- Berman, M. (1986). TAKE IT TO THE STREETS-CONFLICT AND COMMUNITY IN PUBLIC SPACE. *Dissent*, 33(4), 476-485.
- Boussaa, D. (2017). Urban regeneration and the search for identity in historic cities. *Sustainability*, 10(1), 48.
- Brian, E. (2011). "Urban Identity. Learning from Place II." Routledge. London & New York.
- CSO, (2018). Statistical summary of Nineveh 2018. Retrieved 4/4/2022. Web address https://cosit.gov.iq/ar/?option=com_content&view=article&layout=edit&id=1218
- Danti, M. D. (2015). Ground-based observations of cultural heritage incidents in Syria and Iraq. *Near Eastern Archaeology*, 78(3), 132-141.
- Francis, M. (1989). Control as a dimension of public-space quality. In *Public places and spaces* (pp. 147-172). Springer, Boston, MA.

Garcia-Ramon, M. D., Ortiz, A., & Prats, M. (2004). Urban planning, gender and the use of public space in a peripheral neighbourhood of Barcelona. *Cities*, 21(3), 215-223.

Geipel, R. (1991). Long-term consequences of disasters: The reconstruction of Friuli, Italy in its international context. New York: Springer-Verlag.

Goodmann, W. (1986). "Principles and Practice of urban Planning". international city Managers Association. Washington.

Golany, G. (1978). Urban planning for arid zones: American experiences and directions.

Hayden, D. (1997). The power of place: Urban landscapes as public history. MIT press.

Hutter, M. (2019). "Public Realm". 1-4.10.1002/9781405165518.wbeosp122.pub.

Hussein, S. H., Abdulla, Z. R., & Salih, N. M. M. (2019). Urban regeneration through post-war reconstruction: Reclaiming the urban identity of the old city of Mosul. *Periodicals of Engineering and Natural Sciences (PEN)*, 7(1), 294-301.

Hwang, K. H. (2014). Finding urban identity through culture-led urban regeneration. *Journal of Urban Management*, 3(1-2), 67-85.

Lang, J. (2006). Urban design: A typology of procedures and products. Routledge.

Lofland, L. H. (2017). Uses of the Public Realm. In *The Public Realm* (pp. 229-246). Routledge.

Madanipour, A. (1996). Design of urban space: An inquiry into a socio-spatial process.

Madanipour, A. (2003). Public and private spaces of the city. Routledge.

Marmot, A. (1982). The Legacy of Le Corbusier. *Built Environment* 7 (2): 82-95.

Mattar, P. (Ed.). (2004). *Encyclopedia of the Modern Middle East & North Africa: Laabi-Shamlu (Vol. 3)*.

Macmillan reference USA.

Moudon, A. V. (1992). A catholic approach to organizing what urban designers should know. *Journal of Planning Literature*, 6(4), 331-349.

Pasaogullari, N., & Doratli, N. (2004). Measuring accessibility and utilization of public spaces in Famagusta. *Cities*, 21(3), 225-232.

Raadik-Cottrell, J. (2010). *Cultural memory and place identity: Creating place experience*. Colorado State University.

Rogers, W. (2003). "the excellent city park system" in what makes it Great and how to get there. 9ed0 p harnik. *The trust of public land; Pub, Washington, DC*.

Scherling, J. (2021). A tale of two cities: A comparative study of media narratives of the battles for Aleppo and Mosul. *Media, War & Conflict*, 14(2), 191-220.

Shamai, S., & Ilatov, Z. (2005). MEASURING SENSE OF PLACE: METHODOLOGICAL ASPECTS. *Tijdschrift Voor Economische En Sociale Geografie*, 96(5), 467-476.

SM, M., MA, I., & Faizah, A. (2015). Post-War Resettlement and Urban Reconstruction: A case study of Khorram-Shahr, Iran. *Journal of Design and the Built Environment*, 15(1), 24-32.

Talen, E. (2000). Measuring the public realm: A preliminary assessment of the link between public space and sense of community. *Journal of Architectural and Planning Research*, 344-360.

Tibbals, F. (1992). "Making people Friendly Tomns: Improving the public Environments in Town and cities.

Worpole, K. (1992). Towns for people: transforming urban life. Open University Press.

URL 1: Lang. Jon, URBAN DESIGN: A TYPOLOGY OF PROCEDURES AND PRODUCTS. Sydney, Australia, PP 9-22, 2005

URL 2: Lang. Jon, URBAN DESIGN: A TYPOLOGY OF PROCEDURES AND PRODUCTS. Sydney, Australia, PP 9-22, 2005

URL 3: Lang. Jon, URBAN DESIGN: A TYPOLOGY OF PROCEDURES AND PRODUCTS. Sydney, Australia, PP 9-22, 2005

URL 4: Lang. Jon, URBAN DESIGN: A TYPOLOGY OF PROCEDURES AND PRODUCTS. Sydney, Australia, PP 9-22, 2005

URL5: https://www.tripadvisor.com.tr/Attraction_Review-g293983-d15591052-Reviews-Israel_Street_Photos-Jerusalem_Jerusalem_District.html

URL6: (a) <https://www.totallyspaintravel.com/2015/03/30/best-plazas-in-spain/> (b) <https://www.pps.org/article/squaresprinciples>. (c) <https://medium.com/sidewalk-talk/the-invisible-life-of-urban-spaces-ed3333b23d44>

URL 7: (a) Urban design, regeneration and the entrepreneurial city. (b) <https://www.sculptureinthecity.org.uk/visit/>

URL (8,9,10,11,12,13,14,15): BBC News, "Is anything left of Mosul?" [online] Available at: <https://www.bbc.co.uk/news/resources/idt-9d41ef6c-97c9-4953-ba43-284cc62ffdd0> [Accessed 9 August. 2017], 2017.

URL (16,17,18,19,20,21,22): Researchers' Work

URL 23: <https://www.facebook.com/ALMossul/photos/a.216092228790832/1143209276079118/?type=3&theater>

URL 24: <https://twitter.com/mohammadmasuod8/status/963428469433659392/photo/1>

URL25:

<https://www.facebook.com/392262637455015/photos/pcb.1109873009027304/1109872915693980/?type=3&theater>

URL 26: <https://twitter.com/mohammadmasuod8/status/1364568006915932160/photo/1>

URL27:

<https://m.facebook.com/BabAltoob/photos/pcb.1829149470590169/1829149390590177/?type=3&source=48>

URL28:

<https://m.facebook.com/BabAltoob/photos/pcb.1829149470590169/1829149390590177/?type=3&source=48>

URL 29: <https://www.facebook.com/ALMossul/photos/a.216092228790832/1143209276079118/?type=3&theate>

URL 30: <https://www.pinterest.com/pin/741123682423727324/>

URL 31: Researchers Work

URL 32: <https://twitter.com/mohammadmasuod8/status/1327660347898146816/photo/1>

URL 33: <https://www.radionawa.com/all-detail.aspx?jimare=14796>

URL 34: Researchers Work

URL 35: <https://www.pinterest.com/pin/741123682423727324/>

URL 36: <https://in.pinterest.com/pin/741123682421704678/>

URL 37: <https://www.facebook.com/BabAltoob/photos>

URL 38: <https://www.facebook.com/ALMossul/photos/a.216092228790832/950072585392789/?type=3&theater>

URL 39: <https://www.facebook.com/ALMossul/photos/a.216092228790832/950072585392789/?type=3&theater>

URL 40: Dr. Hussein, Shaimaa Hameed., Abdulla, Zina Riadh., Salih,N.M.Mohammed. ” Urban regeneration through post-war reconstruction: Reclaiming the urban identity of the old city of Mosul “from Periodicals of Engineering and Natural Sciences, Vol. 7, No. 1, June 2019, pp.294-301.