City architecture after war: a study of the impact of the war event on the architecture of the city of Mosul

Abdullah Saadoon Salman1, Anwar Fadhil Hussein2, Haidar Adnan Nassif3, Ibrahim Jawad Kadhim4
1Department of Architecture Engineering, University of Technology, Baghdad-Iraq
2Architectural Engineering Department/ College of Engineering, University of Kerbala, Iraq
3Department of Architecture Engineering, University of Technology, Baghdad-Iraq
4Department of Architecture Engineering, University of Technology, Baghdad-Iraq
E-mail: ae.18.42@grad.uotechnology.edu.iq

Abstract. The research discusses the impact of the events represented in the act of war that occurs on the urban system of cities, which leads to a forced shift in its morphology due to the collapse of important landmarks after the end of the event. The urban programs work with cities destroyed by wars with them in terms of commitment and liberation in a way that restores the identity to the place and is restore the life that was lost due to the war. Or urban programs work to forge new relationships whose basis is the new positions that emerged after the war, and which constitute a new history for the city. The new urban positions carry a double architectural value, because they express two important events: the first in considering it a distinctive landmark that was essential in the emergence of the city, the second, considering this landmark was affected by the war, which led to its demise or losing a large part of its elements. The research problem arose in the presence of the need to activate and revive the landmarks and sites on which the city was formed and the places affected by the act of war, in a way that the recipient can read the event of the war in the city’s architecture, and the research aims at reading the war event in the city’s architecture and the strategies that integrate the archaic sites with the sites produced by the event of the war.

Keywords: event (the act of war), city of event, positions of the event, urban development.

1. Introduction
The events that occur in cities affect their morphology and urban features, where the event here is the act of war that occurred in the urban system of cities, which led to forced transformations in their morphology, the reason for that transformation is the absence of urban features after the end of the war event.

Architectural studies have dealt with war cities from different axes, some of which emphasized that their historical centers were destroyed and most of their urban features disappeared, so new centers must be built to meet contemporary requirements and differ from the past, as in the experience of Sarajevo, the capital of Bosnia and Herzegovina. On the other hand, other studies stressed on the need to revive these cities while preserving their local identities and relying on the basic plan of the city, as in the experience of rehabilitating Beirut. The last group of studies emphasized on the preservation of what remained of the centers of those cities while using the policy of dictation and urban addition to the rotting parts of the cities’ urban fabric by using advanced thinking to find a kind of acceptable opposition between the old part and the modern part as a distinct vision in the rehabilitation of war cities.

However, the war event and its impact on the reconstruction of the city and its role in the architecture of those cities were not discussed in a way that achieves the presence of the principle (represented by the main city landmarks and cells present before the event) in its derivatives, i.e. in the formation of the product of the city’s architecture in a way that considers the city's past and present.

Hence, the research problem crystallized through a program mechanism represented in the research
of the need to activate and revive the landmarks and places on which the city was formed and the places affected by the war, in a way that the recipient could read the war event in the city’s architecture.

1.1. Philosophical Analysis of the Concept of a Post-event City:

The research analyzes the above general concept in a philosophical way by adopting objective and scientific knowledge of the parts related to this concept, through studies and in various fields in order to reach a clear perception of the thought of the general concept of the research:

1.1.1. Idea of the event. Events from the linguistic aspects come in two forms, one of which is temporal and the other is subjective, non-temporal. The temporal events are the findings of something that did not exist in a previous time (it has a beginning in time). As for non-temporal events, it is the presence of a thing and its existence, that does not have in itself that existence, not according to having time or not, but in every time both matters (it is in itself a principle by which it exists) [1]. As for the idiomatic meaning of “event”, it was defined in terms of its association with several aspects, especially literary ones, such as narration, story, philosophy, in addition to architectural propositions. In terms of the event's association with the philosophical aspects, within the philosophy of the concept of an event, it refers to a concept that is opposite to the event, which is the concept of what is happening, which invents the date of its occurrence, in contrast to an event that is in a strong relationship with history, as history, if it exists, gives a perception of the nature of events as it represents An ideology of what happened and is happening [2]. The event is also defined as a set of regular or scattered facts in time, and events are nothing but conjunctions of time with action, so the relationship is close between the action (the event) and time, and to highlight the event it is necessary to draw scenes and describe the sites and places in which the events take place [3]. Each event is distinguished from other events by the essence that gives it uniqueness and is the basis of its existence, and in what concerns its type the event is in the form of (a political event or a war event, a religious event, an economic event, an architectural event) [4]. Regarding the topic of the research, the war event will be addressed.

1.1.2. War and the City. It is known that the phenomenon of war has the ability to change, its ability results in creating transitional situations that possess transformative energy at the physical level or cultural civilization. At the city level, wars play the role of accelerating the pace of urban transformations, the act of war resulting from conflict, which is one of the proven facts in the life of states throughout history. The degree of the conflict and its type sometimes are related to a number of subjective and personal factors including the nature of the prevailing political power in the conflicting societies with a degree of ideological contradiction or compatibility between political systems, and the military conflict represents the most and fastest level of influence among conflict strategies [5].

Man deals with a world that has accidents and has changes and developments that give new derivatives by the action of certain principles.

The general concept discussed in the research is from the premise that architecture is a science that corresponds to philosophy in the mechanism of the structure of the form in which the benefit to society is obtained, and the shape here represents one of the pillars of the product (architecture of the city of the event ), And the architecture of the event city is represented by its existence between the principle (a mental issue) and the derivative (a material issue), which is what is meant by what is present in the mind before the occurrence of the event and the material formations derived after it.

It is said that “has it been written that we should always search for the cause of what is happening to us and how it occurs?” This idea is related to the worldview in philosophy, and how we should study it for scientific necessity [6]. Where the verbs (to be – to process – to become) were and still are the focus of philosophy and the backbone of all natural and human research, considering that “being” is the beginning of the existence of a thing, and “processing” is the movement of time, and “becoming” is what the first entity evolves into after passing through the process moving [7].

Accordingly, this axis will be discussed on several levels in order to reach the formation of the
product of the city’s architecture and its reading, through which we review the origin of the thought of
the city, which represents the principle and the facts that the city’s architecture was before the event
through the philosophical act of the city’s being, which represents the mental basis adopted for the
architecture of the city, and the moving process. And between that will appear the fourth dimension
that overlaps with each level, which is the realization of the temporal and spatial dimensions. See
Figure 1.

![Figure 1: Stages of thinking in architecture versus actions of philosophy](image)

1.2. Characteristics of the Emergence of the Event City
The city is like a complex organic organization that serves the material and spiritual needs of man, and
it is a huge structure but sensitive at the same time. Any change that occurs to any of its parts affects
all other parts [8]. Some cities and their historical centers carry spiritual and symbolic dimensions that
represent spaces that contain various evidences of a multitude of urban civilization, characterized as
urban nuclei and nodes that contain the historical characteristics of cities represented by a set of
material and spiritual elements [9]. The importance of distinctive signs is due to their role in
determining, facilitating and directing the movement of people towards their goals, especially for
foreign visitors and those with languages different from the language of the country.

The stage of the emergence of ideas, principles and dealing mechanisms is an influential stage in
the development of the designer's mind until it reaches advanced levels, the three stages : the
incubation of ideas, the balance of society and the difference, concludes the stage of difference,
disparity and conflict between old products and focus on the thought of justification against the
revolutionary trends in showing the products which is considered to those working on it to be useful
and influential in meeting the needs of modern man [10]. Things cannot exist by and of themselves
independent of thought, because what is outside thought cannot be rational, and the tool of thought in
rationality is ideas and every issue presupposes the existence of thought, so we must arrange ideas and
topics according to meanings and ideas, in other words that what is visible is identical to what is in the
Minds [11].

Accordingly, the city as an organism is an organization that includes physical landmarks or cells
that represent, which are distinct elements from their surroundings, the basis for the emergence of
those cities often and they have a material and moral impact on society, and the designer should be
aware of the importance of dealing with those important features in the history of the city.

The research tends to reduce the general axis and move to the special axis, which is the city of the
event, as the city represents in this part of the research the time interval (the in between) meaning the place where the event is presented, and here the other philosophical dimension appears, which is the process.

1.3. The in between in the Event City
The research discusses in this part the time interval (the in between) represented by the place in which the event falls, and the methods through which the event is presented, and here appears the other philosophical dimension, which is the process. The event process here prepares for the resulting event if it represents a prescriptive process (leading to interpretations). Becoming produces the process of becoming a city after the event, but if the reverse path of events is done through the retrogressive process (back to interpretation) then it is its way to the city before the event, and here the study of city philosophy is between the principle represented by mental perceptions and the derivative, which is the realistic image.

"Al-Maqram" proposes cases of the interstate space by studying its characteristics, intellectual transitions, and dialogues with other phenomena, namely (Liminality, Threshold, and Interstice). Initially, then through the buildings the possibility of coexistence is obtained, and mixed uses can be part of the strategy to maintain the vitality of the dwelling spaces, leading to social contact and human activity. Human behavior is affected by the nature of the surrounding space, so it should be flexible, hospitable, and a place for meeting and gathering [12].

Al-Sadr introduces in the book “Our Philosophy” the concept of the contemporary between the cause, the dependent, the beginning and the derivative, and states that the occurrence is the cause of the need for things to have causes. The thing only needs a cause, in order to happen, so if it happens, its existence after that is not lacking in a cause. And we know that the need for a thing to cause is not in order to occur, but because its existence is self-related to its own cause. The law of contemporaneity between cause and effect is not consistent with a set of phenomena in the universe that clearly reveal the continuing existence of the cause after the disappearance of the cause. [13]

It is precisely this idea of time, in a relativistic context, that provides the theoretical foundations for approximating the past to the present as a present and urgent interpretation. A past full of experience that should guide the energetic transformation of the present, which is a fundamental key upon which his entire theoretical contribution is based [14].

We conclude that the city of the event in the “in between” stage is a platform for presenting ideas and behaviors that are in conflict with the need to reach the possibility of coexistence, and this is achieved in the situation of the city under the act of war and the presence of opposing ideas, here the city must preserve the components of its urban structure and architecture, until the transition to another stage, where its basis will be the old space and the space that resulted from the war in the stage of the emergence of the interval, and this is what is called the ‘position or the new landmark’.

2. Previous Studies
Political events, through the act of war, affect the urban structure of cities and their historical centers negatively, which causes the historical center and the city in general to lose its role and vitality, and the functional transformation appears as a result of the absence of the characteristics and components of the urban structure represented by urban landmarks and sites and the relationship of the elements of the urban fabric (mass and space) and the main axes and nodes. In this paragraph, the research studies the impact of the war event on the city’s structure through previous studies and experiences by specializing in part of the urban architecture of the city in which the act of war occurred by studying the old and new urban sites in the urban structure of the city because they have an important and clear impact in directing urban development strategies and city architecture After the event.

(Rossi) in his book (The Architecture of the City) refers to the urban events and realities of the city that produce physical objects that are the basis for reformulating the historical context of the city whose forms have changed from one event to another in participation with the public event, and he mentions that the place that contains the events is called the linked location in most cases with the
revolutionary phases, or with decisive events in the historical course of the city, through which the outlines and important paths of the city are drawn, and the new design of the city can be formulated and reconfigured to serve the position and the event, and these places play a major role in forming mental plans for the movement of the recipient, and through it he can read the most important features of the event city [15].

Some studies refer to a set of strategies that may ensure the preservation of the urban identity of the cities destroyed by wars like Mosul. They also referred to the redeveloping and coping with today’s environmental, socio-economic and political changes and ensure memory, identity and development, and importance of buildings with historical and symbolic values and their role in reclaiming the urban identity and promoting the sense of belonging [16].

2.1. Previous Theoretical Studies

This paragraph concerns the theoretical approaches adopted in the reconstruction projects of cities where the war occurred, for the purpose of introducing the next paragraph of the research, which concerns the practical aspects.

In his study, Moaz Taher discussed reconstruction strategies after wars and disasters, reconstruction processes where it can provide an opportunity to develop and address previous problems through long-term urban development. And the physical impact of the war event is one of the clearest and most urgent visual effects of reconstruction, and it touched upon the trends of architecture after the war and puts forward several directions that focus on the scientific-functional aspect, the symbolic aspects and the collective memory, and as follows [17]:

A. Modernization and renewal trend: This approach is concerned with finding a new building that did not exist previously.
B. A revival approach: This approach is concerned with rebuilding what was destroyed by war in order to preserve the memory of the place.
C. A trend to mix between the old and the new: a merger in the use of old and modern building methods.
D. A symbolic trend a witness to the events: It focuses on the importance of the event of the war more than the importance of construction.

Caja mentions in his proposition on the rebuilding of the city in critical times as the process of re-discovering the patterns and places in the historic city, which was abolished by the anti-historical (war event) ideology of the modern movement [18]. Note figure (No. 4)

The studies deal with urban development strategies according to different directions in relation to the event of the war. Woods in his 2011 study WAR AND ARCHITECTURE: Three Principles, proposes three guiding principles (between liberation and commitment) in which most of the post-war reconstruction projects share:

The first principle: restoring what was lost in pre-war conditions. The idea is to restore "normal life", which is a way of life lost as a result of war, and the idea is that war is merely an interruption of the continuous flow of normalcy.

The second principle: demolishing damaged and destroyed buildings and building something new, radically different from what existed, with the aim of returning life to normal, and ignoring the effects of war.

The third principle: A post-war city is a new city different from the old damaged one, as many war-damaged buildings are relatively salvageable, and because new ways of living will not be the same as the old way, rebuilding old buildings must provide new ways and ideas of living [18].
The development process should be according to priorities, such as starting with the most needed buildings such as office buildings, and repairing symbolic sites, such as mosques and buildings of historical importance.

Layij discussed the problem of restoring the spatial planning structure of the major cities of Iraq - Baghdad and Mosul, destroyed during the war of 2003-2011. Layij refers to the negative side of civilization as being that virtually at any point in time in certain parts of the globe, military actions and military conflicts occur, as a result of which civilians and cities suffer, the study Confirmed about the principles of landscape-urban reconstruction should be developed specifically for a particular city.

Landscape and urban reconstruction is a modern method of restoring the city in order to create a comfortable socially oriented and environmentally safe and stable environment. [19]

2.2. Previous Practical Experiences

The research in this paragraph studies the global experiences of cities that have been affected by the event of war, to know the role of the war event on the architecture of those cities, as this helped enrich the theoretical concepts extracted from previous studies and propositions.

2.2.1. The German Experience. Cities all over the world have been subjected to events, whether natural or by human interference, such as the event of war, especially the Second World War, and have been subject to architectural and developmental programs that have contributed to the return of the city in a better way than its predecessor, as it preserved its history and kept pace with its present for the sake of its future, we will shed light on German cities to take advantage of their experiences, as the city of Dresden was bombed during World War II, and the forces dropped more than 3,900 tons of high-explosive bombs, killing at least 25,000 people and destroying most of the city, and the city is still spending billions of dollars to restore its buildings and facilities.

As for Berlin, the city was subjected to two events, the first is the event of Nazi rule and the ideology of Hitler’s thought, and the second event is the Second World War, after Hitler assumed the position of German chancellor in 1933 A.D., here the city was affected by the Nazi ideology, as the Nazi architecture expressed the new political, social and cultural vision that Under the Nazi administration, national trends emerged towards developing and inventing a national architectural style as a contribution to drawing new architectural lines in the city of Berlin. Hitler praises Roman architecture and finds it an incentive to create an original style in determining the sources of historical inspiration in architecture, and he wanted to be the intellectual founder of the Reich and how Germany and Berlin would look when he wins the war, so he plans to form the buildings that symbolize the
hegemony of Germany by emphasizing the values of immortality and fortitude [21].

Figure 3: Pictures showing the city of Berlin, (Germania) before and after the political event.[21] [22].

Among the war-damaged signs that were relatively salvageable and in a contemporary way that merges the old with the new, the Kaiser Wilhelm Church in Berlin, built in 1890 and damaged in 1943, stands as a visual metaphor when the church succumbs to the ideology of the juggernaut who destroys it rather than preserving it. Figure 4.

Also, the Brandenburger Tor gate, which remained almost destroyed throughout the Cold War due to its location close to the Berlin Wall, it was restored between 2000-2002. This is in addition to many landmarks, of which, a part of them will be mentioned in line with the research boundaries, such as (Berlin Wall) and other sites such as the East-Side Gallery and Victory Column, Charlottenburg Palace, Schloß Bellevue. The above urban landmarks and sites formed the basis for the urban development strategies that have been adopted in the city reconstruction projects, which we will address in the next paragraph of the research.

The rebuilding phase of Berlin represents the zero hour (for some Germans) for the history of its architecture, and the midpoint instead of the beginning of an era for others, this difference of opinion is due to their different views on the event of the Nazi Party, as this event clearly affected postwar architecture, as part of German society considered that fictional architecture in the post-war period also resulted from the disaster of the Nazi experience, which ultimately led to the weakening of not only the neoclassical, but also the ideas of a monumental and representative building and believed that the government had no right to build on a huge scale both during the Nazi years and during the
reconstruction phase, and a few Germans preferred to preserve large buildings and open spaces [21].

**Figure 4.** Pictures showing the Caesar's Church as a witness to the ugliness of the political event and the violation of the sanctity of the holy places. [http://www.noonpost.org/content/6606](http://www.noonpost.org/content/6606)

**Figure 5:** Pictures showing the Brandenburg Gate affected by the political event and another after the event. [http://shof.co.il/?mod=articles&ID=137](http://shof.co.il/?mod=articles&ID=137)

Cities dealt with their problems in different ways. The following is a summary of the most important strategies that were adopted in the architecture of those cities after the war:

1. The conversion of buildings with functions that were in opposition to the trends of society and the cause of political events into a museum or exhibition, where the occupying forces of Germany demanded to remove the symbols of Nazism, but the building of the Nazi secret police in Cologne was transformed into a museum about the history of Cologne during the Nazi era. People can visit it and see its exhibits, and this was of prime importance for post-war Germany.

2. The IBA Plan by Friedrichstedt put forward a way for the urban project to be suitable for reasserting the current structure of the historic city, and for the urban setting to become a key element of the architectural debate in Berlin, for historical patterns to emerge again in new forms.

3. Leaving some urban sites as they are while preparing the appropriate space for them to bear witness to the event, as the effects of the widespread devastation and destruction throughout Germany have been transformed into monuments calling for peace.

4. Restoring some urban sites and buildings of high symbolism, such as the bombed West Berlin municipality, and they also tried to preserve some neighborhoods and streets that are major movement axes in the city.

5. Preserving basic components of civil identity, such as rebuilding Romanesque churches in
Cologne, to reconfigure the historical identity of cities of utmost importance.

6. Managing reconstruction locally and encouraging community participation, as they set up exhibitions to see those plans. This opposition did not succeed in stopping some modernization projects while it succeeded in others because planning in them is one of the tasks of the local administration [18].

3. Research Methodology

3.1. Study Area

The research selected the old city in Mosul for practical study for the cultural heritage and important urban sites that were the basis in the formation of the city.

This area is one of the few cities that until now has a huge reservoir of ruins from past times in which time has left its mark. The coherent urban fabric of the old city of Mosul has come as a reflection of a cohesive and a united society. Today, the old city of Mosul suffers from many problems and exacerbations. Most of its buildings have become very dilapidated. Today, it is in dire need of a program towards better architecture in order to be at the required level for the recipient.

![Figure 6](http://tahdeeth.net/news/11284)

The event had an impact on the city’s architecture and its monuments, and the reconstruction can be considered a way to redefine the historical monuments and locations of the urban parts, especially with the problems that most of the historical centers have suffered from. The following is a review of the most important of these urban sites in the city that were present and affected by the event. As for the other sites that we will address, they were established by the war event and must be present at all times, especially in its architecture program because it is a reflection of values and principles and represents victory, as follows:

3.1.1. Pre-event sites

- The Great Mosque of al-Nuri: It was an urban location and a distinctive landmark on the horizon of the old city, and a witness to its civilization, the mosque was an important location and was known for its distinctive humpback minaret, which was deliberately detonated from the inside.
Figure 7: Pictures showing the Al-Nuri Mosque as an important site in the urban structure before and after the political event. [Link](https://www.almowaten.net/2017/07/)

- The old bridge: the bridge was built in the third decade of the last century, and is considered a historical and cultural landmark that connects the two banks of the Tigris River and in the middle of the five bridges of the city, and it is of pure iron, Figure 9

Figure 8: Pictures showing the Old Bridge before and after the political event. [Link](https://www.almowaten.net/2017/07/)

3.1.2. Sites (milestones) that appeared after the event. This paragraph comes to distinguish the research and strategies it proposes, as it adds urban sites that will be immortal over the coming generations because of their lofty goals, and we will address the ideas through which the above topics are produced: (the researcher)

- Places of martyrdom of our soldiers and heroic media people, sites of mass graves, and places where the worst crimes were committed by criminal gangs. These places need an architectural act that turns them into important urban sites in the post-event phase (the researcher)
Figure 9: Pictures showing Sites that appeared after the event - Sites of martyrdom of hero soldiers [https://www.almowaten.net/2017/07/]

- Prison headquarters that were used by the penitential gangs to commit the most heinous crimes and transfer them to other functions such as museums to remain a witness to this era and to be seen by other generations.

4. Discussing the Proposed Strategies for the Architecture of Mosul:

- The ancient places in the city are the cause of a previous cause. These phenomena have been freed from the previous cause but have not been dispensed with in the course of time. It is also a cause of a later effect that represents the derivative, which is what is achieved in the old places that are subject to partial destruction and I want to rebuild them.
- The necessity for having surveys to document the sites that resulted after the event, which represent important principles that must be present in the product of the city’s architecture, which are the places of martyrdom of soldiers and media heroes and sites of mass graves, in addition to the path of the historical movements of the heroes of the Iraqi army and the Popular Mobilization Forces and the gates from which they entered, to serve as an intellectual morphological scheme upon which the city architecture program is based.
- Diagnosing the above features requires conducting field surveys to establish the reality of the region and what the important sites and milestones have ended in the emergence of the city to be the basis for the city’s architecture and it is not possible to start without it.
- The buildings that were used by the penitential gangs to judge the innocent and the prisons used in torture would be turned into museums for exhibitions, which people visit them to see the ugliness of these gangs, and to document this stage.
- The need to be more careful to solve the city's problems through Reconstructing destroyed important buildings with the same architectural styles and preserving them as evidence of the past like Al-Nuri Mosque, because they having an important role in consolidating local identity and memory and restoring normal life as soon as possible.
- Encouraging community participation and running a program towards a better architecture locally, through the holding of educational seminars and exhibitions, so that people can get acquainted with the plans of development projects.

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