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## ARCHITECTURAL HERITAGE FRAGMENTS AS CATALYST FOR MEANING TRANSFORMATION: CASE IN THE TRADITIONAL CENTER OF BAGHDAD

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### ABSTRACT

Several studies on the architecture of mosques tend to raise two inter-connected aspects: form and meaning, a correlation that had shaped, throughout time, the characteristics of the architectural type of the mosque. This study sheds light on a distinct approach towards this relationship, through a framework of heritage conservation and urban renewal. It analyzes the Khulafaa Mosque (1961) in the historic center of Baghdad by the Iraqi architect Mohamed Makiya who incorporated into his design the 12th-century minaret of Suq el Ghazl, the only fragment left from the medieval Abbasid mosque that once stood there. The study adopts a structuralist-semantic approach to reveal the transformation of meanings in this mosque on two levels. The first level is the denoted meaning of modern technology achieved through disarticulating the compositional relations of elements. The second level is the connoted implicit meanings of belonging connected to the historical fragment, the minaret, realized through reconfiguring the mosque's typological relations. This study considers such potentials of meanings' transformation in inspiring other attempts at activating historical fragments for sizeable urban renewal projects.

**Disciplinary:** Architecture (Architectural Heritage, Architectural Conservation of Built Heritage), Islamic and Mosque Studies, Middle East Urban History, History of Architecture.

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## 1. INTRODUCTION

Architectural heritage presents itself in different sizes. It ranges from a holistic entity to small minor fragments. Its methods include reviving treatments, following the existing conservation and restoration rules, which presuppose the full reconstruction of a structure's former shape. However, some of these inherited remains lack the necessary information for such a reconstruction, and they leave a large margin of possibilities that may catalyze an active input to the conservation activity

(Al-Ali, 1997). Further, the role of an architectural heritage fragment could be promoted to encompass a whole urban area and become a catalyst to its development and revival. In this regard, the paper will present the concept of activating historical fragments on an urban scale. Acknowledging the view that "architecture uses visual symbols and elements, which provide an array of communicative elements, possible to abstract and combine" (Gawlikowska, 2013), the paper follows the structuralist-semiotic methods.

It tracks the Semiotics' terminologies to be used in interpreting meaning in mosque architecture. It will address a case study in Baghdad: the Khulafa mosque designed in 1961 by the Iraqi modernist architect Mohamed Makiya (1914-2015), in the city's old commercial center, incorporating the 12th-century minaret of Suq al-Ghazel, the only element left of the Khulafaa Abbasid Mosque which stood there several centuries ago. The design problem, therein, was threefold: How to deal with, and preserve this remaining historical fragment?, how to evoke the memory of the famous Abbasid mosque with its unknown architecture, totally lost due to past events, and how to sort out a balance between the different urban fabrics of the site, such as the open grand modernist street, and the organic fabric of traditional *Suqs* (markets). The study will address these questions, to demonstrate the potentials that a historic architectural fragment might hold for its present urban context.

## 2. LITERATURE REVIEW AND DISCUSSION

The research analyzes previous studies to establish a theoretical base for relevant conceptions regarding the value and potentials of a historical artifact, interpretation of meanings in architecture, and the meanings attributed to the mosque.

### 2.1 CONSERVATION OF ARCHITECTURAL HERITAGE FRAGMENTS IN URBAN CONTEXT

Architectural remains might be found in a city fabric or not, but either way, they are different from each other in two aspects: the first is the availability of the informative data, which provides an image of the edifice in its past era, and the second is the size of remains. Such distinction is decisive in determining the degree of intervention in any restoration/revival process and to the potentials of a successful renovation - new reading and new interpretation (Al-Ali, 1997).

The process of intervention becomes more complicated when the heritage remains are located in an urban context, as they do not stand alone, but rather engaged in complicated city systems (Al-Ali, 1997). Fitch noticed that the restoration of a historic district presents aesthetic problems that are not found in the isolated building. He explained that in many cities, the resulting distortion of scale, caused by the interruption of incongruence replacements of high rise buildings in a former uniform streetscape, takes on surrealist proportions, and contrasts; yet none of the urban cores of small scale and low-profile past can be visualized as a returning place, nor can the former consistencies be restored (Fitch,1990). Glendinning remarked that the integrated architecture of old and new parts leads to concerns about how to reconcile modern developments with the historic urban fabric. However, such a poetic mixture of preserved fragments and iconic interventions could become incoherent and incomprehensible (Glendinning, 2013).

Fitch (1990) stated that many architects would argue that historical fragments, which have

survived, cannot be integrated into a changing city, but for him, the fact that such juxtapositions are without historical precedents is not especially relevant. Such juxtapositions of old and new can often lead to exhilarating new passages in the cityscape (Fitch, 1990). It is possible to bring an example of a neglected historic fragment that once was part of a remarkable edifice, as it was the case for the facade fragment of the Berlin Anhalter Bahnhof, which was part of a train station – railway terminus - in Berlin, Germany. It has been severely destroyed during World War II, in 1943 and 1945. Parts of the station were still standing in 1951, but then most of them were demolished in 1960, except for the central portion of the principal elevation. These remains witnessed several attempts of preservation and restoration. Till recently, the site held traces of the old station with no apparent existence above the ground level. Eventually, the new Tempodrom, a multi-purpose event venue, was erected in the center of this area, with a playing field located between it and the façade remnant, and a wooden area extending in the other direction towards the Landwehr Canal (Figure 1). The facade fragment in its current situation is standing without any meaningful impact on its urban surroundings; its conservation remained a passive act.



**Figure 1:** Berlin Anhalter Bahnhof Train Station: Current Status of Façade Fragment (Courtesy of Fonalité/Flickr.com (2013)).

## 2.2 STRUCTURALIST-SEMIOTICS AS AN APPROACH TO THE ANALYSIS OF ARCHITECTURE

During the nineteen sixties, seventies, and eighties, the architectural discourse was greatly influenced, on different levels, by the Structuralist - Semantic approach. This approach provided tools that help “read” Architecture. Although during the following decade criticism was raised against this theory and its applications, nevertheless, this paper finds that it still holds an explanatory power for addressing Makiya's design approach and the paradigmatic thinking of his time. Following the visions of the Semiotics' foundational thinkers, especially Roland Barthes, who first introduced Semiotics to Arts, a large body of literature by theorists, architects, researchers and critics like Umberto Eco (1978), Geoffrey Broadbent (1980), Gandelsonas (1980), Charles Jencks and Juan Pablo Bonta (1980), was associated with this approach. Thus, the method continued to be an efficient way to tackle and interpret meanings in architecture.

To establish a method of Semantic comprehension, some of these writings presented analytical idioms derived from similar applications in linguistic analysis. Among these was approaching the architectural product as a “System of signs/Signification” that could be read on two levels: the first is “Surface Structure”, which is explicit and direct. The second is “Deep Structure”, which is implicit and intrinsic. The two expressions: (Surface structure) and (Deep structure) originally

belong to Avram Naom Chomsky, who theorized for Generative and Transformational grammars in several books published in the 1960s.

In the discipline of architecture, Gandelsonas and Morton approached Chomsky's vision while analyzing Peter Eisenman's House II, where his oppositions/dualities were called "Deep structure/level", influencing the "Surface Structure/level", in dialectical relationships. They stated that, for Eisenman, the Surface level in architecture has traditionally represented only the appearance of the forms in which architecture manifests itself, and that his concern was not the surface level, but rather its use as a potential structure for revealing, in the building, the operations and the deep structure that generated the architectural form. The reading of the surface level initiates a sequence of continually deepening interpretations (Gandelsonas & Morton, 1980). On the other hand, Gandelsonas and Morton studied the work of Michael Graves and suggested that "In architecture, signification might be described in terms of two interrelated aspects; the first, a set of possibilities for structuring the components, subcomponents, systems, and subsystems of the building; the second, a repertory of ideas, images, and notions from an architectural repository." The first is 'architectonic', and the second is 'repository'" (Gandelsonas & Morton, 1980).

Broadbent, on the other hand, detected four deep structures at the roots of architecture: a container for human activities, modifier of the given climate, cultural symbol, consumer of resources. He states that these deep structures cannot be separated, yet building a cultural reference, after satisfying the deeper structures of architecture, which the users could read intentionally might be the only way in which one can consciously build meaning into architecture (Broadbent, 1980).

It is possible to track more perspectives on the conception of the duality between Deep and Surface structures, and even try to employ other terms like symbol, sign, icon, etc.; but what matters is the fact that such conceptions initiated the consciousness of pursuing and presenting a systematic approach to interpret Architecture, and provided tools to describe/read the "form/ meaning" duality. Thus, architecture can be considered as a batch of an inter-related complex of systems that provides more freedom in choosing the perspective the most suitable to any intended interpretation.

## 2.3 MOSQUE ARCHITECTURE & MEANING

Amongst vast Islamic architecture studies, several investigated the meanings and significance of the mosque as one of the foremost Islamic building types. Haraty and Utaberta (2019) assert that the most recent trends Mosque designs focused on three aspects: construction, religious and social activities, and history. Of the earliest works on meaning in the mosque architecture are two mentioned by Oleg Grabar (1979); one is Paret's "Symbolik des Islam"(1958), that he finds vital in making a distinction between primary and secondary symbols, but do not talk about visual architectural implications of symbolism. The second is by Jacques Waardenburg (1974), "Islam studied as a symbol and signification system", which Grabar (1979) found too methodologically abstract." Grabar (1979) identified aspects of symbolic significance in Islamic Architecture and specifically stressed the role of decorative and calligraphic plates in this symbolism.

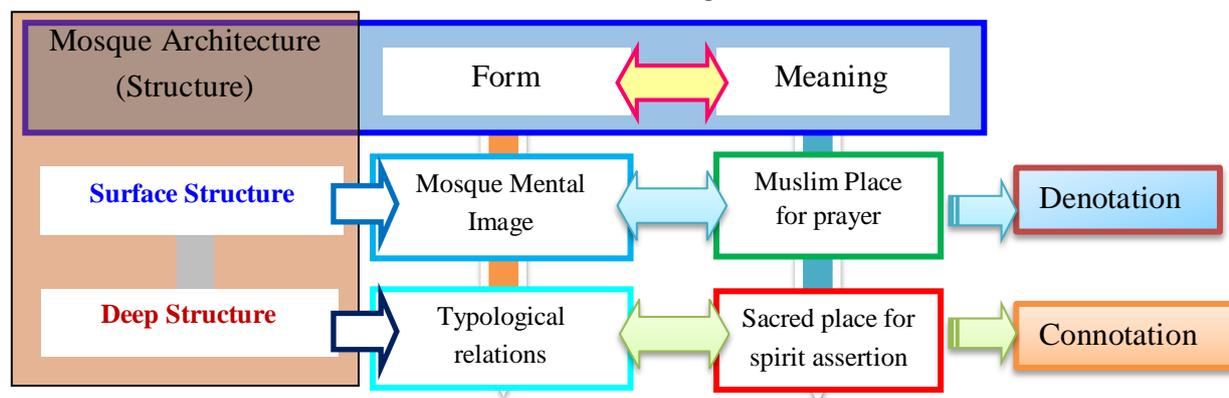
In general, he hypothesized that Muslim tradition identified what is sacred or holy to it in a denoting rather than connoting fashion. Burckhardt's work titled "Art of Islam; Language and Meaning" (1976), also gives thoughtful insights on symbolic and significant aspects in Islamic Architecture. Yet, one cannot but agree with Grabar in his depiction that such works lack "explicit statements of the relationship between data ... and interpretation" (Grabar, 1979). Moreover, Roger

Joseph (1981), tried to grasp particularly signs of the mosque and their formal properties that are related to cosmology and social organization. Some recent works, however, applied the semantic approach to shed light on exceptional cases of the Mosques from around the Islamic world. For example, Ramzy's study (2013) employed semiotic tools to interpret the architectural spiritual message of the Funerary Complex of Sultan Qaitbay affected by the Sufi notions.

The works reviewed above are of interest to this paper for what meanings and significances they read in mosque architecture. Joseph (1981) sees that the mosque somehow functions as a gate between the sacred and divine and the secular and social. Similar to this concept, another recent work on Iranian mosques by Khaki and Abad (2015) attributed symbolic meanings to the elements of a mosque: the dome, the minaret, the minbar, and the Ewan, the latter being an element of Iranian architecture. The meanings they read signify the connection between this world and the other world, the material world and heaven, the world of Gods, and the world of the dead. This concept attributes a deep meaning to the mosque that is beyond being a sacred place for connection with god. Alahham (2019) presents the concept of the metamorphosis of meaning, which the mosque endured historically from the prevalence of the sacred to an amalgamation of the sacred-secular and, finally, the encompassing of the sacred by the secular as revealed in states' mosques. Such transformation-metamorphosis is to be read through this paper but with different identifications of the meaning attributed to the case study that respects heritage conservation and urban revival.

## 2.4 LEVELS OF MEANING AND FORM IN MOSQUE ARCHITECTURE

Semiotics offers an appropriate "means of treating the mosque as if it were a special language with its ensemble of semiotic codes which reveal something about both cosmic and social space" (Joseph, 1981). In examining a mosque from a Structuralist- Semantic standpoint, architecture is considered as a system of signs. This system consists of a network of relations between its elements. These relations are woven into two structures' levels (Figure2).



**Figure 2:** Research Scheme of Meaning in Mosque Architecture

On one level, a surface structure functions in denoting the explicit meaning of the mosque as a place for prayer and worship. This denotation is provided by a set of relations connecting the architectural elements salient in an outside mental image of the mosque. Joseph (1981) states that "Insofar as *the* mosque is a sacred artifact; its structure remains more or less the same". Still, as it is also a technological and social artifact, he recognized that "it reveals a multitude of styles generated by different cultural regions, temperaments, and influences" (Joseph 1981). Hence the elements that compose its mental image differ according to time and place. However, the minaret might be the element most agreed upon among the architectural elements that remind one of Islam (Grabar,

1979). Beside the minaret that may appear as any vertical element, other formal characteristics were found to be adherent to composing a mental image of the mosque like a recognized repetition echoing the rhythm of rows of the worshipers and the use of ornamented surfaces and Arabic calligraphy as well as complementary symbolic components namely: the dome, the arcaded *Sahan* (open courtyard) (Al- Ali & Al- Ali 2015).

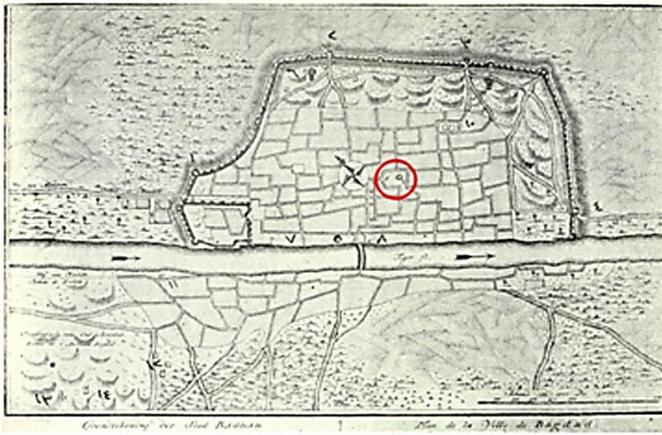
On another level, resides the deep structure where relations between elements generate connotations of meanings that are not sought directly by an interpreter. Still, they relate elements in principal typological connections that are relevant to essential meanings to any mosque anytime and anywhere. Many studies identify the symbolic orientation of all mosques to the Ka'ba as one of the top priorities (Grabar, 1979; Joseph, 1981). "The entire sacred sign system places the Ka'ba at the physical center of Islam just as at the verbal level the Qur'an is the center .... the axes of all mosques of the world converge" (Burckhardt, 1976:5). Another signification is that within the mosque, there are two directions; one towards the inviolable space of the Ka'ba, where the collective spirit asserts itself. The other, it is opposite, away from the perfect location, towards the outside secular world of danger and uncertainty. Both places establish a horizontal axis, while a vertical axis is also identified through the minaret as an upstanding element looking to the sky (Joseph, 1981), (Al-Ali & Al-Ali, 2015). The pulpit – *Minbar*, as well, which is mimetic of the three stool steps that the prophet stood upon, indicates early Islamic indexical distinction between upper and lower (Joseph 1981). The niche or *Mihrab*, on the other hand, "not only orients space but serves as an index to mark the spiritual difference between the worshiper and the divine" (Grabar, 1979). The meanings shown in the studies above will be re-investigated in the Khulafa mosque, to reveal the undergone transformation within the frame of heritage conservation and urban renewal.

### 3. THE CASE STUDY OF THE KHULAFAA MOSQUE

The Khulafaa Mosque is situated in Baghdad, and its construction was finished in 1963. However, its minaret dates back to the late Abbasid era. The research will investigate the levels of meaning in the architecture of this compound to reveal the embodied transformation.

#### 3.1 HISTORICAL BACKGROUND OF THE KHULAFAA MOSQUE AND THE SUQ EL-GHAZL MINARET

Central to the current Rusafa traditional area, on the east side of the Tigris in Baghdad, the Khulafa mosque was initially built by the Abbasid caliph al-Muktafi (ruled 902-908). It remained the main mosque in Rusafa for the weekly Jum'a prayer, attended by the subsequent caliphs and was named –Jami' al-Khulafa, meaning the Caliphs' mosque (Sussa & Jawad, 1958). The Abbasid mosque was burned to the ground, and its minaret fell in 1271 during the Mongol invasion. They were both rebuilt in 1279. However, this Ilkhanid mosque deteriorated as well, and most of its area was rebuilt as "Suq el-Ghazel" - a market for spinning products. The only part that remained standing from the Ilkhanid mosque was its 33-meter height minaret, known as "the minaret of Suq el-Ghazel". In the 19th century, the Ottoman wali Suleiman Pasha (governed 1779-1802) built a mosque for the minaret in the only vacant plot at about a 100m to the west of it (Sussa & Jawad, 1958). The minaret received a faithful restoration, which started in 1940 by the General Directorate of Antiquities after being in neglect for almost a century. The work (Figure 3) preserved the original brickwork and ornamentation (Salman et al., 1982).



**Figure 3: Minaret of Suq el- Ghazl.**

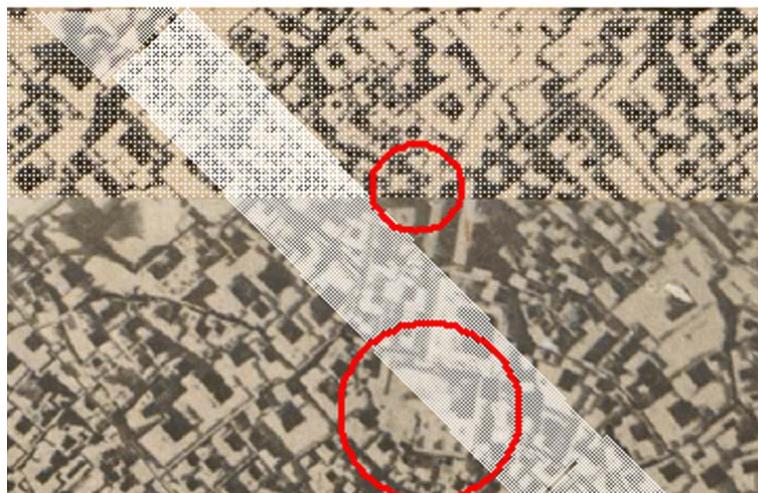
Left: Map of Baghdad by Nibbur in 1766, showing el Ghazl market area (circled by authors with red line) where the minaret used to standup, (Courtesy of Ameen & Alussi (1965)).

Right: The minaret before restoration, view in the early 20<sup>th</sup> century.

Courtesy of Mohamed Makiya Archive, ©Aga Khan Documentation Center, MIT Libraries (AKDC@MIT)

### 3.2 THE JUMHURIYA-KHULAFAA STREET

The work started in 1957 and ended in 1959 for the erection of the Jumhuriya Street (the Republic Street). It gradually gained the name (The Khulafaa Street), referring to the leading site of the mosque and its historical minaret being erected as a landmark in 1963. In addition to the traditional residential neighborhoods, the main area where the street splits into two is the central market area, including the old markets of Ghazel and Shorja. These were part of an intricate network of old markets in Baghdad since the late Abbasid era and stayed alive and densely active through the ages. Despite the severe cut in the urban fabric, the daily flow of people and merchandise carriers continued across the street, hampering car traffic and presenting a serious conflict between human and machine circulation. The street had also cut across the 19th century Ottoman Mosque, previously attached to the minaret, and thus left it once again deprived of its mosque (Figure 4).



**Figure 4: Context of the Minaret of Suq el- Ghazl in early 20<sup>th</sup> century**

Enlarged Portion of a Mosaic aerial photo of Baghdad in 1917, showing organic fabric of the neighborhood surrounding the minaret of Suq el Ghazl. Small red circle around the minaret, sizeable red circle around the Ottoman Mosque, and the trace of the Jumhuriya street marked with white shaded strip,

Source: Courtesy of National Archives UK, WO 302/550 (with Authors' addition on map)

### 3.3 THE KHULAFAA MOSQUE BY MAKYA

In 1960, Mohamed Makya was granted the commission of building a mosque for the historical minaret of Suq el-Ghazl. This task presented a crucial opportunity in his professional life when he could apply his ideas about Islamic architecture and architectural heritage. Sultani (2014) observed that Makya's early works since his return to Iraq after finishing his studies in the UK have been of a modernist style unlike what he achieved in the Khulafa mosque and after. (Sultani, 2014).

He received a first chance to work on a historical Islamic area, which he had experienced in his early childhood and adolescence, and which he knew very well and highly sympathized with. Makiya believed that Islamic spiritual values, which represented the humanitarian aspect of heritage and gave the architectural vocabulary its survival, are sources of symbolism. He also advocates that this symbolism is an indispensable quality in modern cities. He stated:

"The aspirational qualities of symbolism are a crucial requirement for modern planning in any culture. Symbolism extends the concept of functionalism to the higher level of the intellectual aptitude demanded by the designer and asserted by its social meaning." This applies to the lasting status and survival of the arch, the dome, and the minaret within the physical quality of the new built-up environment. They are so much part of the natural setting that they stand beyond the label of "traditional" or "contemporary" (Makya in Kultermann, 1999).

Makiya's stress on the past was combined with a direct interest in the modern technology of engineering and building systems of his time. In Radoin's words, "contemporaneity, according to Makiya, involves projecting a building as an evolving entity according to technological advancement, while tradition fosters its sense of living memory and belonging" (Radoine, 2017). Both concepts were to be sustained in his design of the Khulafa mosque; however, there is a manipulation of meanings that appears when trying to interpret this mosque.

### 3.4 TRANSFORMATION OF MEANING IN THE KHULAFFA MOSQUE

As an Arabic Islamic city, Baghdad has many examples of old and new mosques. Several Ottoman mosques are spread in the historical center in Rusafa, which draw a mental image dominated by high domes and minarets, rising above the houses' skyline against the background of Baghdad's blue sky. The arcaded *Sahan* with the ablution fountain was also characteristic. As well as elements in the prayer hall, including the *Qibla* wall, *Mihrab*, *Minbar*, and the ornamented surfaces. Those mosques were constituted the archetype that Makiya adopted in generating his new design, while the Abbasid style was his choice for its vocabulary according to his words:

"I tried to design the mosque referring to the Abbasid age, with a wall relief that presents scenes and calligraphic layers." (Makya, 2012)

Although the new Khulafaa mosque was meant to activate its minaret, and serve as a place for prayer just like any other mosque, its architecture reveals a new web of significances that are unusual to local mosques. This function can be traced to two levels: the surface structure and the deep structure.

#### 3.4.1 SURFACE STRUCTURE AND THE DENOTED MEANING: A SPACE FOR NEW TECHNOLOGY

The current Abbasid style of architecture in Baghdad can be traced back to the late Abbasid period and observed in several monuments in Rusafa, such as the Abbasid palace and al-

Mustansirya School of theology. Its salient characteristics are the use of elements such as the four-pointed arch and recessed jambs in openings and arcades, the arcuate roofing system including vaults and domes, intricate rows of brick squinches, and wall surfaces ornamented with geometrical, florid patterns, and Arabic calligraphy. The material is the local brick presented in its highest techniques and giving the entire structure a mono-color of bright yellow. All these elements constitute an integrated totality of a continuous mass. These characteristics would compose a surface structure to denote the image of the style, and the impression is that of a “carved in brick architecture”.

When observing the architecture of the Khulafaa mosque, one cannot miss the denoted meaning of the building as a mosque, as its surface structure is composed of all the elements expected in its mental image; the dome, the minaret, the arcades, calligraphy and ornamentation, all fashioned in the previously described Abbasid style. Furthermore, another meaning is conveyed explicitly to the interpreter. This meaning is generated through the disjoining of the elements of Abbasid style from each other with intervals in-between where new elements of new contemporary material (concrete) are inserted to act as structural elements. This could mainly be seen in the arcades of the entrance, the *Sahan's* rear wall-arcade, and the prayer hall. The entire image of the mosque confirms the description that Radoine coined for Makiya's architecture as "skillful maneuvering of contemporary architectural and engineering structural systems to cope with the symbolism of the building envelope" (Radoine, 2017) (Figure 5). The conveyed message to be read is a Modern local mosque for prayer.



**Figure 5:** Meaning in the Surface Structure of the Khulafaa Mosque

Top Left: The Abbasid Mediaeval Palace in Rusafa, Middle & Right: Details of disjointed elements of the Khulafaa Mosque

Bottom Left: Khulafaa Mosque facade, and Bottom Right: *Sahan* of the mosque. (Courtesy of Sultani (2014))

### 3.4.2 DEEP STRUCTURE AND THE CONNOTED MEANING: A PLACE FOR URBAN CONTINUITY

To read the meanings residing in the deep structure, one must comprehend the urban context in which the Khulafaa Mosque is situated: First, there was the grand modernist avenue, the Khulafaa Street, which exposed the minaret as a freestanding element, and tore apart the organic urban fabric of markets and neighborhoods. Second, new master plans allowed the construction of multi-floor buildings on the street. Some of them had already been built when Makiya received the project's commission. They appeared with façades of white surfaces, suggesting new heights in the city skyline that jostle the ancient minaret and its new mosque, see (Figure 6). This issue of heights was an urgent concern for the architect, as he states in his memories: *"I wrote a letter to the Municipality of Baghdad asking to prevent selling the land adjacent to the minaret, and to prevent new near buildings from reaching rivaling heights. I asked just for these two requirements; however, my true ambition was to remove the street in front of the minaret and the mosque."* (Makya, 2012)

Makiya's design presents a shift from the typological relations of the Classical Ottoman mosque. The plan of most Ottoman mosques contains an outdoor gate leading to the *Sahan* usually surrounded by arcades, and an entrance to the prayer hall usually facing the outdoor gate. Thus the horizontal axis is established from the *Qibla* wall to the gate across the *Sahan*. As for the vertical axis, it is present with the minarets, the *Minbar*, and with the central dome. Arcades around the *Sahan* secure the closing of the sacred space from the outside secular world and opens it to the sky.

When observing the Khulafaa mosque architecture, one can identify an amalgamation of the main architectural elements: the prayer hall with the central dome, the minaret, the arcade, and the ablution place, all after being set free from their typological relations, hence establishing a new web of relationships in favor of heritage conservation and urban continuity. This can be read in several aspects of the compound as follows:



**Figure 6:** Context of the Khulafaa Mosque

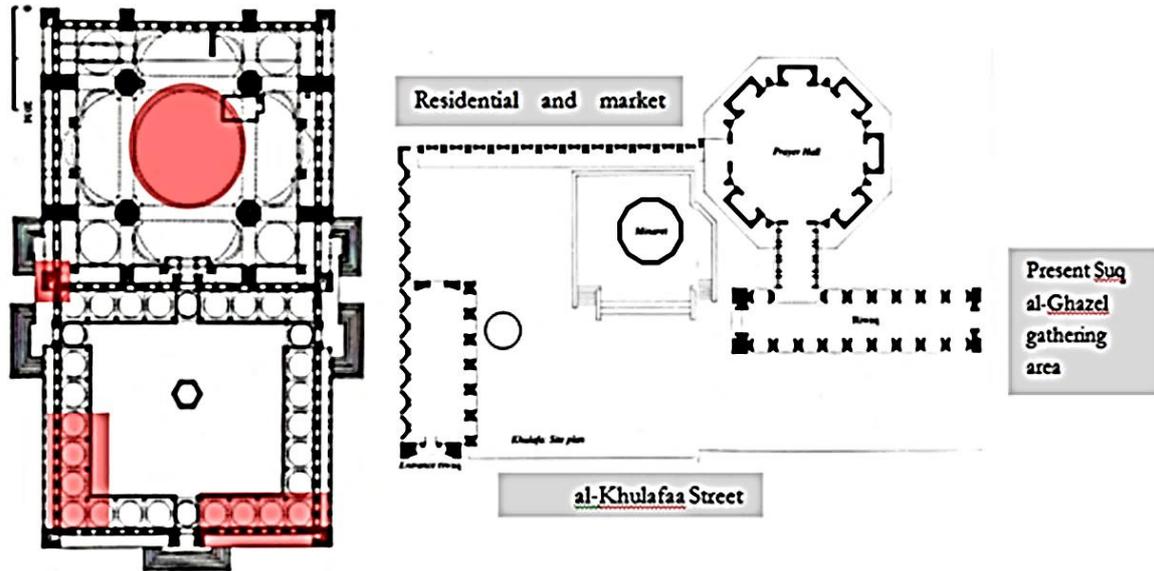
Left: Bird's-eye view looking east, mosque visible beyond the dome of the Latin Church and across Khulafaa Street.

Source: Courtesy of Mohamed Makiya Archive, Aga Khan Documentation Center, MIT Libraries (AKDC@MIT)

Top Right: The mosque during its construction, Source: Courtesy of Getty Images.

Bottom Right: Recent photo of the Khulafaa Street viewed from the Kulafaa mosque roof.

First, the *Sahan* is now open and facing the urban space in front of the mosque. This openness transformed it into a public place ready to interact with outside spaces. Furthermore, this public space was designed in such a way that it now embraces the historical minaret that had been disjointed from its context and exhibits it to the passersby, thus reaffirming its iconic historical status (Figure 7).



**Figure 7:** Formation of the Khulafaa Mosque ground plan

Left: Plan of Sultan Ahmet Mosque in Istanbul, source: Papadupolo (1976) with Authors' addition of red shades for elements used in recomposing the Khulafaa mosque. Right: Ground Plan of Makya's Khulafaa Mosque.

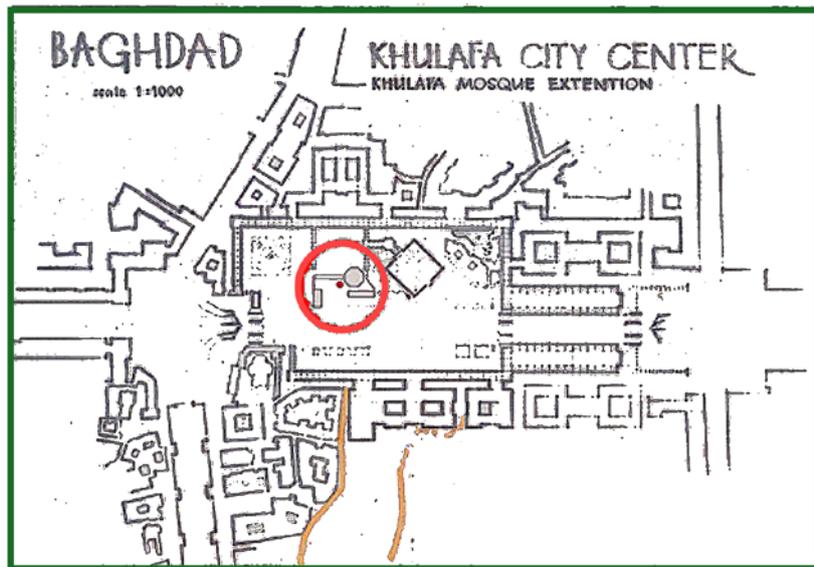
Source: Courtesy of Sultani (2014) with Authors' addition of Grey shades for the area used around the mosque

Second, the prayer hall is reduced to a centrally focused shape, Octagon, necessary to carry the only roof it needs--the grand dome--, and thus prepared to receive an entry from any of its eight sides. The result distorts the horizontal axis of the sacred-secular. Third, the arcade is designed here as two fragments, but unlike traditional mosques, it does not surround the *Sahan*, but serves as the main entrances to it, thereby making the minaret the focal point. The entrance to the prayer hall appears secondary as it is accessed from the side of the right arcade. At the same time, both arcades suggest a connection to the urban context. To the right, the arcade parallel to the street leads directly to the main area where the Suq el- Ghazel is active, and from there, to the street's sidewalk. To the left, the arcade perpendicular to the street suggests a strong axis that extends from the gate, beyond the street, to the Tigris bank. As for the rear arcade of the *Sahan*, it is composed of articulated elements that imply lightness and transparency, which enhances the airiness of the *Sahan*. The entire implicit meaning of the Khulafaa Mosque is transformed from a sacred place for spirit assertion to a secular public space, honoring the historical fragment, the minaret, and suggesting urban continuity with the surrounding context.

### 3.4.3 BEYOND AL-KHULAFAA MOSQUE: THE URBAN EXTENDED VISION OF MAKYA

Makiya's preliminary drawings prepared for the redevelopment of the Khulafaa mosque compound in 1982, illustrate his vision for the urban development of the whole area through which the virtues of his mosque composition can be appreciated. The Khulafaa mosque would have become the main landmark, and this would have been the center of old Baghdad and the entire capital as well, which could have been linked to other places with historical landmarks such as the

al-Mustansiriya school or the Abbasid palace. These drawings show a suggested plaza- *Meydan*, surrounded by arcades and defined as a car-free public space under which the Khulafaa street is diverted into a tunnel. It would have been the urban space that restores human scale, which had been lost due to the obsession with Modernity and manifestations of progress, namely wide streets for cars and high-rise buildings. In the drawings, the *Sahan* of the mosque is incorporated into the plaza, and another more private one is created behind its rear wall, where it functions as an entrance to a more prominent mosque that is commensurate with the suggested plaza's grandiose scale. The church of the Latines occupies the corner of the plaza. It is surrounded by a mass that keeps its privacy from the public space (Figure 8).



**Figure 8:** Plan of the Khulafaa City Center proposed by Makiya in 1982.

Source: Courtesy of Mohamed Makiya Archive, Aga Khan Documentation Center, MIT Libraries (AKDC@MIT), with authors' addition of red circle around the Khulafaa Mosque.

The entire scheme reflects the ambition of the architect to restore the image of Baghdad as a city with domes and minarets with recognition to its present, rather than a city full of high rise buildings. Despite the limited incorporation of the Church of Latines' in Makiya's scheme, its high dome along with the dome of the mosque, and the minaret, create a spatial definition at an urban scale that holds the seed of such image (Figure 6).

#### 4. CONCLUSION

This paper explored the potentials of integrating historical fragments of cultural value into their present urban contexts, as they could be disabled when passively conserved, or worse, exposed to negligence and eventual loss. The paper stressed the role of heritage fragments as catalysts to revive a significant portion of their urban surroundings through processes of transformation to the meanings they had previously held explicitly or implicitly. The authors approached the topic from a Structuralist – Semantic methodological perspective to provide an interpretation of the architecture of a mosque. The investigation on the Khulafaa mosque in Baghdad as a case study revealed that the architecture of the mosque was centered on its minaret-- a historic fragment that dates back to the late Abbasid era. The mosque holds a direct meaning as a place of prayer with its apparent and significant elements, fashioned in Abbasid style. This choice brings to revival the spirit of the lustrous Abbasid Baghdad. At the same time, the mosque's compositional relations were subjected

to a process of disarticulation in favor of inserting elements of modern technology into the local mental image.

The implicit meanings of the mosque structure also went through a transformation by the reconfiguration of its typological relations, thus raising the level of the minaret's significance from being exclusively part of the mosque to being active and incorporated on an urban scale. This suggests that the fragment intrinsically belongs to the city. At the same time, the minaret is still part of this unique building designed in the new era. Such treatment does not deprive fragments of their importance, and does not determine the type of their materials, but engages them with a different scale, and various complexities of signification.

## 5. AVAILABILITY OF DATA AND MATERIAL

Data can be made available by contacting the corresponding author.

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