



Muthanna Journal of Engineering and Technology MJET

Submitted 13 July 2026, Accepted in revised form 13 Sept 2026, Published online 04

October 2026



Interpretation Paradigms in Criticism of Mosque Architecture: The New Design of Al-Nouri Mosque in Mosul

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Abstract

Perspectives on the interpretation paradigms to architecture vary significantly, which is reflected in defining the nature of meaning and its alignments or contradictions within its diverse contexts. This variation can lead to the failure of certain designs and a separation from their recipients, a situation that has occurred, partly, with the new design of the Al-Nouri mosque in Mosul. This event served as a research topic to uncover the nature of the interpretation paradigm, its relationship with the intellectual stances of the recipients, and how these stances influence the position toward heritage preservation in similar cases.

The research aims to define interpretation paradigms and their relationship with both the interpreter and the designer. It also seeks to identify their aspects, indicators, and variables to enable their detection within critical texts and interpreters' opinions through a more reliable, systematic, and highly replicable method. Based on the hypothesis that the interpretation paradigm adopted by experts was influenced by their position toward heritage interpretation.

The methodology relies on applying these indicators and variables to the case of the Al-Nouri mosque in Mosul. This is achieved by conducting a survey targeting academic experts to uncover interpretive evidence, followed by analyzing the results using descriptive and inferential statistics.

The results confirm that the paradigm of interpretation (adopted by experts in the practical study) is the structuralism based on coherent interpretations, where the literal definition was the most acceptable to them, and this relates to designing according to familiar conventional template, also considering mosque reconstruction as a national matter that must be formally unique within its context. It also implies similarity to previous buildings through the geometric shapes of the mosque's main elements. Furthermore, considering it a national icon that evokes historical memory to preserve identity means the issue falls within the realm of religiously symbolic matters, which justified the exclusion of post-structuralist and hybrid paradigms from the results.

The knowledge contribution is demonstrated in identifying indicators and variables that can be applied to analyze critical texts, or to conduct similar exploratory or empirical studies. This establishes a design approach to achieve the design objectives sought by the designer, the recipient, or the interpreters.

These discovered relationships define a design approach through which similar reconstruction projects can be programmed. Furthermore, the study recommends adopting alternative paradigms for the reconstruction of non-historic buildings, allowing for creative design proposals that support multiple/ open interpretation.

Keywords: Interpretation paradigms, Mosque Architecture, Structuralism, Post-Structuralism, Hybrid Paradigm, Al-Nouri Mosque



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1. Introduction

Although theorists agreed that buildings reflect meanings and ideas, as well as reflecting the architectural approaches of critics in both architectural theory and architectural criticism, they differed (according to their philosophical ideologies) on the mechanism by which recipients interpret meanings, which is reflected in interpretation nature. This difference was evident in the case of the new design for the Al-Nouri mosque in Mosul, where reactions varied between opposing, supporting, and other opinions that saw the possibility of developing the design to overcome its problems. This divergence was clearly reflected in many media means. Considering that architecture is a self-contained semiotic system, it primarily conveys meanings inherently associated with it [1]. Here, semiotic theory provides the tools that allow studying the nature of communication and its various contexts [2]. Communication theory relates to codes that are familiar to some recipients, such as architects, while others fail to recognize them, as happened with the recipients of modern architecture, causing some of its failures [3]. This might be exactly what occurred in the case of the new design for the Al-Nouri mosque in Mosul.

From an interpretation perspective, there are many factors that theorists have addressed as architectural inputs. M. Mitášová and M. Zervan mentioned architectural/structural, natural, social, and cultural factors [4]. G. Fadhil et al. mentioned the relationship between architecture and humans [5]. While Eisenman considered architecture as a text, and thus its inputs are the deep underlying structures behind it [3].

These factors appear to be significantly different; some are considered contexts for architecture in terms of both design and interpretation, while others are considered an analysis of it. Therefore, understanding the problem of the contrasting stances toward Al-Nouri mosque represents an appropriate problem area for this topic on one hand, and constitutes a valuable objective on the other. Also, focusing research on the interpretation of the new design of Al-Nouri mosque holds great significance from several perspectives. Since its construction in the second half of the twelfth century, it has represented a grand monument as the great mosque of Mosul, and a crucial site in the life and urban development of the old city. Reconstructing Al-Nouri mosque to its valuable status is not merely an architectural challenge; it is, a symbolic act of revival and recovery. The reconstruction process aims to revive a sense of belonging and identity in the hearts of all residents, and to breathe life back into the spirit of Mosul [6]. And according to its significance, the act of interpretation has a crucial role in contemporary ideological discourse. This study aims to delineate the different aspects, indicators, and variables governing heritage interpretation, to enable their detection within critical texts and opinions through a more reliable, systematic, and highly replicable method. The research is based on a set of questions, as a research problem:

- To what extent does the precise searching for interpretive clues/ evidence delineate the methods of heritage preservation?
- To what extent is the process of heritage interpretation conditioned by the position toward the heritage interpretation?
- To what extent did the act of interpretation in this case study manifest as an objective, individual, or hybrid?

2. Previous Literatures

To cover the subject from all its aspects, previous studies will be classified into two themes: the first addresses interpretation, and the second addresses paradigms of interpretation.

2.1. Interpretation

2.1.1. Theory of Interpretation in Language

For Ibn Jarir al-Ṭabarī and others, interpretation (ta'wīl) refers to the reading and understanding of speech and its meaning, whether it confirms or diverges from its apparent [7]. Interpretation, in this sense, is the process of translating something evident to the eye into words and concepts [5]. Zervan describes interpretation theory through two key issues: first, determining the meanings; and second, the means of communication, through language and codes [3].

In language, determining and defining of meaning occurs through linguistic tools known as "indicators" (Qarā'in), which eliminate ambiguity in linguistic structures, whether this ambiguity refer to lexical, functional, or contextual meanings. Al-Aṣṭal define Qarā'in as a device that clarifies meaning to the recipients, independent of the signifier itself. He also categorized it, based on their relationship to signified, as logical (index) or conventional (symbol). And according to H. Tammam it may be verbal, semantic, or contextual [8]. The term index (indicator) was introduced by Western semioticians, Charles Sanders Peirce defined the index as a sign that relate form and meaning through a real connection [9].

The Qarā'in is the device that helps to determine meaning (the signified). It may exist in an element or in the composition and may rely on rational index or conventional symbol. The search for such Qarā'in (Clues) to understand interpretation paradigms represents one of the endeavours of critics and theorists in analysing architectural texts. Thus, interpretation defined as an attempt to understand the creative text, and approach the determination of its meanings, through mechanisms that utilize clues from the text itself and its contextual relationships.

2.1.2. The Interpretation of Architecture

The interpretation of architecture involves a series of transformations in meaning, due to the time of a building's design, implementation, occupation, and interpretation, which sometimes reflect misunderstandings due to the multiplicity of readings. This diversity has formed multiple interpretation paradigms. Al-Dabbagh (2020), for instance, highlights two: The

classical theory, which stresses the “natural meaning” of form, meanings were agreed upon by architects. The pragmatic theory, which stresses the “shared meaning” of form, initiated from the form usage within different contexts and social conventions [10].

Structuralism and semiotics claim that meaning is inherent in object relation to other objects (binary oppositions). J. P. Bonta notified that horizontal lines in a building appear meaningful only in contrast to another building [2].

Many studies have detailed the factors influencing the interpretation. Al-Dabbagh (2005) categorized these factors into: design-related factors. Product-related factors, including the form and context of the building. Interpretation-related factors, external factors. Al-Dabbagh also referenced J. P. Bonta (1996), who emphasized the role of various critical approaches in interpretation [10]. However, these influencing factors and critical approaches differ from interpretive paradigm that focus on the methodology of revealing meaning.

Fadhil et al. (2022) discussed the influence of culture, experience, and time in shaping meaning. Culture includes the interpreter's background, social environment, and experiences. It also considers differences in age, social status, gender, profession, and income. Additionally, changes in a building's functional use, partial demolition, additions, or rehabilitation can reshape its meanings. This is particularly significant in historical buildings and spaces closely associated with users. Furthermore, society's connection to the memory of a place and past events influences interpretation through emotional responses [5]. This study focuses on influential factors relating to the receiver/interpreter, though not the entirety of it.

In conclusion, the transformation of meaning results from numerous influential factors, which necessitates that researchers consider the various narrow and broad contexts. Furthermore, the subject gains greater significance and specificity when interpreting heritage and reconstructed buildings, as is the case with the case study. Therefore, the following sections will be dedicated to understanding the interpretation of heritage and religious buildings, as well as the utilization of heritage, to achieve a more precise classification of interpretation's dimensions in relation to building.

2.1.3. Interpretation of Heritage within Reconstruction

Although Stevanović (2015) classifies three viewpoints regarding heritage preservation, which influence and are influenced by interpretation, they remain confined to the design stage. He discusses the importance of architectural heritage and its cultural context, which influences the choice of methods for its preservation [11].

While the intervention approach focuses on the intangible characteristics of heritage. Heritage preservation is carried out through a comprehensive creative reading of architectural heritage to improve architectural discourse. The intervention approach also includes the opposing approach to heritage preservation, influenced by the postmodern perspective that shifts the formation of identity through processes of exclusion and difference, this involves reassembling both tangible and intangible remnants. Additionally, the intervention approach includes a symbolic link, emerging from the postmodern perspective of cultural identity as an externally constructed category, by relying on the abundance of intangible values in architectural and cultural terms, focusing on creative interpretation for self-affirmation, such as raising religious symbols [11].

Munawar (2017) emphasizes that any reconstruction plans must consider the collective identity and social memory of the affected community to ensure connected feeling to the future, rather than imposing external solutions. And argues against the “holistic” or externally led (top-down) approach to reconstruction, which historically led local communities to feel disconnected from their heritage [12].

Matthews (2019) called for the necessity of empowering local communities during heritage decision-making processes in post-reconstruction areas. This is to ensure the reflection of collective identity and social memory, noting the residents' preference for modern utilitarian practical solutions, instead of restoring the original historical form. Also clarified how Palmyra, listed as a World heritage site, became a target for political propaganda by various parties [6].

Isakhan et al. (2024) discussed many experiences in rebuilding archaeological sites, which have represented a societal challenge, such as the reconstruction of the city of Aleppo after the war while preserving heritage. This is even though 98% of the residents are connected to their cultural heritage, yet they prefer meeting practical needs, favouring the reconstruction of religious sites with a more modern vision rather than restoring their original historical form. The reconstruction of Mosul has raised questions about the importance of heritage conservation as an urgent priority and its role in fostering long-term community peace. They also recommend prioritizing local and religious sites that are more frequently visited and valued by the local population [13].

The interpretation of heritage is influenced by the intellectual positions adopted by architects regarding heritage, identity and culture, and consequently, how these are expressed in the architecture that seeks to preserve it. On the other hand, there is a fundamental difference between architects' and residents' positions regarding heritage. Here, special attention must be given to the interpretation of religious architecture, particularly mosques.

2.1.4. Interpretation of Religious Architecture/ Mosque

Religious architecture holds a unique role within cultural heritage [14]. Thus, the interpretation of religious architecture may be influenced by multi-dimensional contexts, ranging from urban planning and the shaping of public spaces to the realization of identity.

Previous studies have emphasized the spiritual components of Islamic architecture. For example, Grabar (1980) asserted that monumental forms in Islamic architecture, such as the cube and the central dome linked to cultural or religious mean-

ings, a historical event, or a memory. Therefore, the symbolism of Islamic architecture is understood through a triadic relationship (form, function, and content) [8].

Erzen (2011) considers the interpretation of Islamic architecture as a reading that focuses on symbols and metaphors, avoiding explicit literal expressions. Mosques have four symbolic patterns throughout their history: paradise, the spiritual theatre, the urban sculpture, and cosmic spiral. The domes and their interior decoration symbolize the heavens. The minaret points to the mosque building and symbolizes Islam. Thus, the functional meaning of architectural elements shifts into a symbolic one [15]. These symbols influenced by cultural context, resulting in an open interpretation. It is noted that the study does not define a clear methodology, and the identified aspects vary and relate to multiple interpretation paradigms.

Ardalan et al. (1973) refer to the relationship between geometric forms and its meanings. Cube, polygonal forms and domes reflect religious meanings, repetition of these forms may reflect stability, and sequentially shifts their role from merely formal to symbolic. Because of their strong religious associations, it is sometimes difficult to change them [16]. Some architectural characteristics have become fixed, every architecture expresses its cultural identity within its physical context [17]. The mosque (as a place of prayer) plays a role as a place for gatherings, in addition to being a justice center under the supervision of the Imam [15].

Kassim (2016) discusses the role of mosques in the city, serving mainly as containers for prayer activities, fulfilling a social and cultural role, representing national icons embodying identity, or serving as means of communication (especially when the familiar reference is absent). The size of the mosque and the number of worshippers is critical factors in defining the mosque's role. Kassim also analyzed three mosques with different design approaches in Malaysia, concluding that mosques in multicultural societies play a role in achieving social and cultural cohesion, by developing neutral architectural language [18]. The study addresses the relationship between mosque design and cultural context, which affects how they are interpreted, and emphasize that a difference in design methodology can influence the interpretative paradigm.

A study by Putra et al. (2025) discusses the semiotics of multicultural mosque forms by leaving traditional stereotypes, allowing the mosque to express a pragmatic reading through its spiritual language, while incorporating the vernacular aspects. Meanwhile, the mosque in its iconic form evokes emotional responses within the community. Therefore, the study recommends that large mosques should reflect national identity through a complex language that mixes local cultural elements with modern features [19].

Islamic architecture has several roles, including functional, symbolic, cultural, and social. However, its physical presence and the actual use of its components and elements may lead to a shifting of these roles.

On a different level, Putra et al. (2025) points to the importance of the comprehensive design of large mosques in terms of increasing visitors' interaction and benefit from the mosque in a tangible, physical manner, as well as through intangible aspects [19].

Al-Fahmawee (2022) identifies the meanings of geometric forms and architectural elements in Islamic architecture: Two-dimensional horizontal planes oriented toward the Kaaba, vertical planes for domes, and minarets, Straight lines, squares, circles, spiral forms, octagons, overlapping squares to create new forms, triangles and the six-pointed star, and the eight-pointed star, these carry religious and spiritual meanings [16]. As for the architectural elements: The minaret symbolizes the connection between earth and sky. The domes symbolize the universe, and their upward direction toward the sky represents the orientation of the thoughts of the believers. The muqarnas (column vaulting) emphasizes repetition, spread, and continuity in creation from a single source. The arches and arcades symbolize an invitation to enter the spiritual world. The columns with their leafy and geometric capitals may signify upward ascent. The courtyards symbolize internal guidance for life, and purity. The decorations with continuous geometric shapes express a spiritual meaning of unity (Tawhid), while the leafy decorations indicate dynamism. The repeated parapets symbolize unity and equality in the rows of worshippers. The crescent points to the Qibla (direction of prayer) [16]. Despite examining the semantic dimensions of design in mosque architecture, the study failed to specify the adopted interpretative paradigm for these aspects.

2.1.5. Utilization of Heritage

Al-Fahmawee (2022) identifies three approaches to employing and modifying traditional forms in design: The direct copying approach of heritage elements, where symbolic meanings are transferred using traditional construction techniques, traditional forms and elements. The contemporary approach, which involves shifting aspects of traditional architecture with new symbolic meanings. And the innovation approach for new design elements based on the symbolic meanings of heritage [16]. The study called for a return to heritage in its various approaches within the design process to achieve the symbolic dimension through the interaction between form, function, and cultural content.

Regarding Islamic architecture, "Fiqh al-bina" (Jurisprudence of construction) influences the purpose of these design treatments. K. Azab (2015) sees two jurisprudential concepts of architecture: (the power related to idealism and structural integrity), and (beauty). The aesthetic value of buildings appears in their coherence, and connection with time and space if they express their essence and purpose [20].

Akkach (2012) mentions that Islamic architecture focuses on essence, which means an abstracted symbols, this abstraction is the product of aesthetic, and spiritual thought, moving away from the ideas of depth, making the visual plane a field for meanings, as well as geometric qualities behind each element (visual, spiritual, and aesthetic). Abstraction in geometry, lines, and decoration has been transformed into symbols, with symbolic meanings and contemplative aesthetics. Therefore, their meanings derived from the visual text itself, creating a new aesthetic as well [16].

Islamic architecture possesses both an essence and the mechanisms/ paradigms to realize it, thereby achieving profound symbolic meanings. And the heritage of Islamic architecture can be revived through various approaches. This diversity influences the interpretation of its products in terms of the interpretation paradigm; this will be the focus of the next section. The act of interpretation strategies in architecture based on the concept of language have formed an important topic within contemporary architectural discourse. Linguists such as Saussure, Peirce, and the critic Jencks made significant contributions in this regard (see table 1).

Table 1: Interpretation aspects and values in relationship with design approaches, specifically dedicated to the case study.

Interpretation aspects	Variant approaches	Values	Question
Interpretation of heritage within reconstruction	Intervention approach	Intangible characteristics	Q1
	Opposing approach	Reassembling both tangible and intangible	Q2
	Symbolic approach	Abundance of intangible values	
Interpretation of mosque	Monumental forms	Cube and the central dome, interior decoration, minaret,	Q13
	Geometric forms	Cube, polygonal forms, repetition, domes, minarets, straight lines, squares, circles, spiral forms, octagons, overlapping squares, triangles, six-pointed star, eight-pointed star, muqarnas	
	Architectural elements	Muqarnas, arches and arcades, columns with their leafy and geometric capitals, courtyards, geometric decorations, leafy decorations, repeated parapets, crescent	
Utilization of heritage	Direct copying approach of heritage elements	Traditional construction techniques, traditional forms and elements	Q5
	Contemporary approach	Shifting aspects of traditional architecture with new symbolic meanings	
	Innovation approach	New design elements based on the symbolic meanings of heritage	

2.2. Interpretation Paradigms

2.2.1. The Structural Semiology Paradigm

Structuralism, initially developed by structural linguists, then include the social sciences and the arts. Saussure's theory is based on the signification, focusing more on the systemic level of language (langue) rather than its usage in specific contexts (parole). Roland Barthes explained that meaning lies in the association between the signifier and the signified, and through its differentiation, its relative position in relation to other signs [21]. So, meaning does not inhabit in the object itself, but rather in the way things are arranged [2].

Accordingly, Saussure's dual definition of association and differentiation implies that the system of signs does not merely convey pre-existing meanings. Language is a classificatory system, and the definition of meaning depend on the differences between the words used, as well as on common agreement [21].

During the 1960s and 1970s, many architectural movements turned to semiology. Architecture is seen as a system of signification that is highly material [21]. Bonta stresses that the meaning of a building emerges through comparison with another building. So, communication and perception are assembled around binary oppositions [2].

Structuralism considered the architect as the author of the architectural text [1]. The direct relationship between the signifier and the signified reduces the sign flexibility, imposing a dominant system of reading based on learning from the unbuilt structures of culture, rather than reconstructing them [22]. As a result, architecture works as a communicative system that affirms meaning, rather than emphasizing the architect's creativity or the artistic traditions [1].

Thus, structuralism supports pre-existing structures, through which the architect creates connections between layers of visual characteristics and levels of perception. The structural paradigm responds to political and social events, may embody historical icons, so carries both surface and hidden meanings. So, interpretation relies on the analysis of pre-existing architectural structures [4].

It becomes clear that the structural paradigm seeks to affirm meaning (of pre-existing structures) through the connections between prior structures. It considers the designer as the author of the architectural text, and thus aims to analyses the designer's intentions. Meaning is direct and conveyed through conventional structures, which limit the scope for interpretation. Therefore, the lexical definition is perhaps the most appropriate, and agreement among receivers can be seen as an indicator of alignment with the structural paradigm.

The crucial defect in Saussure's conceptualization lies in his neglect of the material referent and his search for meaning within a fixed temporal moment, detached from the evolution of meaning over time. Furthermore, he misses the creative role of the interpreter.

Meanwhile, Saussure views the sign as part of a linguistic system, regardless of any world outside that system, the arbitrariness of signifier/ signified relationship, opened the door for criticism that drove post-structuralist thought, this is what distinguished the European paradigm of semiology from the American paradigm of semiotics.

2.2.2. The Pragmatic Paradigm: Post-Structuralist Semiotics

Post-structuralism is a theory concerned with reception rather than creation [3]. Understanding architecture becomes an art of reading based on personal experience, buildings are no longer seen as expressions of the architect's creativity or as representations of broader social transformations, in this context, post-structuralists placed the multiplicity of architectural dimensions at the front of their analyses [1].

Peirce focused on processes of signification that can either refer to the material world or have an impact on it, the sign depends on the individual interpretation, which in turn necessitates a new reference, one that generates another reference [21]. He was concerned with logical observations aimed at undermining traditional patterns of art. For him, the sign is a mental process linked to the discussion of ideas, and indirectly related bond between the signifier and the concept [22].

According to Mitášová, this incidental critique considers architecture as an independent discipline, generating its meanings internally through the discussions of architects themselves, Interpretation becomes a closed reading.

Eisenman considered that Tschumi's design converted into a textual structure due to its abstraction, order, and detachment from its surrounding context. This shift replaced external (contextual) meanings with internal (architectural) one. The openness of architectural meanings indicated in the work as a logical index, not as obvious as pre-existing architectural codes [4].

It is obvious that the post-structuralism paradigm relies on the reader's interpretation, this implies an act of individual interpretation, and thus, it is subjective, and indirect, therefore, differences in interpretation among receivers/interpreters can be considered an indication of alignment with the post-structuralism paradigm.

Peirce's emphasis on the role of reality and context led to his theory being considered a complex system that is difficult to apply. It may result in an inability to reach a definitive meaning because the receiver/interpreter remains undefined; it could represent the interpreter's mind, a behavioural reaction, or a purely logical relationship.

2.2.3. The Hybrid Communicative Paradigm / Charles Jencks' Triadic Semiotics Paradigm

This paradigm denotes a communicative interpretation aimed at reaching open meanings [4]. Jencks suggested the idea of practicing the interpretation itself, which permits for both the description or interpretation of architecture, as well as its creation or occupation, Jencks saw the sign as having many of unexpected meanings across different cultures, giving a liberating role to the architect and to the receiver, the designer develops their own language to prevent lexical analysis. Syntactic design approaches include the dominance of rules (structures) over content, meaning the subjective (parole) over the objective (langue) [22].

Jencks' triangle combines both theories of Saussure and Peirce, aligning more closely with Peirce's triangle (which focuses on the individual) than Saussure's binary model, within a more accessible and less fixed context, by considering the role of the architect themselves in the communication process. The idea can be perceived through holistic knowledge, or unbuilt structures. Meanwhile, Jacques Derrida discovers "traces" in any text that always lead to other traces, never arriving to discover of "truth" [21].

Zervan pointed out that open interpretation may rely on the idea of the self-referential sign to uncover goals, and procedures, whose meanings derive from their structural rules, rather than symbolic signs, to search for meanings in the deep structure (meanings not previously existing) [3]. Meaning is structural and considered accurate, not metaphorical, therefore, it is connected to different contexts and to political and social events, as well as related to the architect's own works to achieve his unique character. He also noted the use of binary choices, which make the composition aggregative with the possibility of transformation towards uncertainty, such as (underground/above ground), (decentralized/multicentric composition), (classical forms/abstract forms) [23].

It becomes clear that the hybrid communicative paradigm relies on the role of the designer in the communication process through connection to various contexts and the designer's own works, as well as responding to political and social events. It also depends on the role of the receiver in interpretation, relying on the transformations of conventional templates towards uncertainty. This implies that significant differences in interpretations among receivers may indicate adherence to this paradigm of interpretation.

Table 2: Three paradigms of interpretation in Architecture with its aspects, indicators, and the possibilities of questionnaire about them, specifically dedicated to the case study.

First: The structural semiology paradigm	Aspects and indicators	- Agreement of opinions means the lexical definition. -The agreement of the questionnaire answers indicates the structural paradigm adoption. -Use of traditional/conventional templates reveal direct meaning -Depending on implications and differences -The role of langue/denotation
	Possible questions	Q8: Does the new design respond to the old concepts politically, historically or socially? Q9: Does the new design illustrate other historic buildings? Q4: Do you think that the design is wholly or partially (conveys the same preconceived meanings/reshapes the meanings/both)?
Second: The pragmatic paradigm: Post-structuralist	Aspects and indicators	-The difference of answers means high subjectivity -Difference of opinions means self-interpretation
	Possible questions	Q11: Do you compare the new design with: The old design of the same mosque / with oth-

semiotics		er old mosques (inside or outside Mosul)/with other modern mosques (inside or outside Mosul)/with a mosque designed by you?
Third: The hybrid communicative paradigm/triadic semiotics paradigm	Aspects and indicators	-Linking to different contexts -Transformations of conventional templates -Dominion of rules over content -The role of parole/connotation -Interpretations differ greatly indicate the adoption of hybrid paradigm
	Possible questions	Q12: Are there contradictory ideas in the new design, allowing for new meanings? Q10: Do you have an idea about the designer's previous work?

Jencks placed significant emphasis on meaning, which relies heavily on the recipient's culture. This has rendered interpretation highly subjective, causing architecture to lose its ability to convey a definitive message. Furthermore, the reliance on metaphors has occasionally led to an excessive imposition of symbols.

Thus, the clues or evidence (the devices that help to determine meaning) vary within interpretation paradigms (see table 2). They may rely on differentiation in the position of the sign within pre-existing templates, where the sign here is a symbol. Alternatively, they may depend on comparisons and identifying differences from similar cases, where the sign functions as an index. Or they may rely on the role of the designer in formulating the language grammars and the interpreter's role in understanding these formulations, with the sign also functioning as an index in this case.

It also becomes clear that the importance of pre-existing/ conventional templates (similar cases) lies in shaping the design thinking on one hand, and forming the act of interpretation on the other, these templates (similar cases) constitute the architectural heritage in its various models.

The research aims to define interpretation paradigms and their relationship with both the interpreter and the designer. It also seeks to identify their aspects, indicators, and variables to enable their detection within critical texts and interpreters' opinions through a more reliable, systematic, and highly replicable method.

3. Methods

The research aims to apply the aspects identified within the interpretation paradigms, as well as the aspects of interpreting heritage in mosques, by determining the identified variables within the selected case study for this purpose, the new design of Al-Nouri mosque in Mosul, (see fig. 1).

3.1. Description of case study

Al-Nouri mosque is one of Iraq's historic mosques, located on the west bank of Mosul. The surrounding area is known as the great mosque district. It is famous for its leaning minaret (Al-Hadba), which tilts toward the east and is considered one of the city's most prominent historical landmarks. The mosque holds significant historical importance as it was built over eight centuries ago (1172-1173), with its Minaret remaining a witness to its prominence in Mosul [24]. Therefore, its reconstruction presented an architectural challenge, in addition to being a symbolic cause for the rebuilding of Mosul following its destruction in the 2017 war. According to UNESCO, this project serves to strengthen the sense of identity and belonging among the city's inhabitants. As soon as UNESCO announced that an Egyptian team had won the competition it launched, the matter raised concerns among the people of Mosul. This was because the design contradicted many architectural features of the old city, ignoring the ideas of Mosul's own architects [25]

3.2. Hypothesis and objectives

Therefore, the research identifies the varying perspectives of the residents toward the new proposed design as a problem area and seeks to understand its causes and foundations. In other words, based on the hypothesis that the interpretation paradigm adopted by experts (dependent variable) was influenced by their position toward heritage interpretation (independent variable). Assuming that this relationship represents the key point for understanding the problematic of the new proposed design.

The objective is to discover clues (evidence) to identify the interpretation paradigm adopted by the recipients of the new design of Al-Nouri mosque in Mosul, and to determine the relationship between these paradigms and the positions on heritage and its methods of preservation.

3.3. Measurement tools

The research adopts a questionnaire directed to a group of academic experts in architecture, who are knowledgeable and familiar with both the old design of Al-Nouri mosque and the new design, by virtue of their expertise as well as being residents in Mosul city.

In-depth interviews were conducted with experts to clarify the questions' contents, followed by a refinement of the pilot study tool based on their professional feedback and insights. The questionnaire form (see appendix) included questions regarding the status of Al-Nouri mosque, questions about the attitude toward heritage, questions concerning the attitude toward interpretation, and questions about the interpretation of Al-Nouri mosque itself. Images of the historical stages of

Al-Nouri mosque, as available from sources, along with images of its new design, were presented by PowerPoint software and by posters, to provide the respondents with a comprehensive understanding of both cases and enable comparison between them.

Questionnaires were conducted (33 in total), then the statistical analysis was conducted in two sequential phases: Descriptive statistics were initially applied using (Percentages) to summarize the data. Additionally, statistically significant variance among the respondents' answers was determined to identify key patterns. Inferential statistics were subsequently performed using (Spearman's rank correlation coefficient), this is a non-parametric test was implemented to measure the strength and direction of the relationship between the ordinal variables, then come out with conclusions.

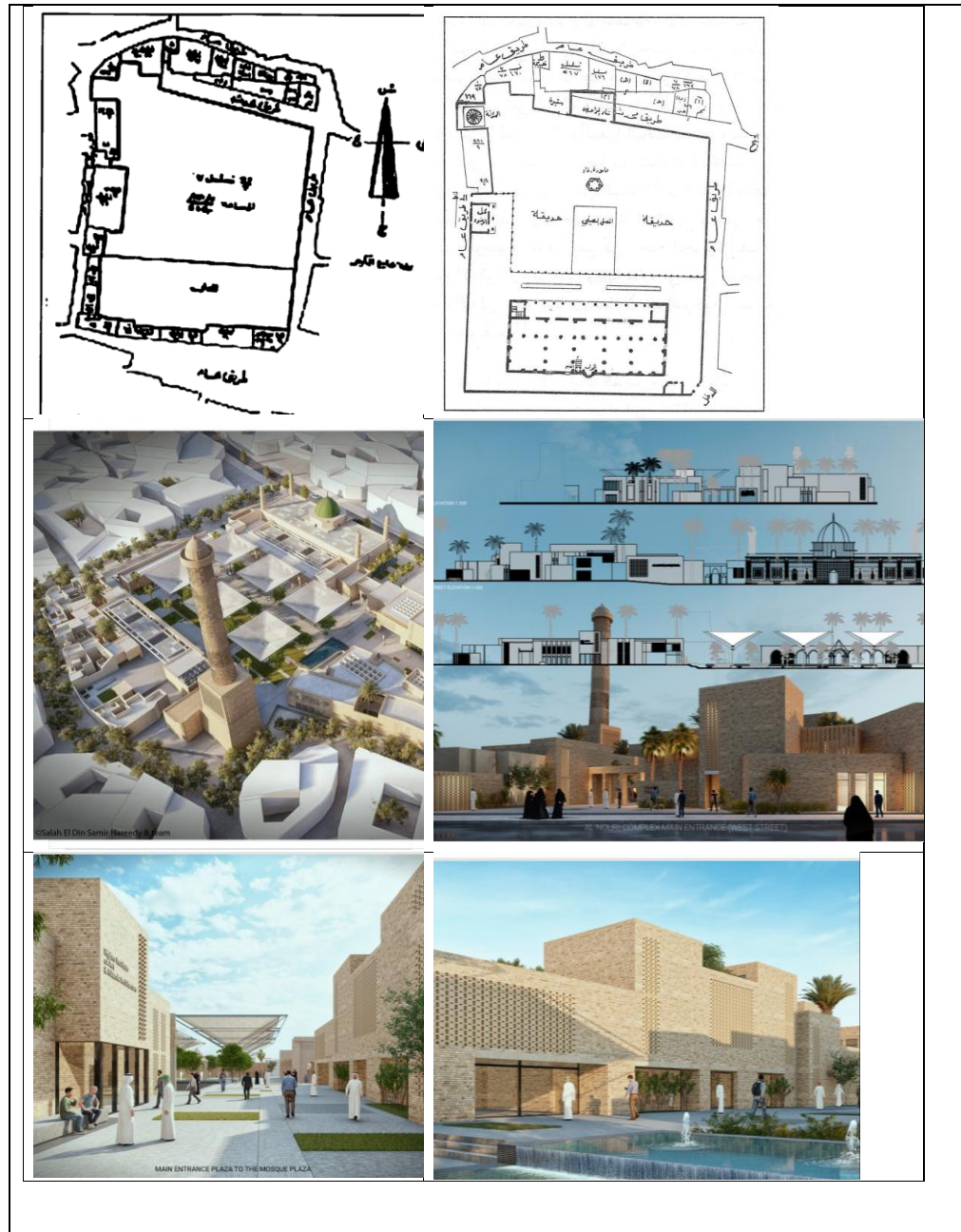


Fig. 1: Case study: Archived architectural plans [26], and design proposal for Al-Nouri mosque reconstruction [27].

4. Results

The descriptive statistical results for all questions (except for question 8 and question 10) showed significant differences in the respondents' answers, indicating that the responses tended to concentrate around certain specific values (as detailed for each question in table 3, table 4, and fig. 2).

Regarding the status of the Al-Nouri mosque, the respondents tended to view it as a national icon that evokes collective memory and believed it should be redesigned in the same conventional image of the city's mosques. The high agreement

among respondents, along with significant differences (87.9%, 72.7%) for questions 1 and 2 respectively, indicates adherence to the structuralism paradigm of interpretation, meaning the answers are direct literal meanings with a high level of compromise among respondents.

Table 3: Results of the descriptive statistic, percentage values.

Aspects	Questions	Values	Codes	Result %
Questions regarding the status of Al-Nouri mosque	Q1	What does Al-Nouri mosque mean to you?	Mosque for prayer	V11 6.1
			A building with a community and cultural role	V12 6.1
			A national icon that invokes collective historical memory	V13 87.9
	Q2	Being an architectural designer, how should Al-Nouri mosque be redesigned?	The same conventional image of the city's mosques	V21 72.7
			A neutral style that expresses the different cultures in this country	V22 6.1
			A new model that emerges from the collection of elements from different sources to reach the world	V23 18.2
Questions about the attitude toward heritage	Q3	What does the issue of rebuilding the great mosque represent to you?	The issue of meeting functional requirements (utilitarian)	V31 6.1
			A national issue for the revival of identity? (symbolic)	V32 72.7
			The issue of individual creative architectural design? (creative)	V33 0
			The issue of reviving societal and spiritual values? (social)	V34 21.2
	Q4	Is the new design?	Restoring the identity of the old mosque through repetition	V41 6.1
			Creating a new identity and image through transformation	V42 57.6
			Developing intangible identity	V43 33.3
	Q5	How do you see the new design dealing with Mosul's local and historical heritage?	Direct copying of heritage forms and contents	V51 3
			Developing heritage forms and contents	V52 39.4
			Use of modern forms and contents	V53 57.6
Questions concerning the attitude toward interpretation	Q6	Do you think it is necessary to understand the design of mosques by interpreting them as symbols? If yes, answer the following question.	Yes	V61 90.9
			No	V62 9.1
	Q7	Do you see that the design of the big mosques in the city (such as Al-Nouri mosque)?	Symbolizing paradise with a forest of columns, fountains, plant decorations, and the green color	V71 3
			Correlation to the effectiveness of congregational prayer through the humanitarian scale, central organization and the clarity of the prayer hall	V72 21.2
			A unique architectural form within the context of the city through its distinctive location, the possibility of seeing it from long distances, and its distinctive shape	V73 54.5
			Encoding the spiritual content of the function "as prayer is the servant's connection to Allah" through the central formation of its structural structure and the aggregation of its architectural elements.	V74 18.2
	Q8	Does the new design (convey) a "close/interconnected image" respond to the old concepts?	Politically	V81 0
			Historically	V82 36.4
			Socially	V83 24.2
			All of the above	V84 27.3
			None of the above	V85 12.1
Questions about the interpretation of Al-Nouri mosque	Q9	Does the new design mimic other previous buildings?	Yes	V91 18.2
			Somewhat	V92 63.3
			No	V93 18.2
	Q10	Do you know the designer's previous works?	Yes	V101 0
			No	V102 100
	Q11	Do you compare the new design with?	The old design of the same mosque	V111 60.6
			with other ancient mosques (inside or outside Mosul)	V112 0
			With other modern mosques (inside or outside Mosul)	V113 12.1
			With a mosque designed by you	V114 0
			There is no comparison	V115 27.3
	Q12	Are there contradictory ideas (decisions) in the new design, allowing for new meanings?	Yes	V121 18.2
			No	V122 81.8
	Q13	Is your understanding (interpretation) of the new design related to?	Geometric forms (e.g. square, hexagonal, octagonal, circle, triangle)	V131 21.2
			Architectural elements (such as minarets, domes, muqarnas, arches, vaults, columns, courtyards, decorations, curtains, and crescents)	V132 60.6
			Heritage and modern construction techniques	V133 18.2
			Things other than the above (specify if possible)	V134 0

As for the respondents' attitude toward heritage, the issue of its reconstruction is viewed as a national matter for preserving identity. The new design has created a new identity by modifying some contents and using new forms. Likewise, the high agreement among respondents, along with significant differences (72.7%, 57.6%, 57.6%) for questions 3, 4, and 5 respectively, confirms the previous result that the dominant interpretation paradigm is structuralism.

Regarding their general attitude towards interpretation, respondents tend to believe in the necessity of interpreting the designs of grand or central mosques in cities, considering them as unique architectural forms within the context of the urban site. The high agreement among respondents, with significant differences (90.9%, 54.5%) for questions 6 and 7 respectively, indicates that the interpretation paradigm is also structuralism.

Concerning the interpretation of the new design of the Al-Nouri mosque specifically, respondents tend to believe that the new design slightly imitates previous buildings. They also totally reported their lack of knowledge regarding the designer's previous works. Furthermore, they tend to compare the new design with the old design of the same mosque, noting the presence of conflicting decisions in the new design. Their understanding relies on architectural elements such as the minaret, domes, arches, and courtyards. The high agreement among respondents, with significant differences (63.6%, 60.6%, 81.8%, 60.6%) for questions 9, 11, 12, and 13 respectively, also indicates a structuralism paradigm to interpretation.

Question 8 remains an exception; responses varied across different values but without statistically significant differences, which excludes the post-structuralism paradigm and confirms the earlier conclusion about the structuralism paradigm. As for question 10, all respondents agreed on their lack of knowledge regarding the designer's previous works, which rules out the hybrid interpretation paradigm.

The descriptive statistical results support the third research hypothesis that the structuralism paradigm is largely objective, as reflected by the high agreement percentages in the responses.

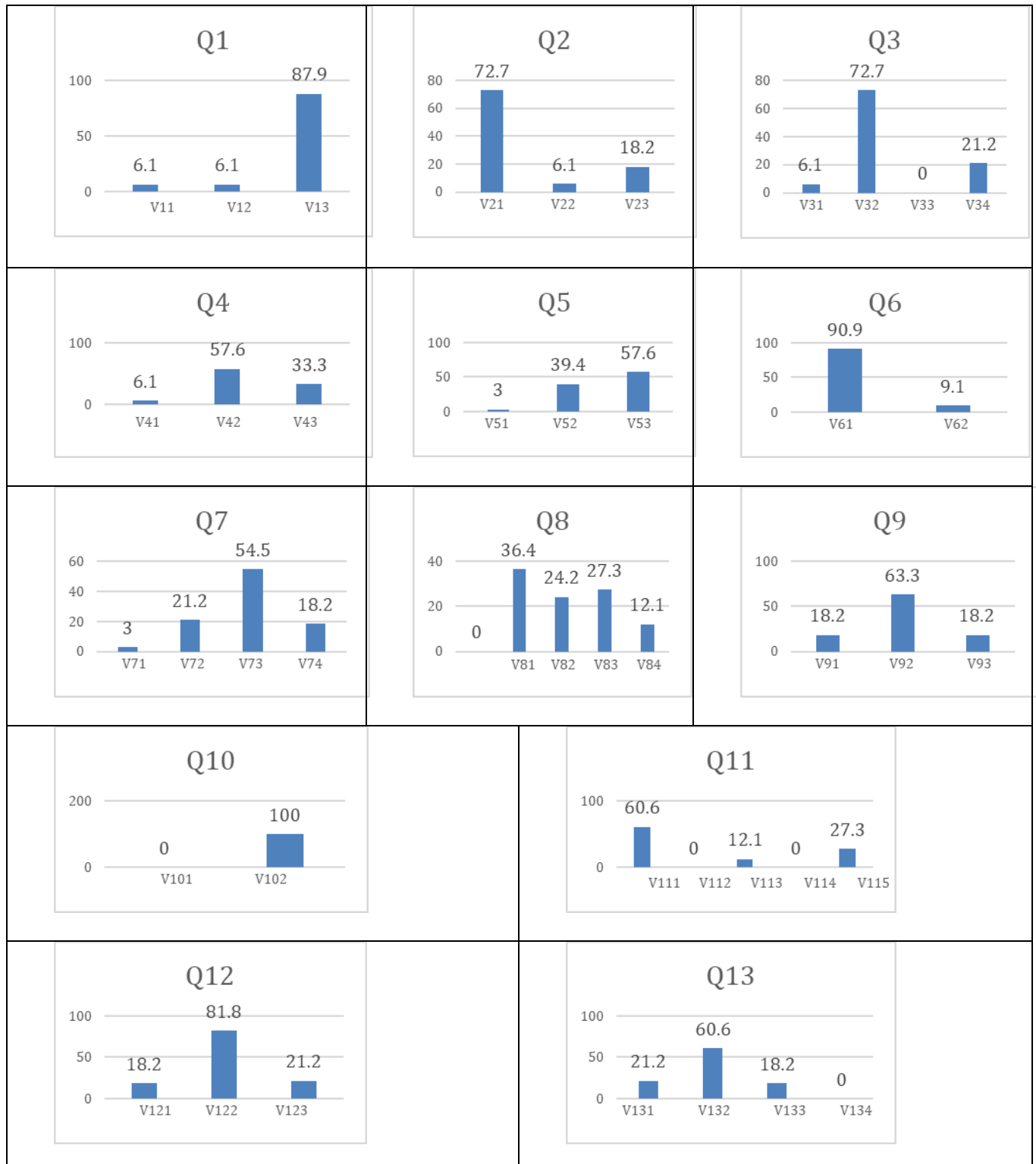


Fig. 2: Results: Descriptive analysis charts for questionnaires responses.

As for the results of the inferential statistics (Table 4.), they showed a moderate positive correlation between the (necessity of interpreting the designs of large or central mosques in cities) and considering them as a (national icon invoking collective historical memory). In other words, the stronger the belief in the need for interpretation, the more they are regarded as a national icon.

Table 4: Results of the inferential statistics, correlation coefficient between variables.

		Correlations												
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
Spearman's rho	Q1 Correlation Coefficient	1.000												
	Q2 Correlation Coefficient	.184	1.000											
	Q3 Correlation Coefficient	.162	-.004	1.000										
	Q4 Correlation Coefficient	-.010	.101	-.051	1.000									
	Q5 Correlation Coefficient	.319	.172	-.024	.232	1.000								
	Q6 Correlation Coefficient	.527*	-.015	-.192	-.080	.026	1.000							
	Q7 Correlation Coefficient	-.039	-.113	-.350*	.297	.004	-.031	1.000						
	Q8 Correlation Coefficient	.331	.238	.138	.034	.004	.075	-.042	1.000					
	Q9 Correlation Coefficient	.144	.278	-.031	-.131	.098	.175	-.175	.044	1.000				
	Q10 Correlation Coefficient										1.000			
	Q11 Correlation Coefficient	.071	-.014	.175	-.069	.130	.013	-.091	.221	.370*		1.000		
	Q12 Correlation Coefficient	-.175	.080	.207	-.081	.210	-.149	-.053	-.022	.130		.019	1.000	
	Q13 Correlation Coefficient	-.158	.120	.199	.024	.144	-.349*	-.100	-.088	.079		.045	.099	1.000

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

There is also an inverse relationship (slightly weak) between the respondents' view of considering the reconstruction issue as (a national matter for preserving identity) and their perception of large mosques as (a unique architectural form within the urban context of the city). This means that viewing reconstruction as a national issue for identity preservation is not related to the urban context level, but rather to religious symbolism through architectural form, connection to function through human scale, and other architectural characteristics. This supports the second research hypothesis.

Similarly, there is an inverse relationship (slightly weak) between (the necessity of interpreting the designs of large or central mosques in cities) and interpreting them through (architectural elements such as minarets, domes, arches, and courtyards). In other words, the stronger the belief in the need for interpretation, the less reliance there is on architectural elements for interpretation, highlighting here the role of geometric forms like squares, circles, and others, as well as traditional and modern construction techniques.

These results demonstrate that the understanding and perception of the mosque's role and symbolism lie more in geometric forms and construction techniques than in the architectural elements that Islamic architectural literature has long emphasized as significant influences on the image of the mosque, although this is a new contribution to knowledge, it requires more research to achieve greater reliability, considering that the relationship is weak.

There is a positive relationship (slightly weak) between the idea that (the new design slightly mimics previous buildings) and its comparison with (the old design of the same mosque), meaning respondents compare and expect that the new design is related to the old design.

On the other hand, factors such as age, gender, and educational level have an impact on the respondents' answers. Age possibly influences the ability to interpret the new design as a response to historical concepts as well as other concepts. Gender has a slight possible effect on the attitude toward heritage, particularly regarding the view that the new design used and developed modern forms and meanings. Similarly, educational level has a slight possible effect on the attitude toward heritage, especially concerning the belief that the new design created a new identity by modifying forms and meanings. Meanwhile, difference in professional experience did not show any significant impact on the aspects studied in the research, all these results confirm in general the agreement of the respondents in their attitude towards the aspects of the research.

5. Discussion

The fact that the (structuralism paradigm) aligns with the emergence of certain values within the (attitude towards heritage), is represented by the view that the reconstruction of the mosque is a national issue with symbolic significance, and that the new design created a new identity and image through modification using modern forms and meanings. This slightly supports the first research hypothesis and provides insight into the possible relationship between the structuralism paradigm and the traditional/conventional attitude towards heritage, which answer the third question for this research, adopting a national symbolic attitude means preserving the same conventional image, as confirmed by many theoretical studies on one

hand, and residents' opinions conveyed by the media on the other. However, this was not achieved through the new design, which may be a reason for the opposition against it, this opposition consequently led to the formation of a consultant committee to re-discuss some detailed solutions with the designer, to make the design more closely associated to the Mosul architectural identity understood by experts and residents.

Although the surveyed sample consisted of architects, it became clear that the literal meaning of the required image (Lexical definition) was the most acceptable to them. This means considering mosque reconstruction as a national matter that must be formally unique within its context. It also implies similarity to previous buildings through the fundamental geometric shapes of the mosque, such as the minaret, domes, arches, and courtyards. Furthermore, considering it a national icon that evokes historical memory to preserve identity means it is a religiously symbolic matter. Consequently, these discovered relationships define a design approach through which similar reconstruction projects can be programmed. Although formal uniqueness within context may seem slightly contradictory to another design requirement, evoking historical memory through similarity to previous buildings, including the mosque itself, this confirms Roland Barthes' argument that meaning stems from both association and differentiation. It also confirms Saussure's view that a sign system may not only convey pre-existing meanings.

6. Conclusions

Despite the emergence of post-structuralism and hybrid paradigms of interpretation quite some time ago, the structuralism paradigm of interpretation remains dominant among architecture experts, this indicates that coherent literal interpretations still getting a unified compromise widely. This can be justified by the fact that the reconstruction project of the Al-Nouri mosque holds a unique historical significance and embodies the city's identity on a local level, and this may explain the first, second, and third questions for this research.

More importantly, its deliberate demolition was accompanied by difficult circumstances experienced by the residents, making the restoration of its traditional/conventional image a goal that represents a challenge to preserve the identity of the Mosul city. It can be argued that this traditional/conventional image is linked to national perceptions, which made it necessary to reflect it in the physical/tangible architectural formation symbolizing the religious function, manifested through geometric forms and traditional construction techniques, to maintain continuity in comparison with the old design.

Also, the prevailing intellectual context of the post-war era gave rise to a traditional/conventional reading of this mosque's re-design process, further compounded by the architectural significance outlined in the research. Despite belonging to the same department, these academics vary in age and scientific qualification, factors that results indicate have influenced the outcomes. Consequently, academic background alone cannot be cited as the reason for the high level of agreement in responses. Such agreement may instead represent a form of intellectual bias, or a reflection of the prevailing intellectual context shared by both experts and residents, necessitating further research.

Identifying the research indicators associated with each interpretation paradigm and determining the methods for exploring them within critical texts or through questionnaire is considered one of the research contributions to the field of criticism.

7. Recommendations

The research recommends the necessity of surveying both experts and residents regarding the design characteristics that define the traditional or vernacular architectural identity, that recipients wish to reconstruct for significant historic landmarks. These discovered relationships define a design approach through which similar reconstruction projects can be programmed. It is essential to form local committees comprising experts in architecture, sociology, and other disciplines to identify the tangible and intangible characteristics of architecture that residents consider expressive of their identity and privacy. Furthermore, it is essential to identify priorities based on the necessities perceived by recipients, allowing for a tailored study of each individual case. In the case of non-historic buildings, other interpretation paradigms may be utilized to account for the building's relationship with its various contexts, which may lead to diverse approaches for employing heritage within new designs, thereby enabling multiple readings.

Availability of data and material

Data can be available by contacting the corresponding author upon reasonable request.

Acknowledgement

The author appreciates the scientific and logistic supports from the College of Engineering/ University of Mosul.

Declaration of competing interest

The author declares that she has no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Funding source

This paper didn't receive any specific funds.

References

- [1] W. Whyte, "How Do Buildings Mean? Some Issues of Interpretation in the History of Architecture," *History and Theory*, vol. 45, no. 2, pp. 153–177, 2006. [Online]. Available: <http://www.jstor.org/stable/3874104>
- [2] D. Hattenhauer, "The Rhetoric of Architecture: A Semiotic Approach," *Communication Quarterly*, vol. 32, no. 1, pp. 71–77, 1984. <https://doi.org/10.1080/01463378409369534>
- [3] M. Zervan, "The Analysis of Interpretational Procedures in Peter Eisenman's Books Ten Canonical Buildings," *A&U*, vol. 49, no. 1-2, 2015. [Online]. Available: <https://architektura-urbanizmus.sk/2021/05/06/the-analysis-of-interpretational-procedures-in-peter-eisenmans-book-ten-canonical-buildings/>
- [4] M. Mitášová and M. Zervan, "The Interpretation of Architecture as a Methodological Problem," *A&U*, vol. 54, no. 3-4, 2020. <https://doi.org/10.31577/archandurb.2020.54.3-4.5>
- [5] G. Fadhil and G. R. Al Slik, "The Impact of Time/Emotion Factors on the Interpretation of meanings of Iraqi Architecture and Its Transformations," *Muthanna Journal of Engineering and Technology*, vol. 10, no. 1, pp. 17-26, Jun. 2022. [The impact of time/emotion factors on the interpretation of meanings of Iraqi architecture, and its transformations – Muthanna Journal of Engineering and Technology \(MJET\)](https://doi.org/10.31577/archandurb.2020.54.3-4.5)
- [6] R. Matthews *et al.*, "Heritage and cultural healing: Iraq in a post-Daesh era," *International Journal of Heritage Studies*, vol. 26, no. 2, pp. 120-141, 2020. <https://doi.org/10.1080/13527258.2019.1608585>
- [7] S. Alhawali, "Elm alkalam, Hakekat altaweel," *Safar Alhawali Website*, 5th series, 2020. [Online]. Available: www.safaralhawali.com
- [8] M. K. Al-Astal, "Al-Qarā'in end alosomeen wa atharaha fee fahmealnusoos," Research Paper, pp. 1-161, 2004. [Online]. Available: <https://www.academia.edu/32499082/>
- [9] B. T. Al-Ameen and B. A. Sulaeman, "Mostalah Al-Qarā'in fee Al-fikr Al-aloghayee Al-moaaser- An explanatory study about its concepts and classification for the contemporary linguistics," *ELINSAN WA ELMADJAL Journal*, vol. 4, no. 1, pp. 135-153, Jun. 2018. <https://asjp.cerist.dz/en/article/55253>
- [10] A. H. Al-Dabbagh, "The Nature of Interpretation in Architectural criticism," in *Proc. 3rd International Conference On Architectural And Civil Engineering (ICACE20)*, 2020. https://eprints.cihanuniversity.edu.iq/id/eprint/3294/1/Conf_ICACE20_26-04-2021.pdf
- [11] N. Stevanović, "Interpretations of the Architectural and Cultural Values of Heritage in the Revitalization Process," *A&U*, vol. 49, no. 3-4, 2015. <https://architektura-urbanizmus.sk/2021/05/07/interpretations-of-the-architectural-and-cultural-values-of-heritage-in-the-revitalization-process/>
- [12] N. A. Munawar, "Reconstructing Cultural Heritage in Conflict Zones: Should Palmyra Be Rebuilt?," *Ex Novo: Journal of Archaeology*, vol. 2, pp. 33-48, Dec. 2017. <https://doi.org/10.32028/exnovo.v2i0.388>
- [13] B. Isakhan and L. Meskell, "Local perspectives on heritage reconstruction after conflict: a public opinion survey of Aleppo," *International Journal of Heritage Studies*, vol. 30, no. 7, pp. 821-839, 2024. <https://doi.org/10.1080/13527258.2024.2342288>
- [14] J. Gil-Mastalerzyk, "The place and role of religious architecture in the formation of urban space," *Procedia Engineering*, vol. 161, pp. 2053-2057, Dec. 2016. [The Place and Role of Religious Architecture in the Formation of Urban Space - ScienceDirect](https://doi.org/10.1016/j.proeng.2016.12.100)
- [15] J. N. Erzen, "Reading Mosques: Meaning and Architecture in Islam," *The Journal of Aesthetics and Art Criticism*, vol. 69, no. 1, pp. 125-131, Winter 2011. [Online]. Available: <https://www.jstor.org/stable/42635843>
- [16] E. A. H. Al-Fahmawee, "Semiotics as an approach to the analysis of symbolism in Islamic architectural arts," *Architecture and Engineering*, vol. 7, no. 2, 2022. <https://doi.org/10.23968/2500-0055-2022-7-2-03-19>, Applied Science Private University, Faculty of Art and Design Amman, Jordan
- [17] T. A. Abdullah and S. Khan, "Symbolism in Islamic Architecture," in *Proc. 5th International Conference on Islamic Arts and Architecture (ICIAA2011)*, New Delhi, India, Nov. 2011. https://www.researchgate.net/profile/Safiullah-Khan-6/publication/306117796_Symbolism_in_Islamic_Architecture/links/57b2b89408ae95f9d8f549f5/Symbolism-in-Islamic-Architecture.pdf
- [18] P. S. J. Kassim *et al.*, "Mosque Forms as Signification Language in Mosque Architecture, Multiculturalism and the Role of the Modernist Language in Mosque Architecture," *Aust. J. Basic & Appl. Sci.*, vol. 10, no. 7, pp. 135-145, 2016. <https://www.researchgate.net/publication/314231990>
- [19] S. Putra, T. Youssef, D. Ahmed, and J. Jasafat, "Modern Mosque Architecture and its Impact on Islamic Identity: A Study of Mosques in European Countries," *Journal of Noesantara Islamic Studies*, vol. 2, no. 2, pp. 95–106, 2025. https://www.researchgate.net/publication/389661782_Modern_Mosque_Architecture_and_its_Impact_on_Islamic_Identity_A_Study_of_Mosques_in_European_Countries
- [20] K. Azab, "Islamic Concepts of Building and Architecture," *Journal of the Egyptian Scientific Institute*, vol. 90, May 2015. <https://doi.org/10.21608/JFNILE.2015.88419>
- [21] A. Loeckx and H. Heynen, "The Figure of Knowledge: Conditioning Architectural Theory, 1960s - 1990s," in *Meaning and Effect: Revisiting Semiotics in Architecture Semiotics*, Leuven University Press, 2020, pp. 31-62. <https://doi.org/10.2307/j.ctv16x2c28.4>
- [22] M. Chapman, M. J. Ostwald, and C. Tucker, "Semiotics, interpretation and political resistance in architecture," in *Proc. 38th International Conference of Architectural Science Association ANZAScA*, Launceston, Tasmania, Nov. 2004. https://anzasca.net/wp-content/uploads/2014/08/ANZAScA2004_Chapman2.pdf

- [23] M. Zervan and M. Mitášová, "Architecture and Politics as a Matter of Interpretation," *Artalk Revue* 3, Winter 2018. [Online]. Available: https://www.academia.edu/103621325/Vladimir_Dede%C4%8Dek_Interpretations_of_his_Architecture
- [24] Ministry of Culture, Tourism and Antiquities, Iraq. [Online]. Available: <https://www.mocul.gov.iq/?article=4915>
- [25] UNESCO, "Revive the Spirit of Mosul: Al-Nouri Mosque," 2021. [Online]. Available: <https://www.unesco.org/ar/revive-mosul/al-nouri-mosque>
- [26] S. Al-Deewage, "Mosul Mosques in Different Periods." Al-Daar Al-Arabica Llmawsoaat, 2014. [Online]. Available: www.noor-book.com/كتاب-جوامع-الموصل-في-مختلف-العصور-pdf
- [27] UNESCO, "Reconstruction & Rehabilitation of the Al Nouri Complex in Mosul: Architectural Brief," 2021. [Online]. Available: https://www.uia-architectes.org/wp-content/uploads/2021/06/Final_architectural_brief_mosul_competition.pdf

Appendix

Questionnaire

A questionnaire related to a research study being conducted by your colleague, which includes your opinion on the new proposed design of Al-Nouri mosque, attached are its images... With sincere appreciation.

Questions regarding the status of Al-Nouri mosque	Q1	What does Al-Nouri mosque mean to you?	Mosque for prayer A building with a community and cultural role A national icon that invokes collective historical memory
	Q2	Being an architectural designer, how should Al-Nouri mosque be redesigned?	The same conventional image of the city's mosques A neutral style that expresses the different cultures in this country A new model that emerges from the collection of elements from different sources to re the world
Questions about the attitude toward heritage	Q3	What does the issue of rebuilding the great mosque represent to you?	The issue of meeting functional requirements (Utilitarian) A national issue for the revival of identity? (Symbolic) The issue of individual creative architectural design? (Technical) The issue of reviving societal and spiritual values? (Social)
	Q4	Is the new design?	Restoring the identity of the old mosque through repetition Creating a new identity and image through transformation Developing intangible identity
	Q5	How do you see the new design dealing with Mosul's local and historical heritage?	Direct copying of heritage forms and contents Developing heritage forms and contents Use of modern forms and content
Questions concerning the attitude toward interpretation	Q6	Do you think it is necessary to understand the design of mosques by interpreting them as symbols? If yes, answer the following question	Yes No
	Q7	Do you see that the design of the big mosques in the city (such as Al-Nouri mosque)?	Symbolizing paradise with a forest of columns, fountains, plant decorations, and the green color Correlation to the effectiveness of congregational prayer through the humanitarian sca central organization and the clarity of the prayer hall A unique architectural form within the context of the city through its distinctive location, the possibility of seeing it from long distances, and its distinctive shape Encoding the spiritual content of the function "as prayer is the servant's connection to Allah" through the central formation of its structural structure and the aggregation of its architectural elements.
Questions about the interpretation of Al-Nouri mosque	Q8	Does the new design (convey) a "close/interconnected image" respond to the old concepts?	Politically Historically Socially All the above
	Q9	Does the new design mimic other previous buildings?	Yes Somewhat No
	Q10	Do you know the designer's previous works?	Yes No
	Q11	Do you compare the new design with?	The old design of the same mosque with other ancient mosques (inside or outside Mosul) With other modern mosques (inside or outside Mosul) With a mosque designed by you There is no comparison
	Q12	Are there contradictory ideas (decisions) in the new design, allowing for new meanings?	Yes No
	Q13	Is your understanding (interpretation) of the new design related to?	Geometric shapes (e.g. square, hexagonal, octagonal, circle, triangle) Architectural elements (such as minarets, domes, muqarnas, arches, vaults, columns, courtyards, decorations, curtains, and crescents) Heritage and modern construction techniques Things other than the above (specify if possible)