



Urban and Architectural Identity of Mosul. An Analytical Background for City's Reconstruction

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Abstract

The city of Mosul dramatically represents a paradigmatic case where a condition of pervasive destruction of the built environment has moved the scientific research towards the investigation of possible precautionary strategies in safeguarding those structural characteristics that define the identity of the city. The study here displayed evaluates the elements that compose the urban phenomenon as operational and proactive tools capable to suggest criteria for a critical reconstruction of the urban structure, to integrate a consolidate historical identity with a new architectural intervention. Specifically, the aim of this research consists of detecting how the city of Mosul, although being a city of Islamic foundation—and thus displaying specific morphological and typological characteristics—has developed peculiar aspects affected by other cultural, religious, and geographical factors. And that is recognizable, for instance, in the settlement relationship with the Tigris river, and, in particular, in the construction of a monumental riverfront that often deforms the typical structure of the enclosure, otherwise persistent in the Islamic settlements. Then, those processes identified at an urban level will be extended to a typological one, trying to identify possible relationships between buildings and urban form. As a result, we expect to rebuild a formal and settlement identity of the city of Mosul by combining its individual and peculiar ways of

growth, both architectural and urban. And this would have the purpose of enriching the elements to be taken into consideration in the process of defining an operational methodology capable of leading the practice of design towards more aware and responsible ways in dealing with the reconstruction process.

Keywords

Urban identity • Critical reconstruction • Urban transformation

1 Introduction

In recent years the architectural heritage of the city of Mosul has been the object of continuous and deliberate violence due to the war against ISIS, as widely reported and catalogued by international organisations such as UNESCO and Un-Habitat (*Initial Planning Framework for the Reconstruction of Mosul*, 2018); mutilation and destruction have mostly affected the historical heart of the city, the Old City, since its morphological conformation ideal for the perpetuation of guerrilla warfare and, as such, resulting the first theatre of battles. It should be noted, however, that the current scenario is paradoxically the latest in a series of dramatic events that threaten the maintenance and preservation of Iraq's collective, immaterial and architectural heritage. From the architectural plans for Baghdad in the early 1980s to define the face of Saddam's new state—interrupted by the war with Iran—to the two Gulf wars, followed by plans for conservation and reconstruction—once again interrupted by the internal conflict with ISIS—the history of contemporary Iraq has always been characterised by a deep political instability that over time has nourished internal conflicts between the different cultural and religious realities composing the complex mosaic of Iraqi society, so as to keep constant the possibility that these social frictions

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may turn into real armed conflicts. What is most compromised by this political volatility, as well as primarily the social and civil fabric of the nation, is also the collective patrimony, both physical and intangible, that can be traced back to it, the architectural fabric that defines the identity and recognizability of urban structures, not necessarily purely monumental. The research, therefore, does not pursue a contingent and emergent design solution, but rather the definition of certain reference parameters for the identification of cautionary strategies based on the investigation and selection of typical elements and local generative processes aimed at protecting and maintaining urban identity.

2 Objectives and Strategies

The objective of this paper is therefore the proposal of an experimental way to define a methodological approach that captures from the context of origin its generative and representative guarantees: it is our conviction that in the urban fabric lies the possibility of tracing elements that outline a latent and not necessarily material identity, and that it is the project's task to investigate and select its possibilities of recomposition. With this objective in mind, an attempt will therefore be made to outline a historical introduction to the city's architecture that highlights certain structural characteristics of the urban fabric. However, it should be pointed out that recourse to history does not have a justifiable purpose in itself, but rather the objective of unravelling the city's constituent processes and outlining the *cultural environment* of reference—as Ernesto Nathan Rogers states: “considering the environment means considering history” (Rogers, 1955)—specifically articulated in two directions: history as an instrument for verifying the search for a *consonance* between the architectural project and its context, and as such the appropriateness of its outcome in terms of identity, and, on the other hand, as an operational and analytical tool for the context of origin. For the first point, it is useful to add the notion of history as collective memory, quoting directly Aldo Rossi who writes: “the city is the *locus* of collective memory [...]. It is likely that this value of history as collective memory, understood as the relationship of the collective with the place and the idea of it, will give us or help us to understand the meaning of the urban structure, of its individuality, of the architecture of the city which is the form of this individuality” (Rossi, 1966, p. 170–2). On the other hand, history is the only possible theatre for investigating the relationship between building typology and urban morphology, with the aim—operational and procedural—of grasping its substantial generative logic (Aymonino, 1977).

3 Mosul

In an attempt to trace a brief history of the city, it must be said that the sources on Mosul are not as exhaustive as those for other Islamic cities (think of Baghdad in Iraq or the Syrian cities of Damascus and Aleppo); in spite of this, we will use comparisons between these cities as a tool to define and recognize some settlement and urban growth modalities. The primary source of reference, as also quoted by the authoritative Encyclopaedia of Islam (Honigmann et al., 2012), is the second volume of *Archäologische Reise im Euphrat—und Tigris—Gebeit* by Ernst Herzfeld and Sarre (1920), which has broadly traced an urban history and collects a survey of the main monumental emergencies of the city.

Little is known of the ancient settlement history of Mosul, as historiography has always favoured the Assyrian city of Nineveh, which lies on the opposite—eastern—bank of the Tigris River. What is assumed with relative certainty about the pre-Islamic period is that there was a settlement at the bridge to cross the river, a monastery—today known as Mar Isha'ya—around which a small settlement and some activity on the hillside of Bash Tabiyah grew up. The city is therefore configured with some elements typical of the settlement dynamics of cities of an Islamic foundation, such as the construction of protective walls that sedentarize the *amsar* military camps. A first important datum comes from the survey of how the walls adapt to the morphology of the river territory and approach it, identifying a first directionality (Herzfeld describes the road parallel to the river as the main road of the ancient Mosul); in a first period, from the hill relief of Bash Tabiyah there was the main entrance to the city, important also from a commercial point of view, as the presence of an ancient market would testify. If the commercial access then gradually moved to the Bab Sindjair gate, thus creating a connection perpendicular to the river between the gate and the bridge, it remains evident that the riverfront still hosts a series of monumental emergencies, which together can legitimately be read as a proper *monumental riverfront* (Fig. 1). As can be seen in the proposed cartography, parallel to the river can be identified both buildings used for Islamic worship (Imam Yahya, Shaikh al-Satt mosque, Khidr Ilyas mosque), both Christian religious buildings (Tahrat Miryam, Mar Ishaya), and “secular” buildings such as the Qara Sarai (former Governors' Palace), the main Souq and Ottoman-era government buildings, as well as numerous tree-lined gardens. It can therefore be assumed that the presence of the river has two main implications on the urban fabric that constitutes the city, a typological influence and a morphological conditioning. From



Fig. 1 The monumental riverfront and its monuments (author)

the morphological point of view of the city, we can see how the presence of the river, and therefore the presence of a constraint in the crossing—Hertzfeld reports the presence of only five historical bridges crossing the Tigris in Iraq—has determined the separation of the main mosque, Al Nouri, from the Souq, located instead near to the bridge. This arrangement within the urban fabric is quite atypical in Islamic cities: although the operation of generalizing settlement mechanisms for a world as vast as the Islamic one is risky, Stefano Bianca himself recognizes an Islamic characteristic feature in the proximity between the main Mosque of the city and the main souq: “Markets always occupied a prominent position in the city centre in conjunction with the Friday mosque and related social welfare buildings. The strong interaction between religious and commercial activities was explicitly endorsed by the Qur’an, and it became one of the hallmarks of the traditional Muslim cities” (Bianca, 2000, p. 123–4). If we take for example two distant cities such as Fez and Aleppo (Figs. 2 and 4), we can see how this proximity is effective, and essentially determines the centre of the city, around which all the other cells—

and local markets—of the housing fabric arise. On the contrary, Mosul separates the two urban elements and articulates them on the street perpendicular to the river, thus setting a central axis. It is also interesting to compare the historical maps between the Old City of Mosul (Fig. 3) and Rusafa (Fig. 5), the historic walled nucleus of the city of Baghdad, from which the same distributive logic can be deduced: which makes it possible to identify an urban morphology, if not typical at least recurrent, of the urban settlements on the Tigris River (Figs. 6 and 7). The positioning of these representative institutions on the Tigris River leads Bianca to consider the river as a city infrastructure: “The central suq complex [...] was the focal point of the urban system, where other spines coming from the shrine of al-Gailani and from the eastern gates of Bab al-Thalass'o and Bab al-Wastani converged. The central souqs were accessible from the Tigris, which functioned as the main transportation axis of the city. Attached to the Mustansiriya was a customs station, from where a pontoon bridge provided a direct connection with the al-Karkh quarter on the other side of the river”. A further characteristic of Mosul, on the other hand, is the location of the

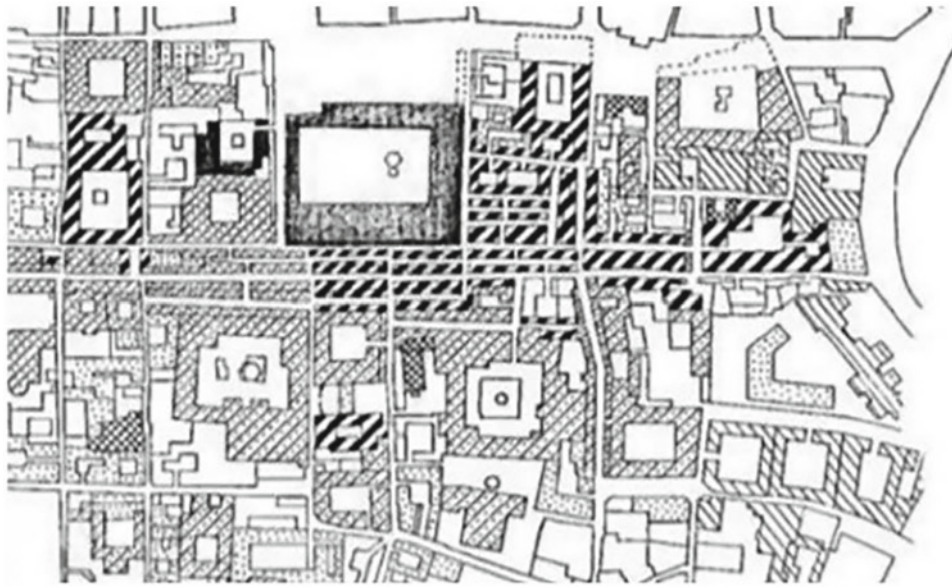


Fig. 2 Aleppo (Bianca, 2000)

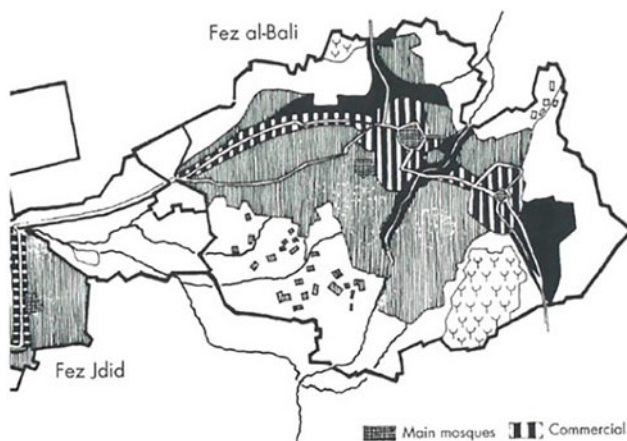


Fig. 3 Mosul (author)

governor's palace outside the historical perimeter of the walls: if the choice in itself is not surprising—in a certain period it was a common solution to move government buildings away from the popular residential fabric to avoid riots—the precise location overlooking the river, to the south of a portion of the residential fabric and one of the three historically most important mosques in Mosul, can be further evidence of a privileged relationship with the river, even at the expense of being outside respect to the fenced perimeter so typical for the Islamic world. In this position, we also find the mosque of Khidr Ilyas, a conceptual hinge that allows us to introduce some typological considerations—as well as confirming what has just been written on the position of monumental buildings *extra moenia*. The mosque is



Fig. 4 c Fez (Bianca, 2000)

mentioned by Hertzfeld as one of the three most important ones together with Al-Nouri and Shaik al-Satt; the position outside the walls could indicate the presence of a different “communal” entity, later merged in Mosul. The typological question cannot ignore the close interrelation with the historical walls, which, in the case of Mosul, directly overlook the Tigris River, as shown by the historical images and drawings. The case in question, in particular, offers an unusual solution: what emerges from the historical images and written testimonies—unfortunately, a plan prior to 1916,



Fig. 5 Baghdad (Bianca, 2000)

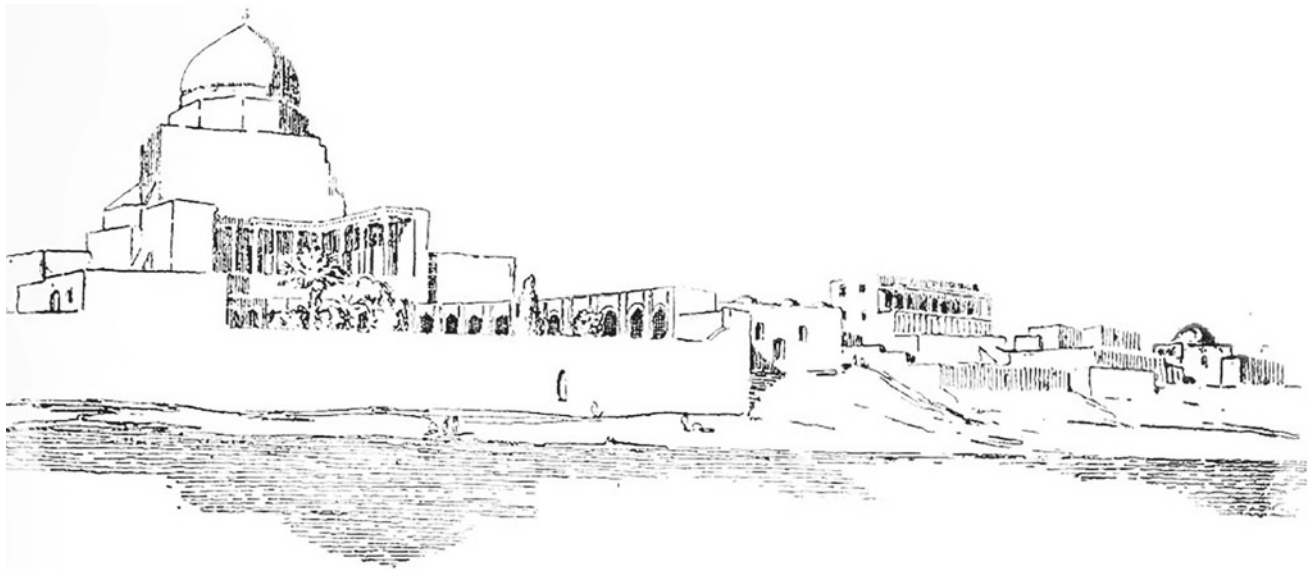


Fig. 6 Khdir Ilyas Mosque (Herzfeld & Sarre, 1920)

when the mosque had been manipulated—seems to open directly onto the river. Hertzfeld himself, while doubting the actual multi-storey solution reported in the drawing, has no doubts as to the correct position and layout. The opening of the “fourth side” of a courtyard, therefore, seems in some way to suggest the consideration of a further typological definition of Islamic enclosures and courts: not only walls, *riwaqs* (porticoes) and *iwans* to delimit and protect the

interior space, but also—in the presence of suitable territorial conditions—natural limits. The accentuated difference in height separating the level of the city from the riverbed makes it possible to close off a building even without using devices limiting its view of the outside. The integration/compensation of the city walls in the building fabric is demonstrated by two other typological conditions, the first of which is that of the souq, in which the photos



Fig. 7 The Souq, photo from the river

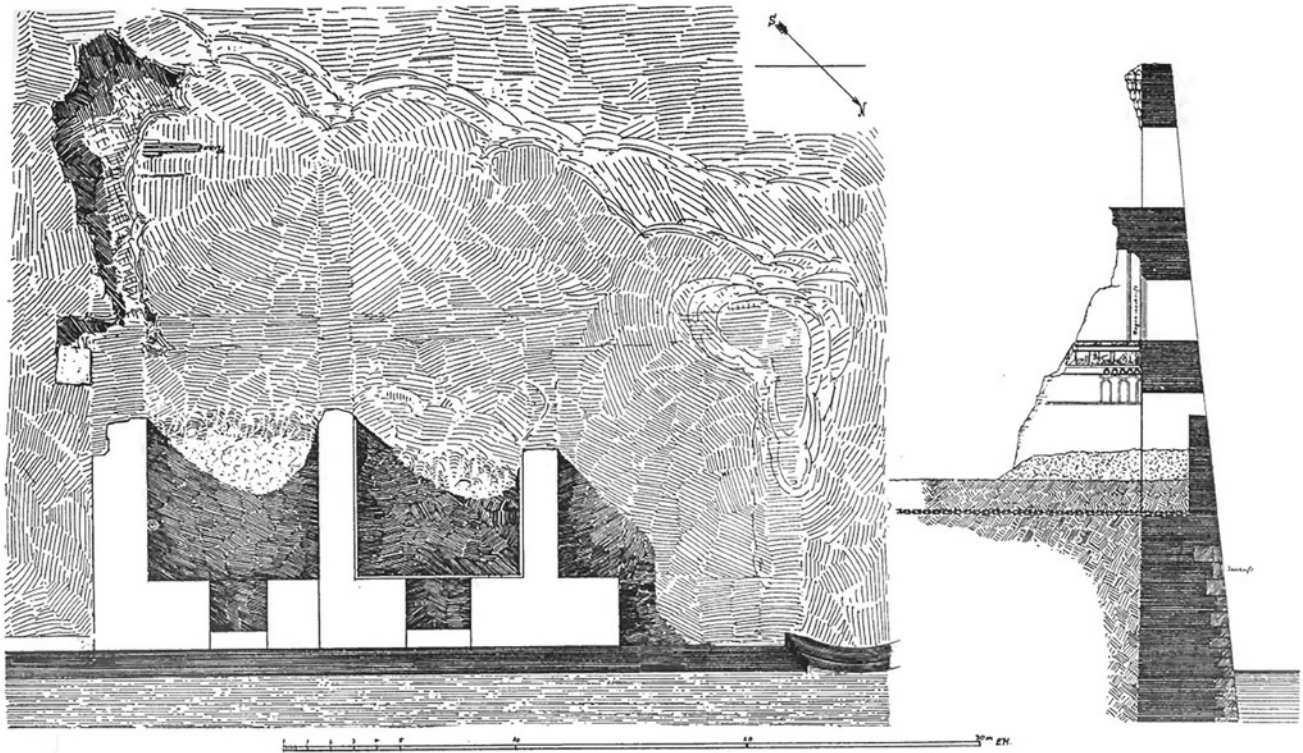


Fig. 8 Qara Sarai palace, plan and section (Herzfeld & Sarre, 1920)

show a close relationship—not only visual but also commercial for river transport—with the watercourse, resulting in a long, accessible portico overlooking the river. Further north, on the other hand, there is a clearly structural

relational modality with the walls, that of the Qara Sarai (Fig. 8) and Imam Yahya (Fig. 9), in which there is a substantial continuity with the walls themselves, either coplanar or mediated by the presence of buttresses.

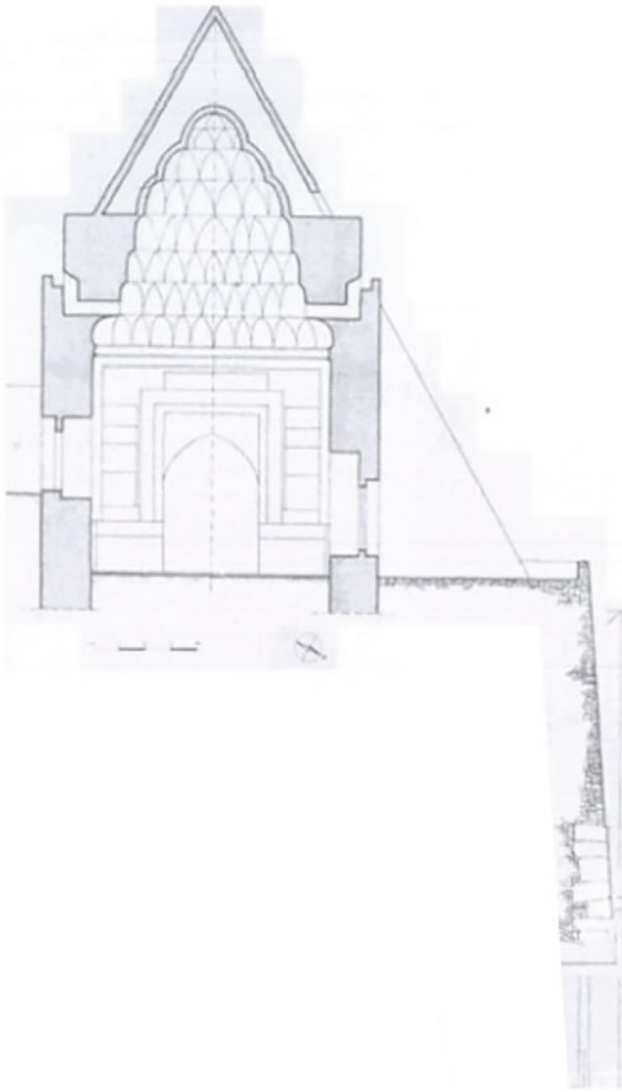


Fig. 9 Imam Yahya Shrine, section (Al-Kubaisy, 2010)

4 Preliminary Evaluations

Before drawing up any kind of evaluation, however, it must be said that Hertzfeld himself, as an archaeologist, questions the material authenticity of the buildings; instead, what seems to maintain a considerable testimonial value is generally the historically reliable location and the planimetric dispositions: therefore, the settlement and relational system of the urban body as a whole. Despite the subsequent overlapping of new infrastructures in time—which, as for many other Islamic cities, have often compromised much of the urban fabric—it remains evident, both at the level of urban form and typological solution, how the presence of the river has conditioned the development of the city. A city that was born historically specular with respect to Nineveh,

where the river is the ideal axis of symmetry; that subsequently deforms its wall perimeter to suit the river and, occasionally, comes out of it, integrates it, breaks it. In the uncertainty of historical sources what seems to emerge is deep integration between the city and the river, which is also reflected at a constructive level in the appropriation and integration between the civil and religious construction, the wall and the riverbed.

5 The Forms of Tradition

If the previous paragraphs analyzed the permanent elements of the urban phenomenon, a “linguistic” and identity question now opens up, involving both the figurative and typological data of the buildings and their relationship with tradition. But what are these traditional elements, how can they be translated operationally into an architectural project? In an attempt to identify some eligible criteria with which to operate in the city of Mosul, and more generally, in the environmental context of the Islamic city, we should remember how, after World War II, the theme of the relationship between tradition and design was the subject of an investigation by internationally renowned architects such as Hassan Fathy, Rifat Chardirji or Mohammed Makyia. Their experimentation moves towards the research for a dialogue with the formal expressions of local architecture that aims at overcoming the limits imposed by an imitation of the figurative and spatial formal vocabulary of the modern movement. Specifically, it seems interesting to report some design expedients made by Hassan Fathy (Figs. 10 and 11) in which the overcoming was made possible precisely by admitting the elements of the architectural tradition, both figuratively and constructively, as factors still able to play a decisive role in the construction of the physical environment.

These experiences, and in particular Fathy’s experimentations, show us how operating in continuity in so-called Islamic cities requires the recovery, first of all, of a human dimension within the project, in a sense that the aggregation of spaces occurs not according to a functional but perceptive logic, leading the user from the domestic to the urban environment, from inside to outside, always maintaining a proportion to the human scale (Steel, 1993). In other words, to organize the space according to the Islamic tradition would therefore mean to build the proportions and the disposition of the rooms according to qualitative needs that transcend the functional data. On the other hand, architecture in Islamic territories is characterized precisely by the cultural primacy of form over its intended use, that is, the primacy of the spirituality of human life over technological and functional instances (Grabar, 1973). Observe, for example, the buildings designed by Fathy, where it is possible to grasp a primary functionality of the spaces, expression of a spiritual

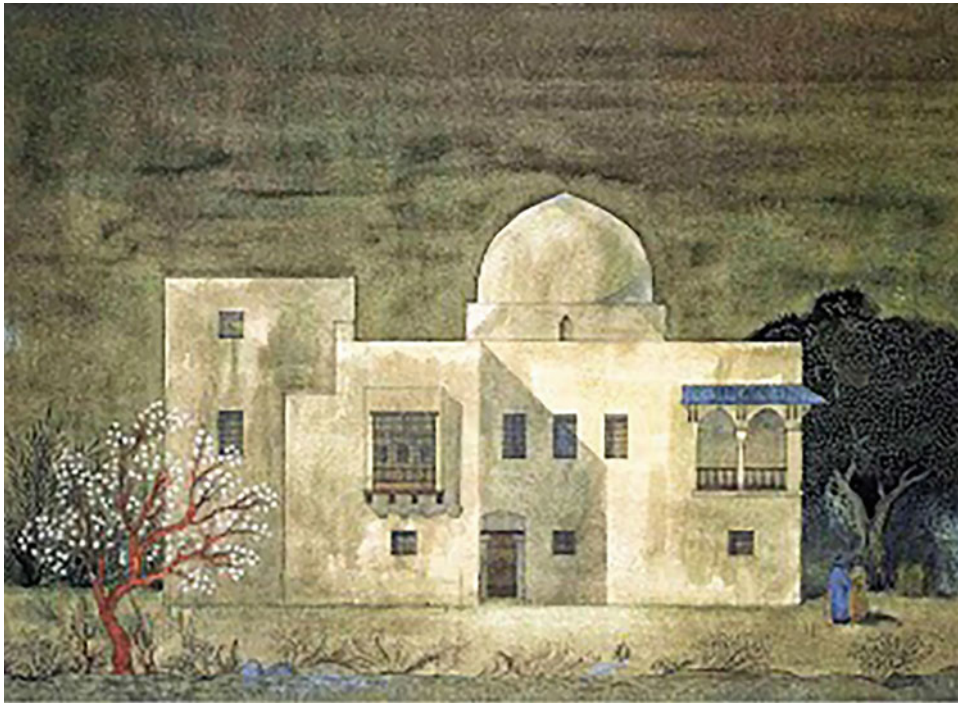


Fig. 10 Fathy, facade study for a country house (Richards, 1985)

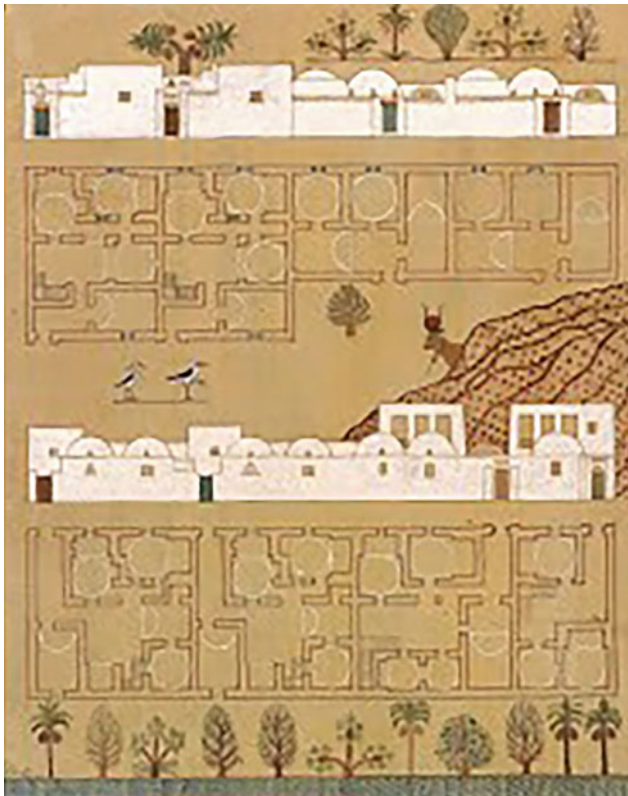


Fig. 11 Fathy, Village housing (Richards, 1985)

need even more than material. Indeed, how Fathy organized the architectural space seems to retain the inclination to convey a movement from a private sphere to the urban domain towards a succession of domestic spaces. Indeed, what transpires from his architectures is a constant presence of a hierarchical organization in the planimetric layout according to a main central core, around which are grafted a heterogeneous set of spatial units. Therefore, we are not mistaken if we admit that Fathy conceived the figuration and typology of the buildings in such a way as to respond mainly to the primary needs of Islamic culture—the care of the interior spaces, the division between public and private places, etc.—rather than to needs considering contingent such as, for example, the subdivision of the rooms of the house by functional activities (Richards, 1985; Steel, 1973). It would be necessary to remember how, starting from considerations of typological nature, Fathy always adds reflections on local construction techniques and how these techniques have influenced the construction of the building's figuration (Fathy, 1964). The building tradition in Middle Eastern countries has imposed spatial constraints on the evolution of the architectural phenomenon, building catalogues of formal solutions that, over time, have become recurrent figurative elements of the local architectural culture. In these contexts, operating in continuity with the evolution of the architectural phenomenon would therefore

require a deep awareness not only of the generative principles of the architectural form but also of local construction techniques, which is the means of production of traditional forms. It does not mean crystallizing the design process around pre-constituted formal models, limiting the creative path to a juxtaposition of these models according to planimetric schemes dictated by aesthetic-functional instances. Instead, it would be appropriate to rediscover the figurative potential that these techniques are still able to express through experimentation aimed at overcoming more traditional formal expressions, rather than an uncritical use of elements belonging to the catalogue of history.

6 The Form of the City

These considerations allow establishing operational criteria with which to intervene in the reconstruction of the old city of Mosul, integrating those contextual factors taken from the study of the physical environment and urban morphology to those design principles compatible with the Middle Eastern architectural tradition. To these data, it is now necessary to add an investigation into the typological and constructive

qualities that have characterized the architecture of the city of Mosul over time, not only concerning the main monumental emergencies but also for the residential fabric that represents in quantity the element that contributes most to define the urban form. The reconstruction of a section of the historical city would require the recognition both of the settlement principles with which the main monumental emergencies are organized in the urban space—and here we are referring to those modes of land occupation that determine the relationships between residence and monument—and of the invariant elements that characterize the typological organisms of the residential fabric.

As often happens in Middle Eastern cities, the residential unit is articulated around a central courtyard (Fig. 12), the only real element of distribution of the rooms, which can be accessed through an entrance located at the intersection between the two sides of the courtyard. The ground floor overlooks the rooms dedicated to family life, often crowned by a loggia placed on a raised level that identifies the representative space of the house. A system of vertical connections located directly in the courtyard provides access to the second floor, used to host the family rooms (Al-Kubaisy, 2010). The typological invariant consists precisely in this

Fig. 12 Typological layout of historical houses in Baghdad and Mosul (author)

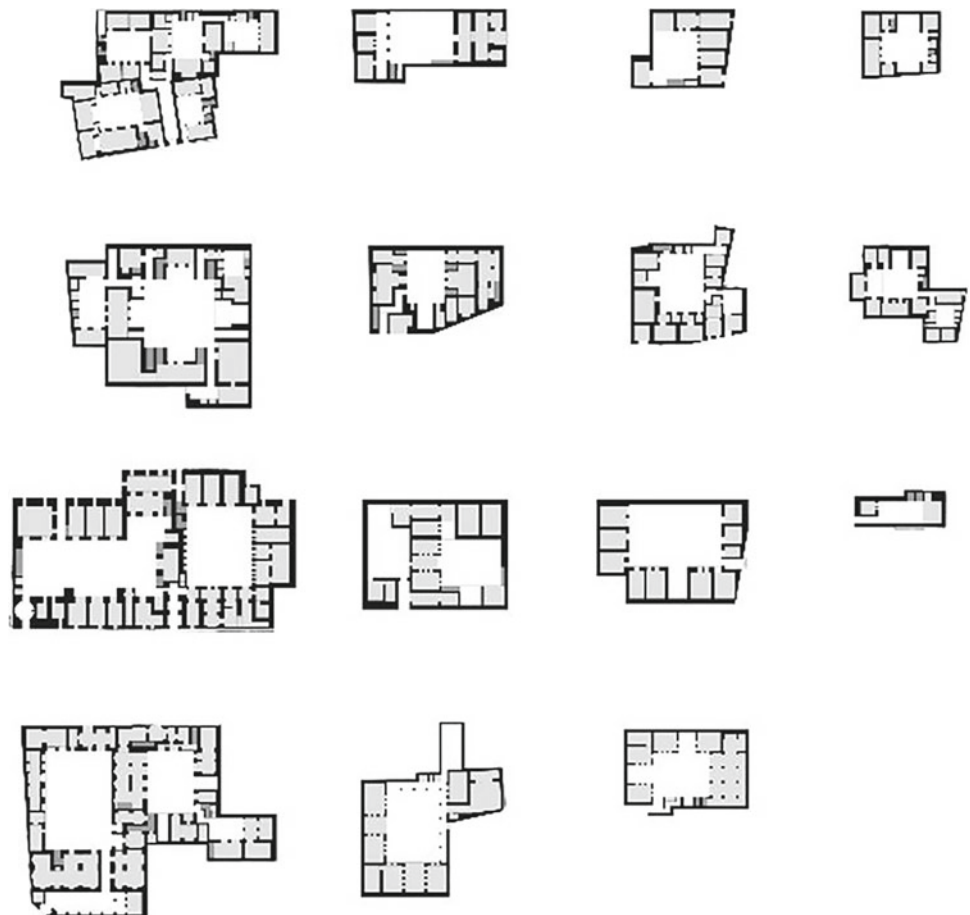
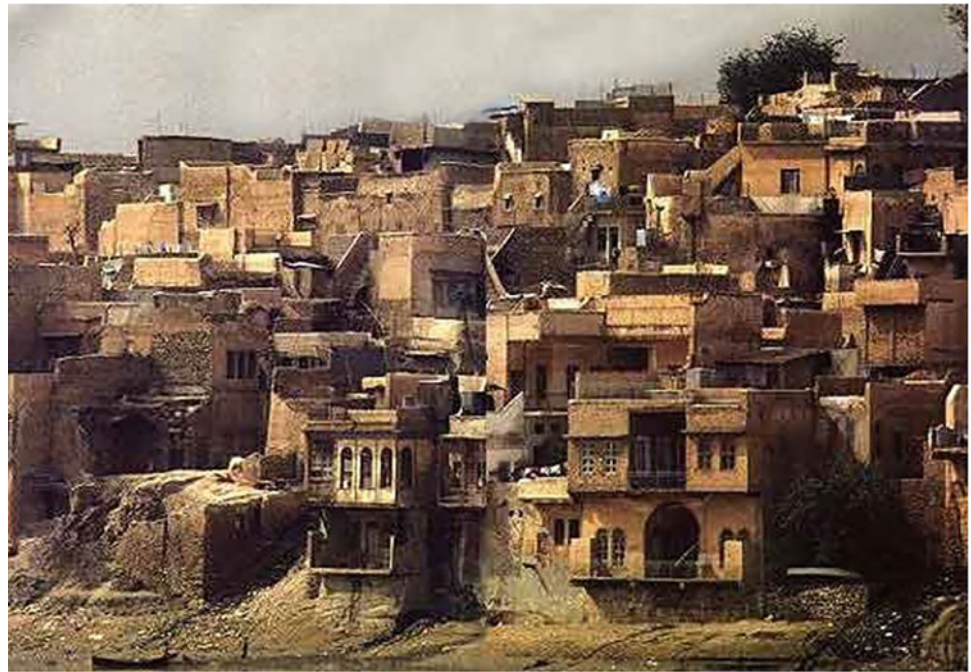


Fig. 13 Riverfront of Mosul

central organization, confirmed by a system of proportions that identify the courtyard as the dominant element in the composition of the building.

Now, as we mentioned before, the architectural forms depend also on the local construction techniques (Fig. 13). Specifically, in the case of Mosul, the availability of fired clay bricks as a building material has historically produced relatively simple traditional building systems, where the structure of the building often consists of load-bearing walls with floors and flat roofs supported by wooden beams. Such a construction technique has produced stereometric volumes and shapes derived from the interaction between the vertical planes of the load-bearing walls and the horizontal planes of the flat roofs. While admitting that some elements of the figurative apparatus of residential buildings are influenced by the Iranian architecture as, for example, it happens for the Iwan (Bianca, 2000), we could compare the buildings that make up the historic center of Mosul, except for the representative architecture, to a set of “pure” volumes obtained by extrusion of the planimetric footprint.

7 Experimental Approach to Design

The choices made have identified possible areas within the urban fabric of the city of Mosul, more congenial to some experimental aspects of our work. Some areas also highlight issues related, for example, to their character:

- morphological (because they are monumental areas destroyed following the bombardments of the recent civil

war, along the main connecting infrastructures that cross the city, or because they are in close relationship with important communication routes such as roads or waterways, for example the Tigris river);

- figurative (these are mostly areas chosen within a heavily densified area with a dense stratification of monumental elements on the one hand and architecture mainly for residential use on the other, with a certain level of promiscuity between public and collective space and private space);
- architectural (these are areas that form part of the historical fabric of the city, which has defined its autonomous and independent character from the monumental settlement of the city of Nineveh, the capital of the Assyrian empire and the poleogenetic centre of today’s city of Mosul).

The historical and procedural sense of an urban organism is therefore understandable if it is placed within a relationship of necessity with the set of relationships established in time and space within its territorial surroundings. For this reason, the structure of Mosul is formed and developed according to historically differentiated processes, which have, however, their own typicality, like any other outcome of the anthropic process, although linearly dependent on the ancient settlement of Nineveh. On the other hand, this form of the anthropized territory is merely the visible aspect of a structure of relations that links the different scalar degrees of the built settlement in the notion of organism, which configures the salient and autonomous characteristics of an Islamic settlement: a Citadel, to the east near the Tigris river; the Friday

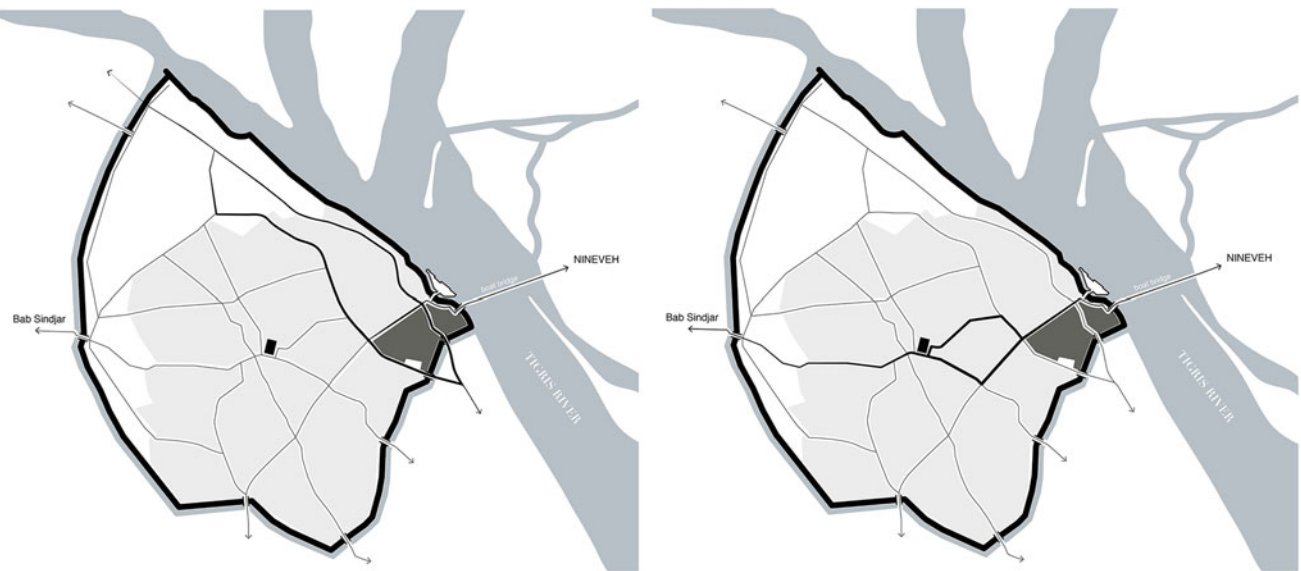


Fig. 14 The two main axis in the city, north–south and west–east (author)

mosque (the Al Nouri mosque); the Souq, also settled in the eastern part towards the river; the defensive system of the Walls with the city gates, and in particular that of Bab Sndjar which was the main access to the city to the west (Fig. 14), along the urban axis which to the east stood at the Dj-al-Aghawat gate, near the boat bridge. The possible places of intervention have been identified in a series of free areas, adjacent to the main axes of the historical city. Starting from the collective role of some activities considered strategic for the city, priorities have been defined in the settlement programme, considering, on the one hand, the socio-economic revival of the settlement and on the other the role in the reconstruction process through the self-recognition of the community in its essential relations and activities: education (through a multi-denominational school); commerce (through the reactivation and reconstruction of the big souq of the city); memory (through the possible reactivation of the representative role of the monumental citadel with the museum of memory of the city); ritual (through the reconstruction of the Al Nouri mosque), etc.

So that, after identifying possible places of intervention, it is appropriate, first of all, to clarify the role of architectural design with regard to these choices, and above all to specify how the project itself is capable of promoting the urban identity now only virtually recognisable in the urban fabric of the city of Mosul. This question has been raised by a form of conceptualisation of the architectural project which, regardless of the individual figurative options, succeeds in scanning his iconic attitude, his vocation as a work of art related to memory. This deduced from the critical predisposition of the experimental procedure has often generated structures and figures context in which those contestual

references have assumed an exemplary symbolic value from both an iconological and an iconographic point of view. It sometimes happens that in specific contexts, and in a given historical succession, the persistence of symbolic structures has worked to interact in a positive way with local artistic resources. On the other hand, the commitment of authentic architectural culture, at least that which is aimed at considering the context of application as an active resource in the design conception process, has, in the course of history, revealed a critical value that, beyond direct sources, proceeds by experimental combinations that place the question on a less empirical, let us say more intuitive level, by induction through certain perceptions, aimed at a possible interpretation of reality. The difficulty in the case study concerns the total absence of concrete historical references, except for small famous presences, which however are able to show, even if only virtually, a context defined by very few finds, which have survived to testify its disruptive historical and symbolic consistency. In other words, what this specific case study shows as perceptible is its absence. It is not only physical, material, tangible absence, but above all immaterial. Physical absence is synonymous with a lack that concerns aspects related to the more typically cultural, historical, and social aspects. The critical process and the project allow to transform through conceptually relevant structures the sense of absence, through its own connotation of meaning, reconnecting the sensitive elements of the new construction with the cultural value of the historical finds. A further aspect among the issues raised by this study concerns the approach that the architectural project should maintain with regard to expressions of cultural identity among the urban structure. The historical formation of heterogeneous

communities also derives from the mutual combination of expressions of diversity, which can be cultural, social and economic diversity. On the other hand, individual settlements have also become custodians of an autochthonous tradition and still today they can be recognised within the city, in different neighbourhoods, in different urban areas. The basic, very delicate point is to imagine how much the architectural project in these places must operate in such a way as to strengthen these differences—with the obvious risk of a form of cultural chauvinism—or vice versa contribute to creating a certain homogeneity between expressions of diversity—again with the unknown possibility of dispersing, or at least thinning out, identities for a form of forced integration for reasons that are neither historical nor cultural, but of opportunistic homologation to current taste. After all, the purpose of this research is to verify in each specific case how to experience the shape in symbol, the structure in icon. This conceptual approach, which also concerns the relationship with small-scale application resources, is initiated through experimentation with exemplary figurative elements, capable of creatively combining new models of behaviour and spatial innovation, in an attempt to contrast with architecture the incipient processes of territorial and cultural homologation.

8 Discussion

This approach, therefore, consists primarily of bringing the experimental activity of design work back to a conceptual dimension, starting from the definition of the salient features of the place up to the progressive definition of appropriateness within the hypotheses of a transformation of the space. The concept of space is here incorporated in his total desire to assume architectural experience as a sensitive fact. The process of knowledge is in this act closely linked to that of design, as a creative act capable of stimulating innovative and coherent hypotheses of a transformation of context and place. This experimentation is extended to the urban scale and not only to the single architectural episode as a unique

solution to specific problems. The priority objective concerns the development of procedures that move from hypotheses that can be generalised, starting from specific and individual physical facts within the human settlement. The responsibility of the project is to offer shared solutions appropriate to the specific case but through innovative and experimental work processes that can be extended to similar cases. If the city is the place of the project par excellence, then even in the act of rewriting its parts it is not allowed to derogate from its more direct knowledge, making explicit the selection of priority urban facts, especially in those researches that address the theme of the reconstruction as rewriting. Rewriting that is understood as the process of transformation of complex urban fabrics, with specific attention to stratified contexts, damaged by catastrophic events and altered by the choices that have led to their loss of definition and identity.

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