

DOI: [10.38027/ICCAUA2021262N12](https://doi.org/10.38027/ICCAUA2021262N12)

Traces, Juxtapositions and Rewritings: Critical Reconstruction as Strategy of Reinventing Cities

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Abstract

Reconstruction after traumatic events is an increasingly important issue in architecture, due to the unprecedented scale with which the destruction of the built environment occurs; the consequence for the discipline is the need to reflect on the identity of the city, its meaning and possible strategies for its maintenance. Rather than starting from an a-contextual datum, the case of the city of Mosul will be the pretext to identify methodological criteria for a strategic recovery plan. Particular attention will be paid to the relationship between the monuments and the city, identifying in this connection a key issue to investigate the generative dynamics of a place and therefore the sense of the city. The relationship with the physical/natural datum and the historical/cultural one will be considered as an essential element of comparison to give to the monument the strength to be able to affect the city transformation process.

Keywords: Critical Reconstruction; Architectural Rewriting; Urban Strategy; City Identity; Mosul.

1. Introduction

The theme of urban reconstruction is becoming increasingly important within the discipline of architecture, since on the one hand climate change seems to accelerate and intensify natural disasters and catastrophes, while on the other hand the situation of political, social, and religious precariousness is increasingly inducing voluntary and surgical destruction of the cultural and representative heritage of cities worldwide. The need to develop and implement cautionary strategies and methodological indications to raise the awareness of those called upon to reflect and operate in highly symbolic contexts is thus becoming increasingly evident. For this reason, instead of reasoning in an abstract and a-contextual way, it was decided to identify the city of Mosul in Iraq as a case study that could be used as a pretext for developing methodological and critical criteria for outlining a strategy of intervention on cities and then on other similar cases, too. Mosul was in fact at the centre of the international news for having been the last stronghold of an ISIS that was being militarily downsized, but whose urban fabric was highly damaged by the conflict: if on the one hand ISIS struck the most representative points of the city, in a deliberate and declared operation of reset of the collective civil memory (think of the minaret of al-Adba, the mosque of Al Nouree, etc.), on the other hand, the city, and more specifically the Old City, has suffered many bombings by regular armies given its historic and tiny conformation that easily allowed ISIS militiamen to hide (UN-Habitat & UNESCO, 2018). The result has been a considerable and surgical reduction of the historical and collective heritage, but also the *tabula rasa* of some portions of the civilian city such as the al-Maiden residential district overlooking the Tigris (Figure 1). The paper will therefore attempt to explore a methodological path that, starting from reflections on the theme of urban identity and the devices in which it resides, tries to give a possible strategic vision for the reconstruction of some highly representative nodes of the city.

1.1 Identity of the city

The issue of urban identity is one that can hardly result in an exact parameterization, coming from the layered construction of a collective historical consciousness, the perception of urban elements individually and as a whole and their modes of use. What can be more specific to an architectural treatment, rather than a sociological one, are the physical configurations that can become symbols and recognition devices for the population: consider, for example, monuments, collective spaces, and primary elements of the urban fabric, but also immaterial elements and/or absences that leave an operative memory in the urban fabric. The stratification of meanings permeates a large part of the urban built environment – as Colin Rowe also points out, quoting Cassirer, it is difficult to identify a human gesture that is completely devoid of meaning – and it becomes even more pulviscular when Aymonino speaks of the city's meaning as a surplus of meaning, a symbolic potential that goes beyond its original purpose: meaning is not to be found in *artificial arrangements* alone (the technical compliance of a dam, for example) but needs multiple purposes, "clear or not, sometimes contradictory" (Aymonino, 1975, p. 23), identifying the effectiveness of monuments precisely in their ability to adapt to new forms of meaning and significance over time.



Figure 1. Report upon destruction in Mosul (UN-Habitat & UNESCO, 2018).

2. The relationship with the past and European reconstruction

The current situation in Mosul, a city that finds most of its wartime mutilation in the Old City, traces many parallels with the condition of much of European cities in the post-World War II period, in which historic centres were equally deprived of their ability to convey a collective identity, finding a common thread in the fact that "it is the traumatic origin of these conditions, and the dependence of the destructive event on external causes, contrary to the will of individuals and the community, that substantially distinguishes the experiences of reconstruction from those of rehabilitation" (Mamoli & Trebbi, 1989, p. 6), from which it substantially follows that "the dialectical articulation of the reconstruction theme is the relationship between continuity and innovation". In the same text, it is also pointed out that reconstruction situations, precisely because of the emergency situation they are faced with, often have a strong push towards *permanences*, in an attempt to preserve the formal and figurative values of the lost past, and, even where innovations are permitted, these are often guided exclusively by criteria of improved hygiene and traffic (Mamoli & Trebbi, p. 130). At this point, it is thought necessary to assess the level of this *push towards permanences*, finding out a way of cataloguing some case studies precisely upon the relationship they establish with the previous urban structure. Accordingly, it was considered legitimate to identify four categories:

- *Case studies that redraw the previous urban structure:* these case studies are not of particular architectural interest, but neither are they methodological, as they are stylistic reconstructions that consider the city as a whole with a complex of replicable forms without delving into the generative logic that determined the urban morphology. Both the French city of St. Malò and the German city of Munster reconstruct, in fact, a pristine

state which they can no longer rely on: "Lacking the material support – the city – to which it refers, the *genius loci* becomes elusive, indistinct, imaginary and arbitrary [...] Infidelity to the pre-existing has already been consummated by betraying the facts, while respecting the rules of formation of the historical city and its sedimented image" (Mamoli & Trebbi, p. 110).

- *Case studies that confirm the previous urban structure:* in this category can be inscribed, without doubt, the greatest number of cases of post-war reconstructions; this derives from the fact that there is a substantial superficiality of some categorisations in the literature that separate cases that, in our interpretation, are instead placeable side by side such as Florence and Frankfurt (but we could also include Sedan in France and Dresden in Germany). Often these cases are distinguished based on the linguistic and typological choices of the buildings, on a spectrum ranging from stylistic continuity to the expressive break with the international style. What emerges, however, at the urban level is how the identity significance of the urban settlement is not assessed on the territorial/physical and cultural/historical context, but rather on the confirmation of the exact dimensions of the cadastral blocks which, in many cases, are uncritically confirmed to preserve the urban identity.
- *Case studies that relate the previous urban structure to new settlement methods:* this category includes those case studies in which there is a selection of certain elements, even in an arbitrary manner, which are however recognised as founding elements of urban identity, seeking a relationship between a system of permanences, both physical and immaterial, and a new settlement system. The approach is very clear in André Lurçat's Maubeuge, where some monumental presences are maintained, the city wall perimeter and the axiality linking the two banks of the river are recognised, but the new interventions do not follow the land division of the pre-war state.
- *Case studies that deny the previous urban structure:* these case studies superimpose a new situation on the previous settlement, as can be seen from the design plan of Saint Diè by Le Corbusier, which proposes a new settlement scheme guided by the criteria of efficiency and functionality, eliminating the problematic relationship with the monumental system remaining in the city after the destruction of the war.

The comparison of these case studies has made it possible to deduce certain questions, such as the substantial impossibility of carrying out a reconstruction *as it was, where it was* on an urban scale; that often, in order to preserve memory and urban identity, the block has been used uncritically as a measure of continuity between the past and reconstruction, even where some improvements of an exclusively technical nature have been inserted, such as the widening of the arteries for traffic and hygienic conditions; that some relations, more subtle and less immediate, are probably detectable and they represent the value of problematising the urban structure in its set of relations with the building bodies, and, through a work of interpretation and selection of some urban characters, can merge urban identity elements with the natural evolution of the city, thus providing a new significance to pre-existing elements.



Figure 2. Pre (up) and post (down) war situation. From left: Munster, Frankfurt, Maubeuge, Saint Diè. (Mamoli & Trebbi, 1989)

3. Historical and natural context

It is therefore considered probable that the question of reconstruction directly involves the construction of a context of *selection* and *relationship* with the surrounding fabric and elements, and there are certain conditions of constraint to the context that deserve to be investigated as primary elements of confirmation. Carlo Aymonino (1975, p. 23) writes that an "urban characteristic that can define the meaning of the city [is the possibility of] using the built spaces – open and covered, full and empty – with respect to the two parameters that condition the meaning of cities: the temporal one (the city with respect to its own history) and the dimensional one (the city with respect to its own extension)". Even if unconsciously, this dialectic, ascribable to the broader contrast between history and nature, has the power to recall the perimeter in which reconstruction develops itself. If, in fact, the historical datum turns out to be the most used solution in reconstruction interventions (a history often taken as a rule, as having in itself legitimacy of operativeness), the most interesting examples are those that intersect the historical datum with the physical one, while reading the territory and its morphological conformations. To a *vertical* and historical instance, of a predominantly archaeological matrix and memory of superimpositions and superfetations – the trace – it is necessary to recognise the need for interpolation with a *horizontal* reading of the work plan – the juxtaposition – with its physical characteristics, but also its emerging and contextual presences. In other words, as says Renato Bocchi (2012): "Even operating in more consolidated areas, the city is reinterpreted and conceived as a *city by parts*, so that the existing context is assumed as material for the construction of the parts of the city. The new architecture does not fit or, worse still, settle into the existing, but on the contrary it is the existing that is assumed and manipulated as the material of the project, as the material of the new morphological reinterpretation".

3.1 Islamic cases of verification

This distinction of a vertical and a horizontal plane of relation is, moreover, easily found and determined in the dynamics of the evolution of the built environment in the Islamic world: if on the one hand – the tendency towards vertical relation – can be referred to the vision of the territory as a *palimpsest* (Corboz, 1985) and the image of a continuous overwriting and superimposition of signs, on the other hand Paolo Cuneo (1986) identifies a *parallactic* settlement mode in the juxtaposition and displacement of settlements in contiguous areas and/or of similar value.

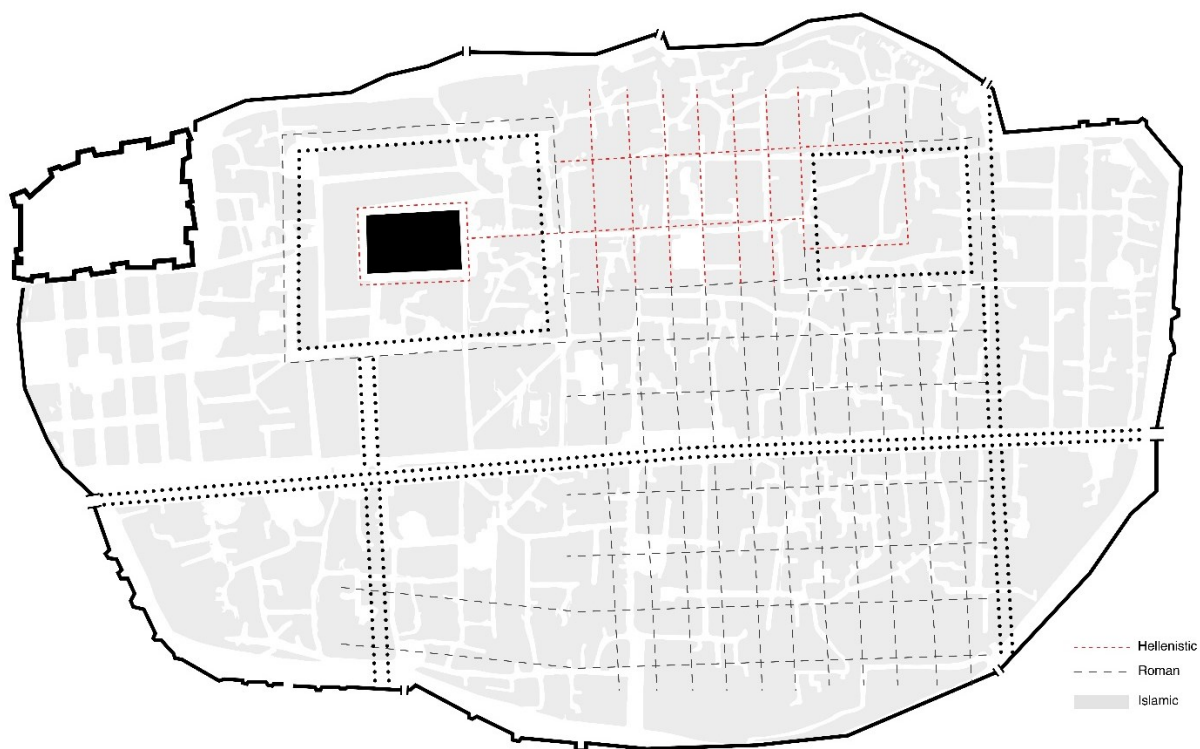


Figure 3. Palimpsest settlement method of Damascus. (by author)

These two settlement patterns, which we might define as typical given their recurring – though not mutually exclusive – character, can be easily found and analysed by taking as examples two cities in the Middle Eastern Islamic world, such as Damascus in Syria and Mosul in Iraq.

For example, the city of Damascus (Figure 3) still bears traces of the settlement of the Hellenistic period: the expansion of that period envisaged the presence of two major urban poles, the temple of Zeus (site of the current Umayyad mosque) and the *agora*; between these two, however, a regular and orthogonal urban grid of Hippodamian matrix developed, straddling a central axis that connected the two poles. Later, during the Roman domination, the Hellenistic urban structure was confirmed and expanded: the temple of Zeus became the temple of Jupiter, but a *temenos* was added around it; the *agora* became the *forum*, expanding towards the southeast; the orthogonal Hippodamian grid was also expanded in the southern part of the settlement, involving the pre-existing Aramean high road, which became the *Via Recta* - the *decumanus* - crossing the city; a *castrum*, a fortress, was also placed on the northwest edge. Beyond this, two vertical axes are identified, as if they were two *cardi*, one directed to the temple of Jupiter and one to the *forum*. Comparing these data with the urban fabric of the Islamic city, one cannot fail to notice how the organic structure is affected in some points from the rigorous orthogonality of the Greco-Roman matrix (see the road connection between the temple of Jupiter and the *agora*, the anomalous size of the block where the *agora* was located, as well as the main distributional axes); but also, and above all, the confirmation of the position of some central monuments and devices in the polar system of the city: although the temple was demolished, the *temenos* became the courtyard of the Umayyad mosque, just as the position of the Roman *castrum* housed the administrative citadel. As numerous scholars point out (Creswell, 1966; Hoag, 1978; Bianca, 2000), the rapid expansion of the Islamic kingdom is accompanied by a substantial inexperience in urban planning (if we exclude the almost insular Yemenite culture, the conversion of Islamism from nomadic tribality to urban settlements is very rapid), and it does not seem strange to think that many settlement modalities are learned precisely from the pre-existing urban structures on which the Islamic world relied.



Figure 4. *Parallactic* settlement method of Mosul. (by author)

The opposite case, on the other hand, is exemplified by the city of Mosul, a city of Islamic foundation, which can be ascribed to the parallax method, which consists in the flanking of a new settlement adjacent to a pre-existing one, a construction by successive phases of autonomous parts. There are many examples in the Islamic world (Cairo has several settlements developed alongside the River Nile, as does Baghdad in Iraq with the nuclei of Ctesiphon, the Round City and Rusafa). Often symbolic motivations are given for this choice (Hertzfeld, 1920; Cuneo, 1986), starting from the desire to recognise a new course, be it political or religious, as an alternative to what was in force before (what Thomas Kuhn would define as a *change of paradigm*), and therefore already charged with extreme symbolic and identity significance from the moment of settlement location. As can be seen from the Figure 4, Mosul was born and grew in opposition to the Assyrian capital of Nineveh, first as a small residential settlement and then as an autonomous centre with its own monuments, first Christian and then Islamic. The duality of this settlement cannot but involve the strong natural presence of the Tigris River, the axis of symmetry of the two settlements, and the importance of the bridge that connects its banks (historically, it seems there were only five others along the entire course), thus determining the settlement's strategic position. It is interesting to note that all the historical cartography represents and maintains an almost pure duality of settlements, until the urban expansion of the 1960s and 1970s, which did not spare even this part of the world from the chaotic and sprawling urbanism ruled by asphalt roads.

But the urban reading just conducted does not want to exhaust itself in a mere evolutionary account of the cities taken into consideration, but to make a reflection at a methodological level on the modes of growth and modification of urban entities in their complexity: it is in fact on this level of reading that those modes identified at the urban level can also be found at the architectural level, of the individual building, thus determining a symbolic and iconological aspect of those settlement modes: what happens in Damascus at the urban level is in fact analogous to the process of metamorphosis that transforms the temple of Zeus, into the temple of Jupiter, and finally into the Umayyad mosque – which is built on the long side of the temenos, while the remaining sides remain as an inner courtyard (moreover determining in some way the first archetype of mosque, joined only 600 years later by the madrasa type and again later by that of the dome (Bianca, 2000)). Thus, even some of the architecture in the city of Mosul (in this virtuosity of parallelism in case studies, which is only meant to be a symbol of the variety of possible cases to rely on) can be identified as the administrative palace - understood in the broadest sense - moved along the course of the Tigris over time, first the outpost of Bash Tabiyah to the north, and later the Qara Sarai, the Citadel of al Qal'ah and, outside the walled perimeter to the south, the Ottoman governor palaces.

4. Superimposition and adjacency. Elements of the urban structure

The result that can be deduced from this is how the symbolic element is maintained, differently, by means of either an identity continuity or, alternatively, a symbolic discontinuity. What, on the other hand, links these two antipodes is the importance that in the urban fabric resides in the position and location of the monument and the primary element. Borrowing from Aldo Rossi (1966) some macro-categorisations of the urban structure, some components can be considered as constituents of the city: such as the residential fabric, the road system, the monuments, and primary elements, as well as the natural limits imposed by the morphology of the territory which, depending on the system of interrelations, contribute to defining the identity of the city (Figure 5). If for the European city it is common to find growth by parts, in which the addition of portions consistent in morphology and typology occurs in successive phases, the case of Old City Mosul responds to a different logic: Aldo Rossi already identified the residential fabric as the most changeable (*soft*) portion of the urban fabric, but this is particularly true in this case. The residential fabric of Mosul is in fact relatively recent (it is common to find buildings dating back to no earlier than 19th century), a fabric which nevertheless, in its mutability, maintains a marked continuity of settlement and typology, given by a substantial conformity of building techniques over time. What remains, however, as the cornerstone of the urban structure are the primary elements and monuments, which thus determine a city made up substantially of monumental and primary nodes, located on a network of road layouts that for the most part follow the main routes through the city. Historically, there were three main routes into the city, all converging towards the Tigris crossing bridge: first from Bash Tabiyah to the north along the river, then from Bab al-Baid and later from Bab Sindjar. It is easy to see how such a system of traversing the city is more consistent with the distribution of monuments than the cruciform superposition given since the 1940s, at the intersection of which there is no representative space.



Figure 5. Elements of urban structure. (by students G. Scotto, R. Lallement, V. Dogari, N. Bello Melo)

4.2 Development processes and identity

Carlo Aymonino (1977) identifies three phases in the development of the European city from the industrial revolution onwards. In a first phase there is the completion of some areas, which had historically remained undeveloped due to a substantially mixed use; a second phase in which the fabric tends to expand concentrically outside the city walls, which are converted into ring roads; a third phase in which the fabric expands so considerably that the typological and morphological relationship with its core is missed. This, however, without the ability to weave new formal relationships, but relying on a road division, the allotment, which replaces the relationship between typology and morphology with that of cadastral and land rent. This latter urban layout, imposing an equipotential road grid, generates an unprecedented situation for the building fabric: the distinction between the functional theme of the building and its position in the urban context. The result is the definition of typological themes which are in themselves representative of their function, but which, detached from the urban and morphological context and potentially positioned in all lots, no longer have a reference to the structure of the city.



Figure 6. Main historical paths. (by author)

With due caution, however, it seems legitimate to identify the same thresholds that Aymonino identifies for the European city also for the city of Mosul, albeit with a difference in terms of exact dating. Just as the completion of the unbuilt parts involved the portion of the Maidan (the northern part within the walls, an esplanade where temporary markets, fairs and open-air events were organised), so too the demolition of the walls to create a ring road and the chaotic expansion of the city beyond its walls, which in Mosul's case also involved the area of Nineveh, historically left unbuilt – not to mention that, in the European context as well as in Mosul, the building expansion of the 1960s and 1970s results to be the conceptual extreme of the building speculation of the nineteenth-century city. What results from such a development methodology is the disconnection of the functional needs that a city is called to respond to from their symbolic and identity potential, deputing to the single building the need for recognisability without considering the system of relationships of the various components of the urban fabric among themselves and with the physical context in which they are inserted. This kind of separation between functional correspondence and the symbolic vocation of places and urban interventions, also better argues what was previously only mentioned regarding the discrepancy between the internal road gutting operated on Mosul's Old City and the position of monuments on other historical routes in the city. This critical recognition thus provides the best keys to a more

comprehensive argumentation of the strategic approach adopted for the reconstruction plan studied in theory for the city of Mosul and presented below.

5. Strategic plan for Mosul

In a context of double destruction - as described above, one widespread and one surgical - it was decided to begin by identifying several urban systems that were coherent in themselves, that could act as a guideline for the insertion of some primary and monumental elements, that could contribute to restoring civil references for the community, delegating the reconstruction of the residential fabric to other phases. From the study of urban phenomena and evolution, several systems have emerged that have profoundly characterised Mosul's morphology throughout its history: the perimeter of the defensive walls, the settlement patterns along the river, etc. The system that we wish to explain here is instead the transversal axis, determined in the Zengid era, that links the West Gate of Bab Sindjar to the bridge that crosses the Tigris River (Figure 7): in fact, numerous activities and institutions of civic value for the city can be found along this axis, such as the Al Nouree Friday Mosque, the complex system of the Souq and the administrative Citadel right next to the river. The superimposition of the state of destruction with this axis lead us to evaluate the possibility of inserting in this system a series of highly symbolic functions that could be the start of a system of reconstruction, not only of buildings but also of identity for the city of Mosul. The work, carried out experimentally as part of the Thematic Studio conducted by us at the Politecnico di Milano with the help of the students, therefore envisaged the insertion of an educational centre, a structure designed not to lose the educational continuity of the young generations of Mosulians; the critical reconstruction of the al Nouree Mosque with the adaptation of some accessory services for worship and collateral activities, maintaining the outline and volume of the Mosque that was destroyed; the reconstruction of a portion of the Souq destroyed in the bombings; but also the construction *ex-novo* of an urban museum on Mosul in an unbuilt area, which although represents the historical position of the Citadel, as a symbol of the civic representativeness of the institution, seeking in the transmission of memory the possibility of cultivating the civil and historical awareness of the population. All the proposed interventions are figuratively recognisable in their character of novelty with respect to historical morphology, of which, however, they are a consequence and an interpretation, seeking a ground for positive and active comparison and mediation between new and old.



Figure 6. Strategic plan for Mosul. (by author with proposal of students)

6. Conclusions

The method we propose here does not claim to be exhaustive in its final solution, but it is intended to act as a spark to induce methodological reasoning on the methods and priorities of an urban reconstruction process. Often the starting context poses immediate and emergency needs for intervention, but these must not undermine the careful study and evaluation of the operational context, otherwise the identity of the city will be lost during reconstruction. The historical knowledge of the city therefore acquires a central role in the reconstruction process, not for the choice of mimetic characters in the buildings, but to enter into the generative processes and logics of the city, in its type-morphological mechanisms that in history have determined its character. It is necessary "to ask ourselves whether generalisation [does not become] genericness, that is, an architecture available to be realised in similar conditions in any place, confirming only the quantity and not the quality of urban expansion". (Aymonino, 1977, p. 38), giving back to the place, in its cultural and physical characteristics, the value of context of relation. Therefore, a study that interweaves the value of the building with its location in places that are representative of and devoted to receiving the meaning of the proposed building itself is considered fundamental, identifying an allegorical mechanism that allows a glimpse of a general idea of the city from the building intention: "we can then observe that in the case where a city possesses a meaning a precise relationship is established, therefore recognisable and identifiable, between the urban form and the scale of the buildings, in particular the monuments. And one determines the other and *vice versa*. The scale is not only a size, but also a technique, a location, an interpretation; [...] it is a partial intervention that presupposes a general idea, expressed with architectural tools". (Aymonino, 1975, p. 28)

Acknowledgements

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of Interests

The Authors declare no conflict of interest.

References

- Aymonino, C. (1975). *Il significato delle città*. Venezia, IT: Marsilio.
- Aymonino, C. (1977). *Lo studio dei fenomeni urbani*. Roma, IT: Officina Edizioni.
- Bianca, S. (2000). *Urban Form in the Arab World*. London, UK: Thames and Hudson.
- Bocchi, R. (2012). *Carlo Aymonino. Per una ricerca di progettazione*. Conference held on 17/05/2012 at IUAV. <http://www.iuav.it/Ateneo1/eventi-del/2020/Ricodo-di-/Conferenza-Aymonino.pdf>
- Creswell, K.A.C. (1966). *L'architettura islamica delle origini*. Milano, IT: il Saggiatore.
- Corboz, A. (1985). The territory as palimpsest. *Casabella*, 516, 22-28.
- Cuneo, P. (1986). *Storia dell'urbanistica. Il mondo islamico*. Roma-Bari, IT: Laterza.
- Hoag, D. (1978). *Architettura Islamica*. Milano, IT: Electa Edizioni.
- Hertzfeld, E. (1920). *Archäologische Reise im Euphrat – und Tigris – Gebeit*. Berlin, DE: Verlag von Dietrich Reimer.
- Mamoli, M., Trebbi, G. (1988). *Storia dell'urbanistica. L'Europa del secondo dopoguerra*. Roma-Bari, IT: Laterza.
- Rossi, A. (1966). *L'architettura della città*. Milano, IT: il Saggiatore.
- UN-Habitat and UNESCO (2018). Initial Planning Framework for the Reconstruction of Mosul. <https://unhabitat.org/the-initial-planning-framework-for-the-reconstruction-of-mosul-0>