

Tools for Reading and Designing the ‘Islamic City’. Italian Urban Studies at the Crossroads



Michele Caja, Martina Landsberger and Cecilia Fumagalli

Abstract Starting from the typological and morphological studies conducted in Italy since the Sixties of the last century, the essay aims to investigate limits and possibilities in the application of these studies to urban contexts that are different from those for which they were originally conceived and developed. The rediscovery of the historic city, mostly forgotten or cancelled since then, both in the intentions and physically, receives from here an international acknowledgement. The researches on the Islamic urban phenomenon carried out by Italian scholars were strictly linked to design issues. Since the end of the 1960s, in fact, several Italian architects were involved in town planning activities of several cities of the Islamic world.

Keywords Typology · Morphology · Urban studies · Historic city · Islamic world

Starting from the beginning of the 1950s, when the urban principles defined and established by the Modern Movement started to be revised and discussed, a new research field comes to the fore: the European historic city starts to be a new area of interest, also thanks to the debate on the ‘heart of the city’ faced at 1951 CIAM in Hoddeston (Tyrwhitt et al. 1952).

At the end of the 1950s, some Italian architects and researchers started their investigations on specific historic cities: Saverio Muratori and Paolo Maretto studied Venice and Rome (Muratori 1960; Maretto 1960; Muratori et al. 1963), Gianfranco Caniggia focused on Como (Caniggia 1963), Aldo Rossi dealt with Milan (Rossi 1964), Carlo Aymonino chose Padova (Aymonino et al. 1970) and Giorgio Grassi (Grassi 1971) and Antonio Monestiroli (Monestiroli 1973) worked on Pavia. These researches introduce a new way to look at the urban form, a method to understand and describe it, based on its typo-morphological characters.

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Consequently, the rediscovery of the historic city, mostly forgotten or cancelled since then, both in the intentions and physically, receives an international acknowledgement.

Even though the Italian studies represent important contributions in the field, it is abroad that a more direct and strict connection between the analytical and the practical phases of the project has been investigated at most.

We can place in this framework, and according to the need for the reconstruction of the European historic cities, the researches developed by Jean Castex and Philippe Panerai on Versailles (Castex et al. 1980) and by Leon Krier and Maurice Culot on Brussels (Krier and Culot 1982), among others.

In order to understand the structure of the Islamic city, which seems to have been neglected by this group of scholars as a testing ground both for the design theories and the analytical studies, we should or could refer to the typo-morphological researches established in the framework of the European urban culture of the last century (Fig. 1).

Saverio Muratori (1910–1973) is one of the first Italian architects of the post-war period to adopt the notion of ‘typology’ in connection with the one of ‘morphology’: we can easily affirm that he has inaugurated the era of the applied urban analysis that have had a great influence and echo both nationally and internationally.

The first result of his researches is the book *Studi per una operante storia urbana di Venezia*, published in 1960, that collects all the field surveys and the analyses carried out by Saverio Muratori and his students at the IUAV of Venice.

The book is an articulate and complex work, able to render, with drawings, images and texts, the stratification in time and the historical dimension of the Venice urban fabric, through general location plans, drawings of the ground floors of public buildings and residential blocks, photographic surveys on specific neighbourhoods or parts of the town, and investigations on specific buildings according to different epochs.

The originality and the success of this book lie in the fact that it has been able to rediscover the richness and the complexity of the historic city in a period in which research in architecture was facing a deep crisis: the re-foundation ideals proposed by the Modern Movement were in fact being abandoned both because of the negative results of the reconstruction projects of the second post-war period and their inability of ‘making city’, especially if confronted to the consolidated and compact urban fabric of the historic city, of which Venice represents a valuable example (Fig. 2).

Thanks to studies similar to the one proposed by Muratori in Venice, the urban analysis rediscovers the morphological dimension of the residential fabric, considering the buildings not as single objects, but as elements of the compact and consolidated morphological structure, defined by different scales: the block, intended as portion of land delimited by streets and canals; the structure of the parcels showing the complex issue of property in the making of history; the building in its typo-morphological essence.

The use of ground floor plans of specific portions of Venice’s urban fabric (which, apparently, seems to be simple and easy, but that is indeed the result of a complex entanglement between archival researches, cadastral investigations, on field verifications and graphic elaborations of the documentation at the same scale) highlights the strict relationship existing between public space, built environment and water,

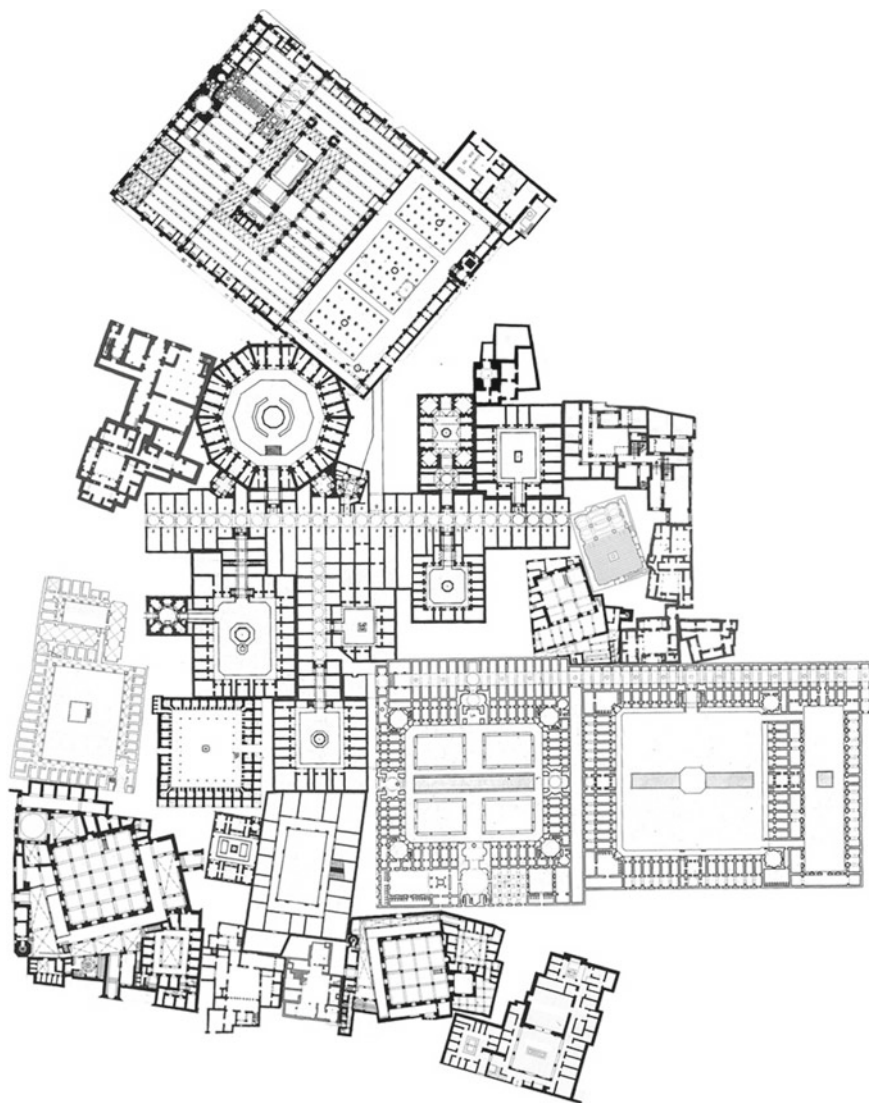


Fig. 1 Collage Islamic city (drawing by Cecilia Fumagalli)



Fig. 2 S. Muratori, Venezia: Urban Districts (Isola di San Lio), 1960, from S. Muratori, *Studi per una operante storia urbana di Venezia*, Istituto Poligrafico dello Stato, Roma, 1960, pag. 53, Tav. 4

able to represent the structure of the *calli*, *campi* and canals and the more private and domestic space of the entrance halls and inner courtyards.

Based on the strict morphological links within the investigated urban fabrics, it is possible to deduce the typological essence of the buildings.

The urban scale considered by Muratori in his researches integrates the more architecturally oriented scale adopted by Paolo Maretto, who also conducted a careful investigation on Venice in relation to gothic buildings.

In his book *L'edilizia gotica veneziana*, Maretto focuses on the transformations occurred on single buildings throughout history, thanks to accurate plans and rich archival documentation.

A similar analytical approach is the one adopted by Gianfranco Caniggia—one of Muratori's pupils—who chose Como as his testing ground. Thanks to a synchronic reading, Caniggia superimposes to the structure of the existing city the modular grid of the Roman settlement. This allows the Italian scholar to highlight different episodes within the urban fabric, from the *tipo base* defined as a common matrix, to the consequent *tipi differenziati*.

In this case, the type is intended as the institutional ensemble of building able to reproduce an organism as a synthetic fact, and at the same time, it possesses characters such as to allow the formation of an urban fabric adjacent to neighbouring buildings and in adherence with the road layout.

Exported abroad, especially to England, France, Belgium and Germany from the 1970s onwards (Merlin et al. 1988; Panerai et al. 1999), the continuity of such a typomorphological approach applied to the investigations on the city and its architecture

is still visible today in different school of thoughts that have focused their researches on the architectural organism and their attention on previous studies, such as those carried out by Conzen on Alnwick (Conzen 1960) or on some of the themes addressed by the International Conferences of Urban Form (ISUF), from 1994 onwards (Strappa 1995; Strappa et al. 2015; Caja et al. 2012, 2016).

Among the previously mentioned studies and researches, we should comprise also the less known works on the urban fabric of the Islamic city.¹ In fact, the Italian contribution on urban studies only apparently neglected the Islamic world. Even though it is not very well known and somehow relegated to the background by the official historiography, the Italian studies have had a great influence in the definition of the urban phenomenon in the Islamic world and in the formation of an overall knowledge about this issue.

In 1981, the Italian scholar and architect Paolo Portoghesi was appointed curator of the 2nd Venice Biennale devoted to the 'Architecture in Islamic Countries' (Cuneo et al. 1982).

The exhibition ratified the international acknowledgement of the themes and issues linked to the architecture and the city of the Islamic world, legitimizing the studies, the researches and the designs carried out since then by framing them in a wider scientific debate.

Several sections of the exhibition were devoted to the presentation of achieved and ongoing projects by well-known international architects such as Hassan Fathy, Louis Kahn, Le Corbusier, Fernand Pouillon, Kenzo Tange, SOM and by some Italian architects such as Vittorio Gregotti and the BBPR group.

Paolo Cuneo curated a section on the restoration and revitalization projects of the historic heritage of several cities, by framing the issue from a scientific point of view. The design dimension, which is the main focus of the exhibition and the reason for it, is scientifically framed by Ludovico Quaroni, who has the difficult task to investigate and present the origins of the urban Islamic phenomenon.

As for the cases quoted in the opening of the paper, the researches on the Islamic urban phenomenon carried out by Italian scholars were strictly linked to design issues.

Since the end of the 1960s, in fact, several Italian architects were involved in town planning activities of several cities of the Islamic world. It is, for example, the case of the Italian involvement in Tunisia, where, along with the issues posed by urban and territorial planning for the development and the modernization of the main cities, the Italian architects involved in the design activities, started to be more and more involved in the issues related to the historic centres. From 1961 to 1970, Ludovico

¹Among the scientific community, the definition of 'Islamic city' is a still debated issue, and we are far from agreeing about a univocal one. For the purposes of the present paper, we suggest to consider the adjective 'Islamic' as a label able to represent a wide geographical and cultural frame to the discourse on the urban issue.

Quaroni worked at the *Plan Directeur du Grand Tunis*,² suggesting, among other things, the integration of the *medina* within the general urban strategies.

Some of the young architects working in Quaroni's design team started to focus their attention and their research interests towards the historic city of Tunis and started to be officially involved in the activities proposed by the public administrations concerning the realization of urban and architectural surveys of Tunis old city.

It is in those years that Roberto Berardi, one of the young architects of Quaroni's team, started his collaboration with the newly founded *Association pour la Sauvegarde de la Médina de Tunis*. In this framework, Berardi carried out a detailed analysis of the urban fabric, of the residential typologies and of the main collective buildings of the historic city of Tunis, that allowed him to establish a veritable urban analysis method that he applied also to other cities of the Islamic world (Privitera and Metalsi 2016; Berardi 1979, 2005, 2008).

Morphology is the instrument, the lens that Berardi adopted to read the city of Tunis and to exploit its analysis; composition is the tool, the operation that enabled him to understand its structure.

Moreover, the representation of the city through its ground plans, as it has been performed by Berardi, is able to render the most meaningful and precise idea of the city itself: 'it is, in some way, the design of that which preceded the stereometric of the city, and also the design of that which would remain of the city, if it were reduced to ruins. And it is also a palimpsest of transformations that have succeeded each other, overlying earlier phases' (Berardi 1989) (Figs. 3 and 4).

A similar experimentation of operative research on the urban fabric of an Islamic city is the one carried out in Algeria between the 1970s and 1980s by another group of architects and scholars in the framework of bilateral agreements for scientific and technical cooperation among Algeria and Italy. It is in indeed in Algiers, and thanks within the COMEDOR,³ that a team composed by three Italian architects (Daniele Pini, Marcello Balbo and Corrado Baldi) and an Algerian sociologist (Sidi Boumediène) founded the *Atelier Casbah*, a research centre on the city and an incubator of ideas and studies for the rehabilitation of Algiers historic centre. The team conducted a meaningful research, presented in a monographic issue of the Italian magazine *Parametro* (Balbo et al. 1973), directed towards the morphological and typological reading of the residential urban fabric of the Casbah. If the Casbah group was involved in an operative research directed towards the drafting of a rehabilitation project for the historic city, the scientific cooperation established among Italian researchers from the Architecture Faculty of the University of Rome and the Ecole Polytechnique d'Architecture et d'Urbanisme of Algiers (EPAU) opens the way to the establishment of systematic studies on the Islamic city with the aim of defining its

²The project was carried out by the Bureau d'Etudes Ludovico Quaroni-Adolfo De Carlo, which comprised Ludovico Quaroni, Adolfo De Carlo, Massimo Amodei, Roberto Berardi and Benjamin Hagler.

³The COMEDOR, acronym for *Comité Permanent d'Etudes, d'Organisation et de Développement de l'Agglomération d'Alger*, was the first Algerian public institution to be charged of the development of urban development strategies.

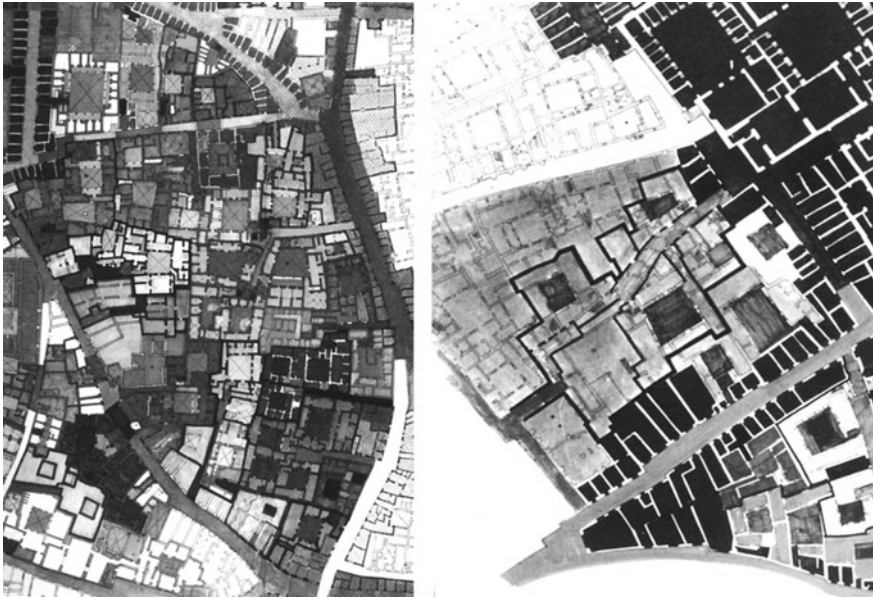


Fig. 3 Left: plan of Tunis Medina by Roberto Berardi, showing his morphological study. Right: fragment of the ground floors plan of Tunis Medina by Roberto Berardi (source Privitera and Metalsi 2016)

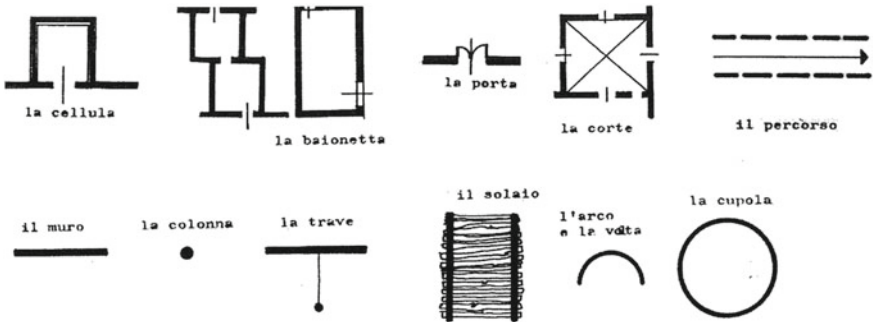


Fig. 4 The basic elements composing the urban fabric of Tunis according to Roberto Berardi (source Privitera and Metalsi 2016)

form and its structure. The different academic and scientific exchanges in Algeria represent, in fact, the occasion for some Italian scholars, such as Paolo Cuneo, Ludovico Micara and Attilio Petruccioli, to carry out a meaningful study on the urban phenomenon in the Islamic world. After these experiences, the three scholars published three different books presenting their researches and their respective points of view. In his *Storia dell'urbanistica. Il mondo islamico* (Cuneo 1986), Paolo Cuneo faced the issue of the definition of the character and the development of the cities of the

Islamic world according to a rigid subdivision into geographical areas and following an historic path until modern times. If Cuneo's encyclopaedic work was informed by a historic approach, on the other side, Ludovico Micara and Attilio Petruccioli followed the teachings of their masters Ludovico Quaroni and Saverio Muratori and adopted morphological and typological readings. Ludovico Micara (Micara 1985) chose to read the Islamic city through its collective institutions, highlighting typological variations and morphological issues. Attilio Petruccioli (Petruccioli 1985), convinced that the urban fabric of a city contained its history, suggested an analytical method aimed at deciphering the transformations occurred within the urban fabric through its structural reading. Moreover, the research approach suggested by the architect follows the study and the understanding of the design tools adopted to build the urban and territorial environment. If we want to sum up the themes discussed all along the paper, one element comes out clearly: the strict, symbiotic relationship between design and typo-morphological analysis, as if to say that one is pre-requisite or, on the contrary, the reason for the other. In other words, all the studies considered by the present paper show the necessity of typo-morphological considerations, in order to carry out any design activity, which intrinsically is a transformation of a previously established condition.

References

- Aymonino C, Brusatin M, Fabbri G, Lena M, Lovero P, Lucianetti S, Rossi A (1970) *La città di Padova. Saggio di analisi urbana*. Officina, Roma
- Balbo M, Moretti G, Baldi C, Sartori S, Dehò L, Pini D (1973) *Parametro*, 17
- Berardi R (1979) *Espace et ville en pays d'Islam*. In: Chevallier D (ed) *L'espace sociale de la ville arabe*. Maisonneuve et Larose, Paris
- Berardi R (2005) *Saggi su città arabe del Mediterraneo sud orientale*. Alinea, Firenze
- Berardi R (1989) *On the city*. Environmental Design: Journal of the Islamic Environmental Design Research Centre 1–2. Carucci Editore, Roma, 11
- Berardi R (2008) *The spatial organization of Tunis medina and other Arab-Muslim cities in North Africa and the Near East*. In: Salma KJ, Holod R, Petruccioli A, Raymond A (eds) *The city in the Islamic world*, vol 1. Brill, Leiden, Boston, pp 269–283
- Caja M, Landsberger M, Malcovati S (eds) (2012) *Tipologia architettonica e morfologia urbana. Il dibattito italiano – antologia 1960–1980*. Libraccio, Milano
- Caja M, Landsberger M, Malcovati S (eds) (2016) *Tipo forma figura. Il dibattito internazionale 1970–1990*. Libraccio, Milano
- Caniggia G (1963) *Lettura di una città: Como*. Centro studi di Storia Urbanistica, Roma
- Castex J, Céleste P, Panerai P (1980) *Lecture d'une ville: Versailles*. Editions du Moniteur, Paris
- Conzen MRG (1960) *Alnwick, Northumberland: A study in town-plan analysis*. Inst Br Geogr 27:3–122
- Cuneo P, Micara L, Petruccioli A (eds) (1982) *Architettura nei Paesi Islamici. Seconda mostra internazionale di architettura*. Edizioni La Biennale di Venezia, Venezia
- Cuneo P (1986) *Storia dell'urbanistica. Il mondo islamico*. Laterza, Roma-Bari
- Grassi G (1971) *Tipologie d'abitazione a Pavia*. Controspazio 9
- Krier L, Culot M (1982) *Contreprojets*. In: A.A.M (ed) *La reconstruction de Bruxelles*. A.A.M, Bruxelles
- Maretto P (1960) *L'edilizia gotica veneziana*. Istituto Poligrafico dello Stato, Roma

- Merlin P, D'Alfonso E, Choay F (eds) (1988) *Morphologie urbaine et parcellaire*. Presses Universitaires de Vincennes, Saint-Denis
- Micara M (1985) *Architetture e spazi dell'Islam. Le istituzioni collettive e la vita urbana*. Carucci editore, Roma
- Monestiroli A (1973) *Pavia: storia e progettazione della città*. Edilizia Popolare 113
- Muratori S (1960) *Studi per una operante storia urbana di Venezia*. Istituto Poligrafico dello Stato, Roma
- Muratori S et al (1963) *Studi per una operante storia urbana di Roma*. Consiglio Nazionale delle Ricerche, Roma
- Panerai P, Depaule J-C, Demorgon M (1999) *Analyse urbaine*. Parenthèse, Marseille
- Privitera F, Metalsi M (2016) *Les signes de la Médina. La morphologie urbaine selon Roberto Berardi*. Dipartimento di Architettura di Firenze, Firenze
- Petruccioli A (1985) *Dar-al-Islam: architetture del territorio nei paesi islamici*. Carucci editore, Roma
- Rossi A (1964) *Contributo al problema dei rapporti tra tipologia edilizia e morfologia urbana. Esame di un'area di studio di Milano con particolare attenzione alle tipologie edilizi prodotte da interventi privati*. ILSES, Milano
- Strappa G (1995) *Unità dell'organismo architettonico, Note sulla formazione e trasformazione dei caratteri degli edifici*. Dedalo, Bari
- Strappa G, Amato ARD, Camporeale A (eds) (2015) *City as organism: new visions for urban life*. ISUF, Rome
- Tyrwhitt J, Sert JL, Rogers EN (eds) (1952) *The heart of the city*. Pellegrini and Cudah, New York

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