
Designing religious buildings in recent decades has become for architects the ultimate expressive opportunity offered by the pop-star production of globalized contemporary architecture. It is as if the inherited worship tradition is no longer relevant to the definition of spatial properties and meanings. Devoid of inner and spiritual meanings, the religious space loses any sacral aura and therefore its very identity. Nevertheless, there is another theoretical approach that is in strict continuity with the past, without any mimicry or historicism, but based on a morphological approach. If spatial properties of sacred architecture are analyzed diachronically, each regional production can be explained as resulting from the long evolution of basic building types. As an example we can consider the derivation of Christian churches from the Roman domus. Even though some aspects of this approach have been widely accepted by the scientific community, the literature on the topic does not yet encapsulate the general validity of the concept. This volume instead considers the morphology of sacred spaces within different cultures, historical periods and religions, focusing mostly on common properties. Therefore it is not only a design manual about sacred architecture, but a professional source for contemporary design in continuity with the continuing formation process. Within the diachronical evolution of specialized building types, the formation process starts from urban tissues of basic building types, reaching the special type through the ‘knotting process’ (Strappa, 2013), a transformation providing ‘solidarity between the congruent spatial conception, the construction, and the roles that it is expected to play’ (Strappa, 2012). The Italian history of architecture shows a substantial tradition in the design of sacred space, even though a theoretical statement on these organic matters has been missing. So it is possible to draw a continuous line from Gianlorenzo Bernini to modern and contemporary architecture.

Edited by Giuseppe Strappa, this volume systematically brings together several essays addressing issues related to the design of sacred architecture. It explores, within a rigorous scientific approach, different aspects of the design of spaces of worship. Different periods and religions are considered, each chapter describing the historical aspects of each building type and showing various contemporary examples: from synagogues (Alessandro Franchetti Pardo), to Christian architecture (Matteo Ieva), and a significant contribution on Islamic examples (Attilio Petruccioli). Sacred space is analyzed with particular focus on the liturgies of different cults, and described as the generator of an architecture adhering to the diachronic evolution of building types: ‘the type, in fact, from this point of view is not something transcendent but immanent’ (Ieva, 2012). The analysis of the morphology of urban spaces surrounding sacred architecture (Paolo Carlotti) offers an innovative point of view on the evolution of basic building types into special buildings. A section is dedicated to the architecture of cemeteries (Laura Bertolaccini) and their evolution to the present day, with some contemporary examples (for example, the enlargement of the cemetery in Terni in 2011, with Giuseppe Strappa as group leader, and Tiziana Casatelli, Paola Di Giuliomaria, Mario Pisani and Elmo Timpani). An important part is dedicated to the preservation of ancient sacred buildings (Giovanni Carbonara and Carlo Blasi), showing different techniques and interventions in traditional religious buildings.
A chapter is dedicated to several examples of modern and contemporary churches, with texts and drawings by Franco Purini, Mario Botta, Dom Hans Van der Laan, Giorgio Grassi and Francesco Cellini. All sections are accompanied by drawings and schemes explaining the morphology of each building type. All examples are shown in detail and include an extensive iconographic documentation. Particular attention is drawn to the contemporary design conceived as the last transformation phase of an inherited formation process, and to all aspects of architectural composition and urban design. The volume therefore provides a fundamental reference for contemporary architects engaged worldwide in the design of sacred space, and is also a useful resource for researchers and professionals interested in the history, morphology and preservation of traditional religious architecture.

References


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Saverio Muratori: a legacy in urban design

Of the five interlaced branches of activity that characterized Saverio Muratori’s working life — architect, urban planner, lecturer, scholar and philosopher — his role as urbanist has been perhaps the least investigated. In light of the current interest in urban morphology it is probably this role that has the most potential for further development. In fact, in this regard the above roles might be reduced to four, in the desirable event that the current separation of the roles of architect and urbanist be rectified, since this divide has been one of the main causes of the crisis of urban form: a divide first perceived and investigated at an international level by Muratori and his school.

It is a well-known fact that disease comes first, doctors later. Which is why in Italy we were able to detect in advance the alarming symptoms of our ‘high-profile patients’: historic centres dramatically set apart from the sprawl of modern peripheries, reminiscent of the ingravescent course of a tumor. Hence our international reputation, perhaps undeserved, and the bitter controversies that have accompanied, in Italy, the development of the ‘Muratorian school’, characterized by a drift of rather widespread and enduring platiitudes.

The book by Marco Maretto can help to shatter the hard surface of prejudice once and for all, presenting to Italian and non-Italian readers Muratori’s urban projects, which are quantitatively amongst the most significant of twentieth-century Italy. Muratori’s experience spanned from his experiments in rationalist and empiricist realms, before and after the war, to his projects in the late 1950s for districts in Naples, Rome and Venice. In the process, his practice was subjected to radical rethinking and critical review, the direct result of his fundamental studies in Venice and Rome, which led him to found the Italian school of urban morphology. However, his design experimentation was abruptly interrupted in 1959. During his final years (1960-1973) he gave up planning and devoted himself largely to lecturing, as well as to the development of his ‘architectural’ thinking and to his studies on local territory.

More than any other of his assistants, Gianfranco Caniggia pursued the lesson of ‘working history’, in the Quinto district of Genova and the Giudecca project in Venice. In a frequently cited article, written on the occasion of the tenth anniversary of Muratori’s death, Caniggia concisely expressed his critical judgment of the evolutionary process of the maestro’s urban projects: focusing in particular on the INA-Casa districts, in which he acknowledged the negative presence of six theoretical idola drawn from external models of the Modern Movement. No trace of the latter can be found in Muratori’s final ‘high profile’ projects, attesting to how he gradually arrived at design based on fabric, considered by Caniggia the royal road to urban projects.

This is the very meaning of Muratori’s legacy, to which the English title of the book refers. Maretto on the one hand develops and examines in depth, from the point of view of urban form and stylistic features of architecture, Caniggia’s hypothesis,
while on the other re-evaluating the INA-Casa districts for their historic function as a ‘laboratory of verism’. From such experimental practices, Muratori was later able to draw the reflections contained in an extensive passage of Architettura e civiltà in crisi, considered by Maretto to be a sort of manifesto of Muratori’s architectural neorealism. It should, however, be noted that the term ‘neo-realist’ seems to be more relevant (from the point of view of formal intentions — unless the Italian historical period in its entirety be included under the same label) in relation to Quaroni and Ridolfi’s Tiburtino, which was explicitly inspired by the sporadic and picturesque model of the Italian village. This is in stark contrast to the Tuscolano by Muratori and De Renzi, which was inspired by the model (no less picturesque) of Scandinavian neo-empiricism. This is in fact where Pier Paolo Pasolini in 1962 shot the film Mamma Roma, one of the last cinematic expressions of Italian neorealism: probably a chance circumstance, but offering suggestions that could favour Maretto’s thesis.

In any case, Muratori’s studies of working history in Rome and Venice were what determined the crucial leap in the quality of his final urban projects, resulting from the dialectic between ‘reading’ and ‘design’, perhaps the most important and widely shared theoretical contribution of the Italian school. At the end of his book, Maretto therefore presents the three projects in Naples, Rome and Venice as paradigmatic examples of the potential benefits derived from the application of Muratori’s concept of working history. Designers of prospective districts are offered a new methodological tool, no longer based on arbitrary reasoning but scientifically derived from the very evolutionary process of the city. The ‘readings’ of this process, as different as they are, can only produce a finite number of solutions, all to some extent scientifically sound.

Maretto analyses the three projects. He describes their conceptual genesis and innovative value with accuracy and critical participation, although unfortunately this is not always matched by the quality of the images. Amongst the mentioned innovations, the attention, based on landscape, to the morphology of locations, is clearly visible in drawings and models. In the Loggetta and Magliana projects, the interpretation of the original ridge directions in the area (probably derived from his studies of Rome) translates into a project in which the ridges are primary axes of the urban layout. These axes integrate in a single design the three basic components of urban form (paths, fabrics and building types), resulting in a wide range of homogeneous and consistent solutions. An in-depth linguistic analysis of these might have led to solving the ‘aesthetic’ problem concerning cities – achieving the correct balance between typological uniformity of fabrics and morphological (and architectural) variety of individual buildings.

In his analysis of the three projects presented in 1959 to the Venetian competition for the Barene di San Giuliano (San Giuliano Sandbank), Maretto in conclusion highlights the methodological innovation of the project proposal. The entry is not made up of alternative solutions, but rather presents three successive stages of a single design process, which Muratori viewed as a symbolic summary of the entire working history of the lagoon city, thus indicating ‘a possible route to a morphological approach to city design’.

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The Atlas of urban expansion is a probably of little relevance to the expert researcher of urban form. However, for the introduction of undergraduates to matters of fundamental import to morphological study it will have some worth. Outlining urban change in more than 100 cities, the Atlas of urban expansion is basically intended to help people ‘better understand and plan for the massive expansion of cities’ (p. 1) and by doing so to ‘increase awareness and help residents, policy makers, and researchers around the world come to terms with the expected global urban expansion in the coming decades’ (p. 1). However, owing to the way information is presented, in particular the lack of detailed urban analysis and the numerous maps lacking in detail, it would be difficult for an urban morphologist interested in, for example, plot patterns and their evolution to find much use for the atlas. Nevertheless, with its general consideration of urban land cover, expansion and density, the
atlas will be of value to students interested in broad historical and contemporary urban change.

Comprising five chapters: ‘The dynamics of global urban expansion’, ‘Understanding and measuring urban expansion’, ‘The global sample of 120 cities, 1990-2000’, ‘Historical perspectives on 30 cities, 1800-2000’, and ‘Urban, national, and regional data’, the atlas is in some respects attractive. The colourful illustrations readily capture attention. The maps in the chapter on the global sample of cities, make it very easy to identify changes in urban sprawl at the end of the last century, and easily-readable charts facilitate rapid grasp of changes in population size, amounts of open space, urban density, fragmentation, compactness, and the scale of new development. Charts allow the reader to compare local change to regional and global developments. Presenting the evolution of cities in Africa, Asia, North America, South America, Australasia and Europe, the atlas is useful in portraying local, regional, and global shifts.

The discussion of historical perspectives on 30 cities between 1800 and 2000 reveals longer-term sprawl, density change, and population growth in 30 megacities, including Beijing, Buenos Aires, Chicago, Istanbul, Kolkata, London, Manila, Paris, Sao Paulo, Sydney, Tehran, and Tokyo. Tables and charts convey the scale of urban change in, for example, Shanghai, a place that experienced monumental suburban expansion after 1989. In the case of Manila, it is possible to distinguish growth outside of the intramuros (the Spanish colonial walled settlement) prior to 1918 and the immense sprawl occurring from the early-1970s onwards. Notwithstanding the expansion of its metropolitan population from 3.7 million to 17.3 million between 1971 and 2002, Manila has maintained approximately the same level of urban density. In contrast, the growth in the population of Shanghai, from 7.3 to 10.8 million between 1973 and 1989 was associated with a reduction in population density of over 60 per cent (p. 309). In relation to each city’s footprint, openness index, built cohesion, scale of infill and extension, there is much in a factual sense to learn of the world’s ‘great cities’. However, there is a paucity of analysis and explanation. How and why changes have occurred are largely overlooked.

The fact that the Atlas of urban expansion does little to explain processes and patterns of urban change will inevitably disappoint many readers. Yet with its large number of maps and its raw data it can offer a taster to what urban evolution, both in historical and contemporary contexts, is about. As the authors comment, the atlas makes ‘it possible to compare cities in terms of their metric values on key attributes of urban expansion’ (p. 4). It is disappointing that the attempt was not made to provide more explanation of the patterns revealed.

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Wallingford was one of a series of fortified settlements founded by Alfred the Great as part of his response to Viking attacks. It is located on the River Thames some 50 miles west of London and controlled a ford and the passage of vessels on the river. It grew to become Berkshire’s county town and was the location of one of William the Conqueror’s castles. But in the later Middle Ages it went into a sharp decline, dwindling into a small local centre. It has been left with a spectacular set of earthworks from both the burh defences and the castle.

‘Townscape’ in the title of this monograph is not used in the established sense of the word. It is not concerned with three-dimensional groupings of buildings and space but with changes in town plan and its utilization over time. However, it has much to offer on these matters.

The Burh to Borough project was established in 2001, and in 2008 it received a major grant for 3 years from the Arts and Humanities Research Council. This publication explains the findings to date, although work continues, notably in garden test pits. In the study of a new, evolving and then declining town the project had six aims. First, it addressed Wallingford’s origins. The town like some of Alfred’s other foundations, for example Cricklade and Wareham, is generally regarded as a de novo creation. But in a long settled country that does not mean a clean slate. There had been stray finds of Iron Age and Roman pottery, and a large
pre-Christian Anglo-Saxon cemetery lay just outside the south-east corner of the town’s defences. Secondly, the project was concerned with the layout of the burh and how it evolved in the tenth and eleventh centuries. This relates to debates as to whether the burhs were initially fortifications or were always intended to serve as urban nuclei. Thirdly, it was concerned with the Norman transformation of the town. Fourthly, it was to investigate the reasons for the borough’s physical and economic contraction. Fifthly, it investigated Wallingford’s connections with its environs. This concerns links to wider debates on town-country interconnections. Lastly, there are methodological issues: for example on the relationship between research-led archaeology and commercial archaeology paid for by developers.

Wallingford had no major predecessor. The site was rural, but with a nucleus to the south necessitating an important early Anglo-Saxon cemetery. It was initially a fortress. Today the area within the burh defences features major open spaces. One contains the castle earthworks. The others, Bulcroft and Kinecroft, adjoin the western bank and ditch. These two were open in Anglo-Saxon times, probably providing accommodation for the field army, and refuge for people and their livestock. A road and properties did later extend into Kinecroft but they were short-lived. Only the south-east quadrant was initially divided by roads and occupied. More urban attributes developed under Alfred’s successors as they located administrative functions and mints in these places. However, the most valuable discovery is the new light that is shed on Anglo-Saxon planning. It is easy to become absorbed by the obvious features of many burhs – the near rectangular outline of the defensive circuit of ditch and bank and a regular street layout based on two main roads linking the gates and crossing approximately at right angles. Here the project has revealed the existence of a major scheme of hydrological engineering. The scheme must have involved large work forces to dig canalized channels. The Mill Brook was a new cut delivering water that fed the town ditch via sluices before discharging into the Thames. To the south, Bradford Brook was re-engineered as a storm drain. The water probably fed mills by the south gate from Anglo-Saxon times. Later the supplies were also used to fill the castle ditches, its mill and later its swannery and ornamental gardens. They also filled the priory fishponds. Obviously, there is a need to re-examine other burhs in the light of these discoveries.

The antiquarian suggestions that the town’s decline was due to the Black Death and the building of a new bridge in the fifteenth century at Abingdon are disproved. Wallingford peaked earlier, around 1200. In fact its fortunes were linked to the castle. The Norman castle destroyed few houses. The authors argue that this was because it succeeded an Anglo-Saxon royal hall. Then in the civil wars between Stephen and his cousin Matilda and her son, the future Henry II, the town and castle remained loyal to the ultimate winners, undergoing three sieges by Stephen. Henry rewarded it with a generous charter, and royal favour lay behind the establishment of a hospital and leper house. Frequent royal visits helped to support a row of goldsmiths. But royal interest faded after c.1250 and visits declined. Contraction followed.

So this is a major research project. It will be an essential source for those interested in the origins of English towns and their patterns of growth and decline. Much of what has been found will have implications elsewhere in northern Europe. It will have a wider relevance for those interested in castle towns. It also shows how a major project can be aided by local support: indeed the roots of the whole project were a campaign to stop a scheme to build on part of the castle site. There is much here for a variety of scholars, although many will not need to read all the detail of the archaeological work.

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The key issue in this astonishing work of over 2700 pages and almost 1400 illustrations is the concept of a town as monument (Stadtdenkmal). Of course Bamberg is a special place. It was awarded world cultural heritage status by UNESCO in 1993. The town had escaped major destruction during the Second World War and is a delightful example of a baroque town. This massive publication is
Bamberg’s response as a World Heritage Site to the need to produce an inventory showing in depth involvement with its heritage. The publication consists of two massive volumes as part of the series Die Kunstdenkmäler von Bayern, Stadt Bamberg (The monuments of Bavaria: the town of Bamberg). While earlier volumes in this series dealt with individual streets and buildings, in this publication the holistic understanding of the town as an urban monument is the centre of attention. There is a full report on the historical building fabric of the town with reference to archaeological excavations and architectural surveys. The town is set in its historical context, including an explanation of how historical structures of power found expression in the built environment and its spatial organization. The interpretation adds a special dimension to the empirical evidence. Urban space is here identified as places of memory, spaces of communication, expressions of power and symbolic spaces. The editor of this work was trained as a historical geographer and we reap the benefit.

The work is subdivided into three major parts. Part I provides a historical account of the city and its spatial transformations at different chronological horizons. Bamberg is located where a former trade route crossed the River Pregnitz. The medieval town hall was erected on the bridge connecting the two parts of the town. In Part II, which is more directly relevant to readers of this journal, Bamberg is presented as an urban monument as it stands today. The identity and typology of each monument is discussed. Relatively new among cultural landscape sites are viewing points of the town that were important for the prince archbishops in the eighteenth century, but are now part of walks enjoyed by the citizens. Visible relic features of the former life-worlds of the people of Bamberg are also considered. They include the Michelsberger Klosterobstgarten (a monastic fruit garden), former arable terraces, standing crosses under a walnut tree, a slate workshop, an inn, a statue of St Sebastian standing in a field, sunken road ways, churches (and views of them), meadows with fruit trees, fountains, a wayside shrine from the Renaissance, a country house in former vineyards, and vegetable and flower gardens. The value of the individual monument inside and outside the legal definition is assessed. There are 46 pages on source material alone, from different archives, museums and other institutions.

The message is that the town as such is the monument. Individual monuments are important, but just as important is the ensemble. The palimpsest metaphor comes into play. The oldest layers in this palimpsest can only be explained with the help of different disciplines. An approach that brings geography and monument protection closer together is urban morphology with its roots in German historical-geographical research. This approach is not important in German university teaching any more but it was methodologically very important for the production of this volume.

This publication includes detailed inventories. There are few predecessors of this type of work. One of them was the detailed record of the building fabric of Vienna by Hugo Hassinger. In the present publication 41 pages are devoted to the details of the roofs of Bamberg – their shape, the material they were built of and their structures – covering a time period from 1170 to 1800. The density of well kept roof constructions in Bamberg from the High Medieval to the Early Modern period is unique. The cellars of Bamberg, important storage places, are discussed over 53 pages.

The medieval wall is pursued through the fabric of the present town and is, for example, traced behind the tiles in the kitchen in a fish shop! The first mentioning of paved roads dates to 1327 but by the middle of the fifteenth century there was extensive paving. Typically, the medieval house stood with its gable along the road. Change came in the fifteenth century when houses were arranged parallel to the street. Since the early-eighteenth century Bamberg was a baroque town, where the bishop and his court resided. The new residence was built between 1697 and 1703. The harmonious effect of the Cathedral Square is largely due to the use of sandstone for the façades, the cathedral and residences. The Cathedral Square served as a self-portrait in baroque style for the Prince Bishops. The eastern wing of the residence was placed in such a way that it could be seen from the town. In 1776 the Prince Bishop ordered the lowering of the pavement of Cathedral Square to make the buildings look more monumental!

Within the city, during the baroque period, plot patterns of modest scale gave way to large-scale buildings dedicated to social care and education. Wooden houses were pulled down and three-storey houses with nine bays were built with stone balustrades on the first floor, with the coat of arms of the archbishop indicating that he was the landlord. Shops were introduced on the ground floors and the houses were residential on the upper floors. These types of houses were fitted into the old narrow streets. Particular emphasis is put on the edges of spaces (Raumkanten) and how they were widened or connected. Streets in the proximity of railway
stations built in the late-nineteenth century have place names such as Friedrichplatz or Wilhelmplatz that express the influence of the Prussian Government at the time. A typology of the villas built between the middle of the nineteenth century and the early decades of the twentieth century allows insight into the building practices of their initial occupiers.

As maps transcend language barriers, the coloured maps of the town in earlier centuries in particular perspectives and facsimiles of historical maps are of especial importance. Pride of place is taken by the reproduction in colour of an oil painting on wood of Bamberg in 1485 entitled 'The farewell of the Apostles'. Among the thematic maps, urban functions from around 1600 produced by GIS show that land use in the city at that time was mainly ecclesiastical. A later map of urban functions, dated 1776 shows land-use change from the bishop to the government. The next map in that series, dated 1849, after secularization, shows the impact of military barracks on the topography of the town. A digital version of an address book of 1898/1904 gives information on urban functions at that time. Another map presents a survey of all cellars in the city, and others show the gardens within the city designed by aristocrats or rich citizens and the house types before 1800 (medieval superseded by renaissance and baroque). Since 1800 speculative residential buildings have been erected in the city centre. A distribution map shows the spread of industrial buildings during four phases: pre-industrial (1770-1835); first phase of industrialization 1845-80; second phase of industrialization: 1880-1945; and post-1945. Distribution maps show the building of apartments between 1850 and 1970 on the basis of building applications, and the work of specific architects between 1850 and 1918. Günzelmann considers maps a good way of going against the tendency in monument protection to atomize. Maps not only convey facts but they also facilitate analysis. The production of 24 coloured maps was expensive. The other illustrations in the text of the two volumes consist of archaeological reconstructions, architectural drawings or photographs taken by the State service. There are 46 pages alone on source material from different archives, museums and other institutions.

The production of this splendid publication is the achievement of the Historic Monuments Office of Bavaria in co-operation with a spirited editor and his large team of researchers and two brave publishing houses. The volumes are of great use as reference works for architects and planners when referring to the historical building fabric of Bamberg. Information is communicated in specialized architectural language and by technical drawings. The challenge for these volumes was to combine contextual analysis with a focus on individual monuments and define Bamberg’s identity as urban monument. It would be a further welcomed service if the vast amount of empirical evidence presented in these volumes and the discussions surrounding the understanding of Bamberg as an urban monument could be summarized in one volume accessible to readers interested in urban morphology and the management of historical urban cultural landscapes – preferably in German and English.

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