

Designing Grid Cities for Optimized Urban Development and Planning

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Chapter 6

Analyzing, Classifying, Safeguarding: Drawing for the Borgo Murattiano Neighbourhood of Bari

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ABSTRACT

A modern city can be studied through its representation, from the urban to the architectural and detail scales. The image of a city is characterized by a plurality of architectural shapes that are visible across the urban landscape. This chapter describes the scientific method of the representation science, namely the architectural survey and drawing, as knowledge methods, that play the role of tools for the analysis of the structuring place dynamics. The methodology includes the retrieval of existing documentary material and the redrawing of the façades and their subsequent composition within the urban space. The research aim is to show the city image of Bari in its architectural, historical, and cultural essence, implementing a graphic model that can be an effective tool for protection, which contains the reference documentation of each architecture, that can be viewed and studied individually or placed in relation to other façades of the city.

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INTRODUCTION

Since 2009, a research on the image of the city of Bari¹. The aim of this project was the acquisition of a deeper knowledge of the architecture in itself and in relationship with the environmental, historical, cultural and visual context, comparing a series of data coming from both the world of representation and the visible reality. The result is the implementation a visual archive named “*BDA Bari Disegno Architettura*” (BDA Bari Drawing Architectures). The investigation is focused on the the architecture in historical Murat, Madonnella and Libertà neighbourhoods and it is linked to the methodology of survey and architectural drawing.

The thriving iconographic data derives from the systematic survey of the main urban fronts and from the historical studies and archive-based research which produced a rich number of original design drawings and photographs.

The used method is the representation science, namely the architectural survey and drawing, that as knowledge methods (Schneider, 2007), are suitable for playing the role of tools for the analysis of the structuring place dynamics and to identify the relationship systems (Massari, Pellegatta, & Bonaria, 2006). Therefore the method is the guided analysis by the building reality drawing.

Good drawing, by virtue of this intrinsic reciprocity between mind and act, goes beyond simple information, allowing one to fully participate in its significance, its life. In exploring a thought through drawing, the aspect that is so intriguing to our minds, I suspect, is what might be regarded as the speculative act. Because the drawing as an artifact is generally thought of as somewhat more tentative than other representational devices, it is perhaps a more fragmentary or open notation. It is this very lack of completion or finality that contributes to its speculative nature (Graves, 1977).

The drawing - conceived both as a practical action of representing reality and as a critical action - has a pivotal role, because it needs to be regarded in its theoretical dimension of linguistic system allowing the comprehension and communication of the architecture, and of method to study it from a functional and morphological point of view. When operating a reconstruction through graphical images of architectures and their composition within the urban fronts, information needs to be selected, and the knowledge is conveyed by letting the strength of the representation emerge as a result of the plurality of architectural languages, that is to say the variety of the historical, cultural, social, economic, aesthetic and human values that characterize the city today.

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Figure 1. Bari city plan

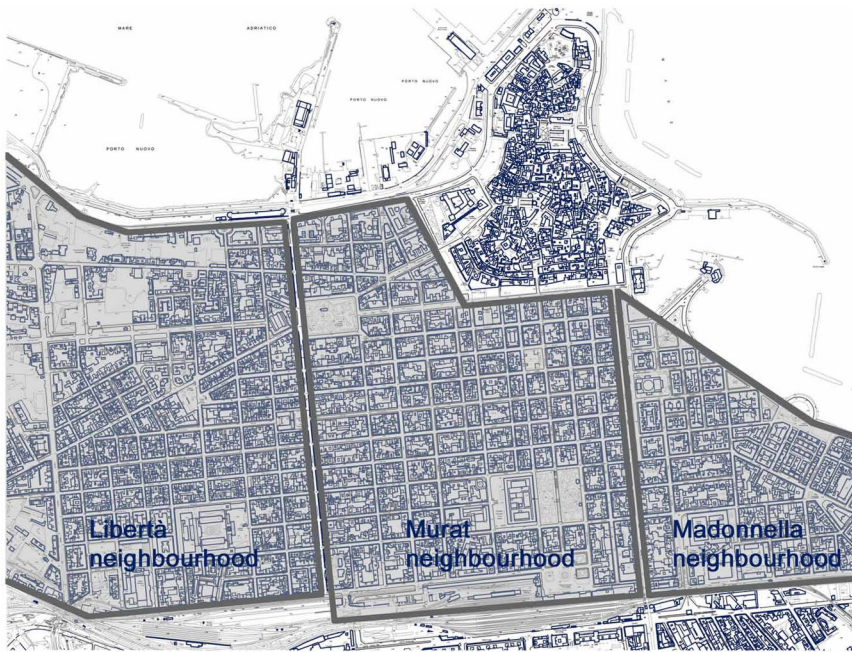


Figure 2. Some of the architectures built between the nineteenth and early twentieth-century



BDA is a “visualization project” aimed to give emphasis to the peculiar characters of the objects, be they meaningful or basic architectures, which exist along the street fronts. The buildings are analyzed both individually and as objects embedded in the continuity of the fronts.

Therefore the city is investigated by reading its architectures. More than *the city architecture*, it is studied *the city of architectures* (Ambrosi, 2000). This definition contains the intrinsic value of the architectures themselves and of the relationship that each of them establishes with the urban system, with reference to other road front elements and of the city in a broader sense *in that collective work which is the backdrop road, considered as a continuous urban space envelope* (Portoghesi, 1968, p. VII). Architecture actually confers an image to the city and determines its peculiar identity (Venturi, 1967), that is nurtured by encounter and juxtaposition of ancient and modern buildings: a plurilinguistic identity layered in space and time. Through the architecture the city history, the building succession events, the political and social thought transformations, the different cultural currents transit can be read.

The history of the city of Bari has ancient origins, but the modern urban space, of enlightenment plant, is configured beginning from a specific historical instant, the end of the eighteenth century, when the oldest part, enclosed in a peninsula and surrounded by walls, was inadequate to contain the increasing population. The nineteenth-century planning starts a construction process that will be long and complex. The city analysis path through its representation cannot ignore this process. Especially considering that the draw operation allows to *explicit and revealing the historical and theoretical structure* (Florio, 2011, p. 24) of architecture and has the aim to stimulate reflection on it. Its representation has the aim to *fix in the drawing and in the measure the state of things at a given time instant, to spread the knowledge, to preserve its memory, to transmit it to posterity* (Ugo, 2009, p. 33).

TO OBSERVE, TO DRAW, TO KNOW THE CITY

One of the first images that were produced during the research path is a city plan on which the surveyed buildings were identified. They were distinguished by typology and construction period (also the distinction between the already studied buildings and the other has subsequently been added). To the geographic data also information has been added about the estate, designers, builders, year of construction. The plan, based on cadastral, has become a geographic information system to which additional graphic data have been associated, as later it will be fully described. Besides to be a working tool, the plan has become an urban morphology icon: apparently it is so

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simple because of its regular geometries, such as repeated plugs to form a base grid. However, it is actually deeply polymorphous in its essence of place, of constructed and inhabited space, of architectures and human life container.

In 1790, even when the royal engineers Palenzia and Viti signed the project of a new *extra-moenia* borough, they drew a planimetry that would subsequently become the iconographic model for the building of the city of Bari. The project of a grid layout, based on developing models already experimented in other Nineteenth-century cities, was adopted by Architect Gimma in 1812 (Pettrignani, 1981) for the initial drawing of the Bari city plan, as well as for the subsequent expansion plans. Its layout, made of regular blocks (also consistent in size), embedded within a network of orthogonal roads, organized in a rhythmic alternation of full and empty spaces, aims to be a symbolic representation of its character, of the formal solidity that its architecture was meant to display. However, the actual city that emerged and its evolution proved to have a deeply complex character. It is a city in which historical, cultural, social, economic, aesthetic and human factors determine a substantial heterogeneity of the architecture and of both private and public spaces. Architecture is a *human object*, as Aldo Rossi (1995) wrote. “I hereby try to read this representation through its fixed and deep scene: architecture. Sometimes I wonder why this deeper value of architecture has not yet been analyzed; its value as human object that shapes reality and conforms matter to some aesthetic conception” (p. 29). The apparent regularity in the urban structure is actually fragmented into a plurality of cadastral particles that correspond to the plurality of the actual architectural shapes that exist in the area. These generate a plurality of architectural shapes that are nowadays visible across the urban landscape. The image of the city is today characterized by the alternation of early-Nineteenth-century buildings and houses that, later during that same century or in the early Twentieth century, were transformed by the adding of superelevations. Newer buildings erected at the beginning of the Twentieth century are also part of the landscape, with their eclectic and Liberty decorative elements and a wide variety of styles. Also, buildings from the 1930s and 1940s enrich the area, as well as post-War buildings that have a more or less interesting style. This have often replaced older buildings that were particularly significant from the historical, cultural and architectural points of view. Such aspect, initially opposed by urban planning experts and Local Planning Authority, is indeed the very strength of the city today. The coexisting plurality of architectural styles represents the variety in uniformity envisioned by Laugier (1755) for big cities; it was also approved by Koolhaas (1994), who considered the paradigmatic Manhattan’s grid “a collection of blocks whose proximity and juxtaposition reinforce their separate meanings” (p.11). In Laugier (1755) opinion:

It is not then a little affair even to design the plan of a city, in a manner that the magnificence of the whole may divide itself into an infinity of beauties of different particulars, that one may not meet therein almost ever the same objects. That in running from one to the other, one may find in every quarter something new, singular and striking. That there may be order therein, and nevertheless a sort of confusion. That all be in a direction, but without monotony; and that from a multitude of regular parts, there results from it in the whole a certain idea of irregularity and a chaos, which suits so well to great cities. We should for this end possess in an eminent degree the art of combining, and have a soul full of fire and sensibility, which ceases lively the most just and the most happy (p. 250).

The image of Bari, originally conceived by its planners as a city with a residential texture meant to be consistent with a regular planimetry and to have a substantially repetitive appearance in order to keep a stylistic uniformity, is thus transformed and layered, it becomes *new, singular and striking* thanks to *an infinity of beauties of different particulars* among which the whole is subdivided.

The *Statuti Murattiani*, that is the regulations governing the new city construction, imposed a stylistic unity program that the Building Committees, guardians of the city planner directions, enforced by rejecting all the projects wandering from the monotonous prescriptions therein contained. The curtains had to respond to the need of *order, symmetry, regularity and uniformity that moves to the beautiful* (Petrignani, 1982, pp. 48, 109), which fit well with the new idea of a modern city, as indicated in the Statutes. But clients, designers and builders of new urban buildings could not get out of the cultural and aesthetic references coming from the national and international architectural debate. Even from the early twentieth century, the architecture style was going to change, renouncing increasingly to the austerity imposed by regulations, first accepting the eclectic style and then turning the look at Modernism.

Although the city, in the succession of urban plans, maintained an orthogonal grid development, typical of nineteenth century, its architecture undressed of the imposed rigid immobility and chanced using contemporary architectural languages (Scionti, 1990, p. 66). The *Borgo Murattiano*, first expansion nucleus outside the walls, today city central neighbourhood and connective tissue area between the old town and residential areas of the second '900, and the subsequent Madonnella and Libertà neighbourhoods at the ones time considered as suburban districts, are all areas with a high land rent value, where it is still possible to build new buildings. This results in a steady replacement streams of old buildings which continues up to now from the early twentieth century. This is the city image today. And it is the reason why the original urban front representation, contaminated by a variegated stylistic grammar, is interesting.

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Kevin Lynch developed the concept of imageability, that is the ability of urban elements to evoke a strong image for an observer. Imageability of streetscape character is concerned with the visual arrangement of elements within the street environment, and how those elements relate to each other and create a distinct character or perceivable differences, that indicate the urban identity. Imageability is closely relate with distinctiveness, as human beings are more likely to recognize an environment with unique or distinct attributes because they are tend to be more imageable. Distinctiveness is an important process in recognizing place identity. As Nasar found that evaluative environment is related with distinctiveness of physical forms, visibility, significance of uses or combination of those factors (Hartanti & Martokusumo, 2014).

The perceptive relationship established between adjacent buildings, both old and new, defines a image of the urban scenes consolidated in the citizen minds. The psychological effect generated by such as a vision is an agreement without a critical selection of the visualized object. For this reason the judgment, coming from the thought of a more or less conscious user, on the living space does not always result from a careful observation of individual architectures and it could be quite distorted by prejudice. Frequently expressed thoughts are: “the façades ornamental style of ancient palaces gives them a greater aesthetic quality not present in uniform contemporary façades”, or, on the contrary, “the sober contemporary architecture are more interesting than the old ones, so redundant for the overabundant coating decorations”. The today tendency towards the preservation of buildings spanning the two last centuries, seems to belong to those who support the fundamental value of the architecture and city historicity, while the renewal feasible by the urban image modernization seems to belong to those that can still gain by high income speculation operations in the most central neighborhoods. Their aim is to replace those examples considered useless, such as some nineteenth-century architectures evaluated as insignificant or as building units isolated on thereinside of blocks completely rebuilt with more recent buildings.

Apart from the aesthetic and value judgment on the existing architectures, drawing can unravel the urban visual complexity and can send away the reflection from the *direct empirical experience* (Ugo, 2009, p. 116), taking it towards an awareness guided by critical judgment, selecting the architectural issues with the aim to distinguish, to recognize and to catalog them, explaining their relationships within the context, and telling their history. Lynch (1960), speaking about urban imageability, suggests:

Since image development is a two-way process between observer and observed, it is possible to strengthen the image either by symbolic devices, by the retraining of the perceiver, or by reshaping one's surroundings. You can provide the viewer with a symbolic diagram of how the world fits together: a map or a set of written instructions (p.11), or, why not, a drawing.

As on several stratigraphic levels of knowledge, drawing renders the currently existing elements, retrieves the memory of historical data, simulates the planning phase - Vittorio Ugo (2009) defines the survey *drawing project inverted sign* (p. 116) - while building the image, prefigures a possible future scenario of restoration or enhancement. The reality transposed into a representation is made abstract. The abstraction is obtained deliberately because who realizes the representation chooses some aspects to show and generates an incisive model in which, in some way, its critical thinking is revealed. This is why the architectural drawing is not only *mimesis*. It is not a world visible slavish reproduction (impersonal, flat), but it is interpretation translated into drawing (Ugo, 2009, p. 34).

For a good part, the BDA archive contains façade drawings, each of which can be viewed and studied individually or placed in relation to others façade within the block, up to reconstitute the whole front road axis.

The research starts from a taxonomic work of individuation, classification and analysis of buildings that generate an iconographical production that is the exact/ abstract description of the built reality.

Figure 3. The urban front drawings: Architectures located in Crisanzio Street. The drawing comes from the systematic surveys made during didactical experiences carried out as part of the Architectural Drawing Courses coordinated by V. Castagnolo (Valentina Castagnolo with the students F. Colapietro, C. Delmedico, A. Labianca).



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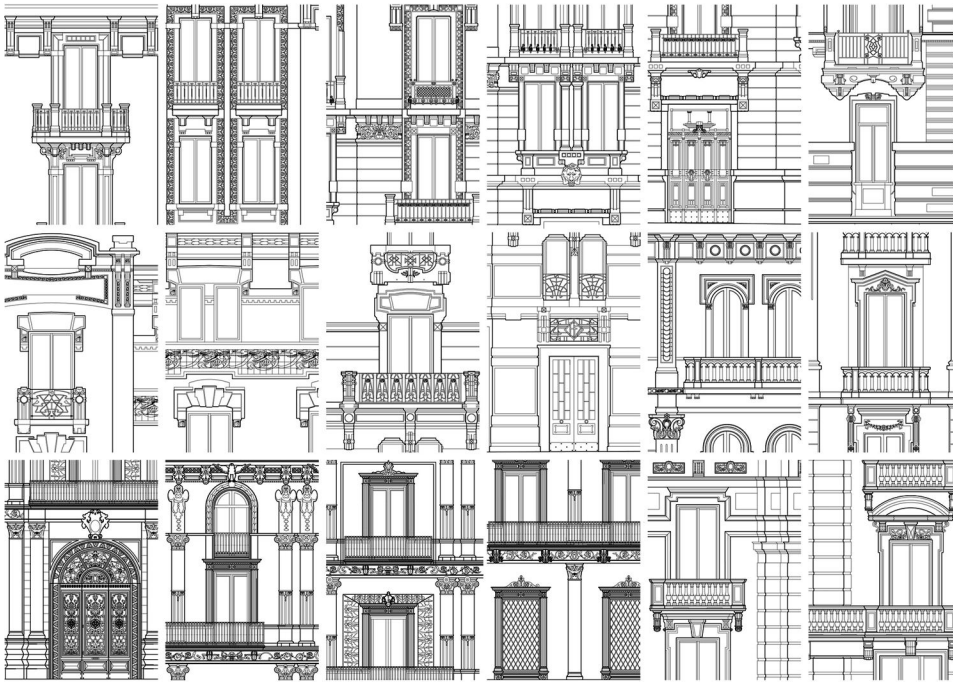
Within the research project concerning a broader urban vision, any building can be focused with a down-scaled attention to the detail. In the method experimentation, applied to all the urban fronts, the study found in the late-nineteenth and early twentieth-century architecture a paradigmatic experimentation place thanks to its façades, articulated in geometrically meaningful elements. The Borgo Murattiano, erected and developed in the aforementioned period, still preserves numerous examples of that architecture made of formal structures - symmetries, modules, orders and decorative elements - to which it is possible, thanks to drawing, to attribute a both functional and symbolic meaning. Buildings are chosen for their hermeneutical potential more than for their mere, and yet undeniable, aesthetic and historical-cultural value. The chosen buildings are characterized by complex decoration setups, and display a clear syntactical definition in each architectural element. Scaling down to obtain a detailed observation of such architectures aimed to experiment a peculiar kind of representation in relationship with a specific architectural object. The methodology includes the retrieval of existing documentary material, the gathering of data on the field, the redrawing of the façades and their subsequent composition within the urban space, the final typological and contrastive analysis.

READING METHOD OF ARCHITECTURE AND CITY: TAXONOMY AND DRAWING

For the scholar who analyzes the built world according to the representation science methods, the data collection in direct contact with a building, constitutes the first stage of the architecture knowledge. Sketches, annotations, visual analysis, considerations about architectural and decorative elements, with the metric and photographic surveys, all are procedures necessary for the subsequent analyzes. The first post-processing operation is the graphic transcription of the metric information in a continuous comparison with the conjectures advanced during the field survey operations. Having written down and synthesized data into a graphical model, which could be both a two-dimensional or a three-dimensional drawing, the research goes on the recognition of the subdivision ordering elements in the façades. Generally, the horizontal scanning is created by string-courses, balconies, cornices, base and crowning elements, and the vertical scanning is created by pilaster strips, pilasters, columns and alignments among openings. It follows the identification of the prorating system based on modules.

The subsequent phases consist of comparative, typological and stylistic analyzes, by which the examined architectures are placed in a historical and a cultural context. Then it is necessary go further into the details of the architectural ornamentation and decoration drawings. Also in this case the reconstruction operations of geometric

Figure 4. The classification of the details: decorative and architectural elements



shapes allow a close analysis of those façades elements that characterize the late nineteenth century and the early twentieth century architectures. About that, the molding reconstruction through the drawing is interesting, as their study allows to find occurrences or deviations with respect to the historical manual directions. Also, the local builders experience was decisive for the form choice, which was also linked to the artistic currents they referred to. In the nineteenth century examples moldings and ornaments, doors and windows frames, cornices and storey string-courses and the architectural order are very similar to each other and they vary most in the façades composition than in type, maintaining some consistency with the manuals. However, in the liberty and eclectic architecture, decorations and moldings differ from the classical form and they change and enrich with themes and geometric variations. For the analysis of decorations, it is also necessary to investigate the fundamental geometric shapes on which they are based, as well as the disposition of each form in the plane for the pattern composition of friezes, cornices and ornamental stripes.

This phase of study must be supported by a historical research for the knowledge of the cultural moment in which the architecture was produced, studying also the artistic currents which designers looked at. Beside the critical historiography, it is useful to study the literature of the time, such as manuals and repertoires of different period architectures, styles, decorations and ornaments.

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The relationship with history is also defined by the reconnaissance of the documentary material, which can consist of photographs and drawings coming from public and private archives, notarial deeds, letters between clients, designers and builders or between all those ones and technical departments. The letters could contain building permits and any authority approval or refusal replies. This archive research, always valid in a methodologically correct approach to investigate the architecture in every age, is particularly useful for the nineteenth and early twentieth century façades study in the city of Bari. In the historical City Archive, contained in the State Archive, the design drawings, that were submitted to obtain the building permits, can be found (Castagnolo, Franchini, & Maiorano, 2014). These documents are contained in files that describe the individual building history construction. A systematic analysis of these files, in part already started in the project, could help to rebuild much of the local architecture history with that of protagonists who designed the city image.

CONCLUSION

In the research project, called *BDA Bari Disegno Architettura* (Bari Drawing Architectures), a new archive has been implemented. It is a database in which each architecture, geographically identified on the city plan, is associated with the current state drawing (synthetic reworking of the scholar's critical thinking), the collected data (photographs, sketches, stylistic, typological, cultural considerations) and the historical archive drawings, to which other historical documents could be connected. Extending the work to other city areas, the database could become a kind of Bari nineteenth-twentieth century architecture *grand tableau* (Ugo, 2009, p. 35).

It is not only an existing taxonomy, but it is a synthesis model in which the whole knowledge system flows into (Foucault, 1971, pp. 10-11). The references to other city studies through representation are not those of classification type, such as, for instance, the Jean-Marc Labordière (2011) anthology of Paris façades. In this investigation the architectures are grouped by style and are arranged in a chronological order. In the classification scheme of each historical period the specific stylistic features are defined. Every significant example is accompanied by photographic images, not surveys or historical drawings. On the contrary, the scientific work for the BDA is not limited to compiling a list, albeit reasoned, of different types or architectures, arranged in a chronological order. Instead, all the collected, cataloged and analyzed data refer to the studies on urban survey, such as those carried out by Angelo Ambrosi and Giuseppe Radicchio on the Bari old town².

BDA study is quite similar to the investigation "Survey of London"³. From the end of the 19th century, the topography of London city center and its inner peripheries have been subject of a research whose aim is to safeguard the historical architecture,

through the knowledge and study of the urban space. The city is represented through the historical buildings description - few buildings erected after the 19th century -, their history, their location in the urban context, their relationship with the other city elements. Also in this case, the investigation is based almost always on the original documentary and field research. Each architecture, easily identified on the city map, is associated to archive documents and photographs and drawings of the state of things.

BDA study is also similar to the investigation on the historical city of Naples through the urban fronts drawings carried out by Adriana Baculo, Antonella di Luggo and Riccardo Florio (2006). Their research aim, conducted as part of agreements with public administrations, was to implement a graphical/critical support for the historical city redevelopment project. The BDA project even though has not such a specific aim, has not to be considered a purely theoretical project. Its aim is to show the city image of Bari in its architectural, historical and cultural essence. It follows that the implemented database is an effective tool for protection, because it contains the reference documentation of each building and it allows an immediate reading of all the data collected, the sorting and comparison of the types and styles in relation to the year of construction.

Figure 5. Murat and Madonnella neighbourhoods in the Bari city plan. The BDA archive contains current state drawing, historical archive drawings, photographs and documents. The map shows the nineteenth and early twentieth-century architecture - highlighted with a marked line - and architectures analyzed until today within the project “BDA Bari Disegno Architettura” (Bari Drawing Architecture) - highlighted with a colored screen



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An example is the utility of this tool in the protection of buildings built in Bari between 1813, year of the *Borgo murattiano* foundation, and the early twentieth century. With the database is possible to extract such an information as the building location and distribution today in Murat, Madonnella e Libertà neighbourhood and the areas with the greater presence of surviving edifices and to lead any safeguard or enhancement action. The BDA database is potentially implementable in sequential stages in relation to protecting and control needs. It is possible to input further information on the conservation status of decay and neglect, or to indicate resent restoration or transformation actions.

The project highlighted another interesting aspect of the scientific research. Any architectural scholar is able to see and communicate through drawing the peculiarities of the built reality that are invisible to those whose eye are not trained to observe.

The drawing can be considered *the architect true glance on the world* (Purini, 2000, p. 39). This glance is educated to see, to interpret and to transmit. In other words, the architect is to be able to describe objects simply by drawing. To draw façades, outlines, profiles, partitions means to reveal, line after line, the richness of architecture, as well as to narrate the “everyday space” that is generally left unnoticed, shapeless and colourless, whose different and peculiar elements are unseen. Indeed for this reason the scientific results of such investigation have significant relevance for the community living, using and visiting the city: the graphical model obtained, visual representation of the architectural elements and of the whole city, is a sharing model, a knowledge system made to be accessible for any kind of beneficiary, for uses that vary from mere fruition to management and preservation to safeguard and touristic enhancement (Amoruso, 2015, pp. 550-578).

The preservation of architecture is pursued also through the acknowledgement of the identity of a place (Norberg-Schultz, 1979, pp. 6-18), since it is part of a context that contributes to determine its features and languages. A place is a complex system whose physical and historical concreteness is well recognizable. Peculiar or common traits, singular occurrences or widespread phenomena, recurring or ever-changing features within can detect. A place is at the same time a city and a territory. A place is a network of relationships where we can identify its forming elements as well as the way they are connected to each other (Castagnolo, Franchini, & Perfido, 2013, p. 804).

The study, aimed at the late-nineteenth and early twentieth-century architecture, offers a chance to reflect and helps preserving memory, architectural and cultural heritage belonging to the recent history of the city. It might also foster the tutelage of the architecture of the area that, although undeniably present in the reality of the city, is often left out of any safeguard action, and most of the times is barely acknowledged.

In the linguistic and typological architectural variety represented within the urban context, zooming on the architectural element level aims to draw the attention on particularly attractive elements, in order to possibly eliciting curiosity, educate to observation, promoting beauty, history, culture, involving the most unaware urban space users.

REFERENCES

Ambrosi, A. (2000). Presentazione. In A. Colonna & M. Di Tursi (Eds.), *Architetture dell'Ecllettismo in Puglia nel XIX secolo* (p. ix). Bari: Mario Adda Editore.

Amoruso, G. (2015). The Image of Historic Urban Landscapes: Representation Codes. In S. Brusaporci (Ed.), *Handbook of Research on Emerging Digital Tools for Architectural Surveying, Modeling, and Representation* (pp. 550–578). Engineering Science Reference (an imprint of IGI Global). doi:10.4018/978-1-4666-8379-2.ch019

Ashbee, C. R. (Ed.). (1900). *Survey of London: Volume 1, Bromley-By-Bow*. London: London County Council 1900. Retrieved from British History Online: <http://www.british-history.ac.uk/survey-london/vol1>

Cara, D., Rossi, G., & Franchino, M. I. (2009). *Bari vecchia. Progetto per un Atlante iconografico - Caso studio: isolato 57*. Bari: Edizioni Arti Grafiche Favia.

Castagnolo, V., Franchini, M., & Maiorano, A. C. (2014). Bari Disegno Architetture (BDA_Borgo Murattiano). Archivio visivo (e visionario) della città a 200 anni dalla sua fondazione. In A. Buccaro (Ed.), *Città mediterranee in trasformazione* (pp. 353–364). Napoli: Edizioni Scientifiche Italiane.

Castagnolo, V., Franchini, M., & Perfido, P. (2013). Conoscenza è tutela (Knowledge is protection). In A. Antonio Conte & M. Filippa (Eds.), *Patrimoni e siti UNESCO. Memoria, misura e armonia* (pp. 801–808). Roma: Gangemi.

Florio, R. (2006). La rappresentazione per la riqualificazione delle aree di studio. In A. Baculo, A. di Luggo, & R. Florio (Eds.), *I fronti urbani di Napoli. I quartieri degradati e le piazze delle città* (pp. 10–11). Napoli: Electa Napoli.

Florio, R. (2012). *Sul disegno. Riflessioni sul disegno di architettura*. Roma: Officina Edizioni.

Foucault, M. (1971). *L'archeologia del sapere*. Milano: Rizzoli.

Graves, M. (1977). The Necessity of Drawing: Tangible Speculation. *Architectural Design*, 6, 235–236.

Analyzing, Classifying, Safeguarding

Hartanti, N. B., & Martokusumo, W. (2014). Streetscape character as representation of urban identity. Case Study: Bogor. In *Great Asian Streets Symposium*. Singapore: CASA Centre of Advanced Studies in Architecture.

Koolhaas, R. (1994). *Delirious New York. A retroactive Manifesto for Manhattan*. New York: The Monacelli Press.

Labordière, J.-M. (2011). *Façades de Paris*. Éditions Massin.

Laugier, M.-A. (1755). *An essay on architecture; in which Its True Principles are explained, and Invariable Rules proposed, for Directing the Judgment and Forming the Taste of the Gentleman and the Architect, With regard to the Different Kinds of Buildings, the Embellishment of Cities, And the Planning of Gardens*. London: T. Osborne and Shipton.

Lynch, K. (1960). *The Image of the City*. Cambridge, MA: The Technology Press & Harvard University Press.

Maiorano, A.C. (2014). *I fronti urbani del Quartiere Murattiano di Bari*. Un rilievo selettivo del costruito. Ivi

Massari, G. A., Pellegatta, C., & Bonaria, E. (2006). *Rilievo urbano e ambientale*. Milano: Libreria Clup.

Norberg-Schultz, C. (1979). *Genius Loci. Paesaggio, ambiente, architettura*. Milano: Electa.

Petrignani, M. (1981). *Bari, il borgo murattiano*. In *Esproprio, forma e problema della città* (pp. 13–53). Bari: Edizioni Dedalo.

Petrignani, M., & Porsia, F. (1982). *Bari*. Bari: Laterza.

Portoghesi, P. (1968). *L'Ecclettismo a Roma, 1870-1922*. Roma: De Luca.

Purini, F. (2000). *Franco Purini. Le opere, gli scritti, la critica*. Milano: Electa.

Rossi, A. (1995). *L'architettura della Città*. Torino: Città Studi.

Schneider, P. (2007). Disegno: On Drawing out the Archi-texts. *Journal of Architectural Education*, 61(1), 19-22.

Scionti, M. (1990). *I tecnici e l'architettura della città*. *Storia della città. Rivista internazionale di storia urbana e territoriale*. In 51: *Bari moderna 1790-1990* (pp. 73–84). Milano: Electa.

Ugo, V. (2002). *Fondamenti della rappresentazione architettonica*. Bologna: Società Editrice Esculapio.

Venturi, R. (1967). *Complexity and Contradiction in Architecture*. New York: Academic Press.

ENDNOTES

- ¹ A research on the image of the city of Bari is carried out by Valentina Castagnolo, Anna Christiana Maiorano and Maria Franchini.
- ² Then the research has gone on by Gabriele Rossi, Davide Cara and Maria Isa Franchino (2009).
- ³ For more information about the research, see British History Online, accessed October 13, 2017, <http://www.ucl.ac.uk/bartlett/architecture/research/survey-london> and “Survey of London” volume series.

Compilation of References

A.A.V.V. (1978). Los ensanches hacia una definición en *Arquitecturas Bis* n. 14. Barcelona pp 44-48.

AA.VV. (1984). *Misurare la terra: centuriazione e coloni nel mondo romano il caso veneto, Catalogo della mostra*. Modena: Panini.

Achilli, T. (2009). Il teatro dalla comunità al consumo. In *Letteratura del Novecento in Puglia, 1970-2008*. Bari: Progedit.

Acun, F. (2002). A Portrait of the Ottoman Cities. *The Muslim World*, 92(3-4), 255–285. doi:10.1111/j.1478-1913.2002.tb03744.x

Adda, J. (1998). *La vicenda del nuovo paese di Vajont. Urbanistica Informazioni 158*. Roma: Edizioni INU.

Agamben, G. (2006). *Che cos'è un dispositivo?* Rome: Nottetempo.

Akbari, Bell, & Brazel. (2008). Urban heat island basics. *Reducing Urban Heat Islands: Compendium of Strategies*.

Alexander, E. R. (1986). *Approaches to Planning*. Gordon e Breach.

Alexander, C. (2003). *The Nature of the Order. An essay on the art of building and the nature the universe*. Berkeley, CA: Centre for Environmental Structure.

Alexander, C., Ishikawa, S., & Silverstein, M. (1975). *A Pattern language: Towns, Buildings, Construction*. New York, NY: Oxford University Press.

Alexander, C., Neis, H., Anninou, A., & King, I. (1987). *A new theory of urban design*. New York, NY: Oxford University Press.

Alexander, C., Neis, H., Anninou, A., & King, I. (1987). *A New Theory of Urban Design*. New York, NY: Oxford University Press.

Almandoz, A. (Ed.). (2002). *Planning Latin American Capital Cities 1850-1950*. London, New York: Routledge.

Compilation of References

- Ambrosi, A. (2000). Presentazione. In A. Colonna & M. Di Tursi (Eds.), *Architetture dell'Ecllettismo in Puglia nel XIX secolo* (p. ix). Bari: Mario Adda Editore.
- Amoruso, G. (2015). The Image of Historic Urban Landscapes: Representation Codes. In S. Brusaporci (Ed.), *Handbook of Research on Emerging Digital Tools for Architectural Surveying, Modeling, and Representation* (pp. 550–578). Engineering Science Reference (an imprint of IGI Global). doi:10.4018/978-1-4666-8379-2.ch019
- Anceschi, G. (1992). *L'oggetto della raffigurazione*. Milano Etaslibri.
- Anderson, S. (1988). Urban form and society in the big city: A thesis on the semi-autonomy of physical form. In *World cities and the future of the metropolises: Vol. 1. International participations*. Academic Press.
- Angelini, G., & Carlone, G. (2013). *Città e nuovi borghi. Urbanistica dell'Ottocento nel Mezzogiorno italiano*. Bari: Adda editore.
- Angelucci, F. (2013). Fast, Slow, Crossover Railways. Technological Scenario for the Reuse of Abandoned Railways. *Agribusiness Paesaggio & Ambiente*, 16(1), 32–38.
- Angelucci, F. (2015). Heterotopias of Urban In-Betweens Renewing Cities and Rediscovering the Vitality and Resilience of Open Spaces. In *Agribusiness Paesaggio & Ambiente*, 18(1), 32–39.
- Angelucci, F. (2017). *Phenotypic vs. Genotypic. Technological Challenges for Urban Public Space as an Enabling Environment*. Agribusiness Paesaggio e Ambiente.
- Angelucci, F., & Cellucci, C. (2016). The Paradigm of the Healthy City between Permanence and Innovations in Small Cities. Technological Perspectives for the System of Open Urban Spaces. *Techne*, 12, 129–136.
- Angelucci, F., Cellucci, C., Di Sivo, M., & Ladiana, D. (2015). The Measurable and the Real Quality of Life in the City. Urban Regeneration as a Technological Correlation of Resources, Spaces and Inhabitants. *Techne*, 10/2015, 67–76.
- Angelucci, F., Di Sivo, M., & Ladiana, D. (2013). Responsiveness, Adaptability, Transformability: The New Quality Requirements of the Built Environment. *Techne*, 5, 53–59.
- Angrilli, M. (2012). Reti della sostenibilità e città ecologica. *Planum*, 25, 1–6.
- Antonić, B. (2016). How to understand the history of housing planning in modern Serbia to achieve new quality in housing? In C. Hein (Ed.), *The Urban Fabric. Proceedings of 17th IPHS Conference* (pp. 165-174). Delft, The Netherlands: University of Delft. doi:10.7480/iphs.2016.2.1234
- Antonić, B., & Djukić, A. (2016). Urban Transformation of Historic City Centre: Case Study Sremska Mitrovica, Serbia. In *Proceedings of 6th Sustainable Development Symposium - SDS 2016* (pp. 10.1-10.6). Granada, Spain: University of Granada.
- Aricò, N., & Milella, O. (1984). *Riedificare contro la storia*. Rome: Gangemi.

- Arnheim, R. (1977). *The Dynamics of Architectural Form*. Berkeley, CA: University of California Press.
- Arnheim, R. (2011). *Arte e percezione visiva*. Milano: Giacomo Feltrinelli Editore.
- Ascher, F. (2006). *I nuovi principi dell'urbanistica*. Napoli, Italy: Tullio Pironti.
- Ashbee, C. R. (Ed.). (1900). *Survey of London: Volume 1, Bromley-By-Bow*. London: London County Council 1900. Retrieved from British History Online: <http://www.british-history.ac.uk/survey-london/vol1>
- Aymonino, C. (1970). *La Città di Padova: Saggio di analisi urbana*. Roma: Officina Edizioni.
- Aymonino, C. (1970). *Lo studio dei fenomeni urbani*. Roma: Officina Edizioni.
- Aymonino, C. (1975). *Il significato delle città*. Bari: Laterza.
- Aymonino, C., & Rossi, A. (Eds.). (1966). *La città di Padova. Saggio di analisi urbana*. Roma: Officina Edizioni.
- Bagnato, V., & Paris, S. (2012). Bari, città pubblica mediterranea: I nuovi progetti di valorizzazione del patrimonio pubblico. *Techne*, 3, 206–215.
- Bartetzky, A. (2015). *Die gerettete Stadt. Architektur und Stadtentwicklung in Leipzig seit 1989*. Leipzig: Lehmanns.
- Barthes, R. (1997). *L'impero dei segni*. Torino: Einaudi.
- Barucci, C. (2002). *Città nuove*. Rome: Diagonale.
- Basilico, G. (2007). *Architetture, città, visioni: riflessioni sulla fotografia / Gabriele Basilico; a cura di Lissoni A*. Milano: Bruno Mondadori.
- Batty, M. (2016). Evolving a Plan: Design and Planning with Complexity. In *Complexity, Cognition, Urban Planning and Design*. Springer International Publishing.
- Batty, M. (1991). *Cities and fractals: Simulating growth and form*. New York, NY: Springer.
- Belča, D. (1997). *Mala istorija Vršca / Small History of Vršac*. Vršac: Videotehna.
- Bernam, M. (1982). *All that is solid melts into air: the experience of modernity*. Pittsburgh, PA: Penguin.
- Boehm, G. (2009). *Il ritorno delle immagini, in (a cura di) A. Pinotti, A. Somaini, Teorie dell'immagine. Il dibattito contemporaneo*. Milano: Raffaello Cortina Editore.
- Bohigas, O. (1985). Ten Opinions on the Type. *Casabella*, 509-510, 93.
- Borri, D. (1994). Città e 'piano' tra Illuminismo e riforma sociale. In *Storia di Bari. L'Ottocento*.
- Brandi, C. (1963). *Teoria del restauro*. Torino: Einaudi.
- Brown, F. E. (1980). *Cosa: The Making of a Roman Town*. University of Michigan Press.

Compilation of References

- Brown, W. (2013). *Stati murati, sovranità in decline*. Bari: Laterza.
- Bruschi, A. (1983). *Introduzione*. In *Realtà, disegno, forma (Architetture di Alfredo Lambertucci)*. Roma: Edizioni Kappa.
- Buccaro, A. (1995). *Istituzioni e trasformazioni urbane nella Napoli dell'Ottocento*. Naples: Edizioni Scientifiche Italiane.
- Buchanan, C. (1963). *Traffic in Towns*. London: Penguin.
- Bukurov, B. (1973). *Klasifikacija vojvodjanskih gradova / The Classification of Towns in Vojvodina*. Novi Sad: Matica Srpska.
- Busquets, J. (1992). *Barcelona. Evolución urbanística de una ciudad compacta*. Madrid, Spain: Ed. Mapfre.
- Busquets, J. (2014). *The urban evolution of a compact city. AR +D (Applied Research + Design Publishing)*. Barcelona: Harvard University Graduate School of Design.
- Cagnardi, A. (1981). *Belice 1980. Luoghi problemi progetti dodici anni dopo il terremoto*. Venezia: Marsilio.
- Calvino, I. (1977). *Le città invisibili*. Torino: Einaudi.
- Calza Bini, A., & Piacentini, M. (1952). *Il piano regolatore*. In *Bari nel quinquennio 1947-1951*. Bari, Roma: Favia.
- Campione, G. (1988). *Il progetto urbano di Messina*. Roma: Gangemi.
- Caniggia, G., & Maffei, G. (1984). *Composizione Architettonica e Tipologia Edilizia: 2. Il Progetto nell'Edilizia di Base*. Venezia: Marsilio.
- Capel, H. (2002). *La morfologia de las ciudades. Tomo I: Sociedad, cultura y paisaje*. Barcelona, Spain: Ediciones del Serbal.
- Cappuccitti, A. & Piroddi, E. (2004). Morfogenesi dello spazio urbano: profilo di una ricerca. *Urbanistica*, 123, 42-53.
- Cappuccitti, A., & Piroddi, E. (2004). Morfogenesi dello spazio urbano: Profilo di una ricerca. *Urbanistica*, 123, 42-53.
- Cara, D., Rossi, G., & Franchino, M. I. (2009). *Bari vecchia. Progetto per un Atlante iconografico - Caso studio: isolato 57*. Bari: Edizioni Arti Grafiche Favia.
- Cardullo, F. (1993). *La ricostruzione di Messina 1909-1940. L'architettura dei servizi pubblici e la città*. Roma: Officina.
- Carlone, G. (1999). Carlo Afan de Rivera. Un ingegnere alla corte di Napoli. *Urbanistica*, 113, 119-127.
- Carlone, G. (Ed.). (2005). *Il porto di Bari. Progetto città (1855-2015)*. Bari: Adda editore.

Compilation of References

- Carlone, G. (1987). Urbanistica preunitaria in Terra di Bari. In *Storia della Città*. Milan: Electa.
- Carmona, M., Heath, T., Oc, T., & Tiesdell, S. (2003). *Public Places–Urban Spaces. The Dimensions of Urban Design*. Oxford, UK: Architectural Press.
- Carta, M. (2014). *Reimagining Urbanism. Creative, Smart and Green Cities for the Changing Times*. Trento: List.
- Carta, M., Lino, B., & Ronsivalle, D. (Eds.). (2016). *Re-cyclical Urbanism. Visioni, paradigmi e progetto per la metamorfosi circolare*. Trento: Listlab.
- Carta, M. (2014). *Reimagining Urbanism. Creative, Smart and Green Cities for the Changing Times*. Trento: List.
- Castagnoli, F. (1971). *Orthogonal Town Planning in Antiquity*. Cambridge, MA: MIT Press.
- Castagnolo V. (2014). *Analizzare catalogare salvaguardare*. Il disegno per il Borgo murattiano. Ivi
- Castagnolo, V., Franchini, M., & Maiorano, A. C. (2014). Bari Disegno Architetture (BDA_Borgo Murattiano). Archivio visivo (e visionario) della città a 200 anni dalla sua fondazione. In A. Buccaro (Ed.), *Città mediterranee in trasformazione* (pp. 353–364). Napoli: Edizioni Scientifiche Italiane.
- Castagnolo, V., Franchini, M., & Maiorano, A. C. (2014). Bari Disegno Architetture (BDA_Borgo Murattiano). Archivio visivo (e visionario) della città a 200 anni dalla sua fondazione. In A. Buccaro (Ed.), *De Seta, C., Città mediterranee in trasformazione*. Napoli: Edizioni Scientifiche Italiane.
- Castagnolo, V., Franchini, M., & Perfido, P. (2013). Conoscenza è tutela (Knowledge is protection). In A. Antonio Conte & M. Filippa (Eds.), *Patrimoni e siti UNESCO. Memoria, misura e armonia* (pp. 801–808). Roma: Gangemi.
- Castex, J., Depaule, J.-C., & Panerai, P. (1977). *Formes urbaines: de l'ilot a la barre*. Paris: Bordas.
- Čelebija, E. (1979). *Putopisi / Travel books*. Sarajevo: Veselin Masleša.
- Ciorra, P., & Marini, S. (Eds.). (2011). *Re-Cycle. Strategie per l'architettura, la città e il pianeta*. Milano: Electa.
- Ćirković, S. (1968). Srednji vek. In M. Maletić (Ed.), *Vojvodina. Znamenitosti i lepote / Middle Ages: Vojvodina. Sights and Beauties*. Belgrade: Književne Novine.
- Clementi, A. (1997). Infrastrutture. L'ambiguo impero delle reti. In *Attraversamenti. I nuovi territori dello spazio pubblico* (pp. 95-108). Genova: Costa e Nolan.
- Clementi, A. (2010). Interpretare il contesto. In *PPC Piano Progetto Città Context*. Trento: LISTLab.
- Clementi, A. (2010). Strategie per la qualità urbana. In *Zhongshan Programme. Italy / China for the cities* (pp. 18-33). Trento: LISTLab.
- Clementi, A. (2012). Pianificare oggi nel Mezzogiorno. In *Paesaggi interrotti. Territorio e pianificazione nel Mezzogiorno* (pp. 3-36). Roma: Donzelli.

Compilation of References

- Clementi, A. (2014). Green Dragon. Underpinning the Design Concepts. In Scoprire il fiume / Recovering the Jiu Qu River. Urban Renewal Project in Zhongshan (pp. 30-64). Trento: LISTLab.
- Clementi, A. (2016). *Forme imminenti. Città e innovazione urbana*. Babel.
- Ćolić, D. (1966). *Komunalna prošlost Zrenjanina / Communal Past of Zrenjanin*. Zrenjanin.
- Conzen, M. P. (2001). The study of urban form in the United States. *Urban Morphology*, 5, 3–14.
- Conzen, M. R. G. (1969). *Alnwick, Northumberland: A Study in Town Plan Analysis*. London: Institute of British Geographers.
- Conzen, M. R. G. (2004). *Thinking About Urban Form: Papers on Urban Morphology, 1932-1998*. Oxford, UK: Peter Lang.
- Corboz, A. (1998). Un caso limite: la griglia territoriale americana o la negazione dello spazio-substrato. In P. Viganò (Ed.), *Ordine sparso. Saggi sull'arte, il metodo, la città e il territorio* (pp. 239–244). Milan: Franco Angeli.
- Corbusier, L. (1972). *Maniera di pensare l'urbanistica*. Bari: Academic Press.
- Corominas, M. (2002). *Los orígenes del Ensanche de Barcelona Suelo, técnica e iniciativa*. Barcelona, Spain: Editions UPC.
- Crosas, C. (2009). *Variations in Regularity. The El Vedado Project and the Creation of Metropolitan Havana* (Unpublished doctoral dissertation). UPC, Barcelona, Spain.
- Crosas, C. (2009). *Variations on Regularity. The El Vedado Project and the Creation of Metropolitan Havana* (Doctoral dissertation). UPC, Barcelona, Spain..
- Crosas, C. (Ed.). (1999). *El Proyecto de El Vedado-La Habana*. Barcelona: Edicions ETSAB.
- Curcio, G. (2008). *La città del Settecento*. Rome, Bari: Laterza.
- De Carlo, G. (1985). Notes on the Uncontrollable Ascent of Typology. *Casabella*, 509-510, 46–52.
- De Martino, A. (1984). *La nascita delle Intendenze. Problemi dell'amministrazione periferica del Regno di Napoli, 1806-1815*. Naples: Jovene.
- Deleuze, G. (1988). *Le pli. Leibniz et le Baroque*. Paris: Les éditions de Minuit.
- Deleuze, G. (1989). Qu'est-ce qu'un dispositif? In *Michel Foucault philosophe: rencontre internationale* (pp. 185–195). Paris: Le Seuil.
- Desideri, P. (Ed.). (2001). *Ex City. Spazi esterni e reti della nuova metropoli*. Roma: Melteni.
- Dessi, V. (2010). Sostenibilità ambientale vs vivibilità della città compatta? *Techne*, 10, 77–84.
- Di Ciommo, E. (1984). *Bari 1806-1940, Evoluzione del territorio e sviluppo urbanistico*. Milan: F. Angeli.

- Di Girolamo, C. (2014). *Infrastrutture innogenetiche. Spazi catalitici per uno sviluppo urbano sostenibile*. Milano: Maggioli.
- Di Girolamo, C. (2016). *Infrastrutture di contesto*. In *Progettare per il futuro della città. Un laboratorio per Chieti* (pp. 41-43). Macerata: Quodlibet.
- Dioguardi, S. (1932). *Architettura*. Bari: Società Editrice Tipografica.
- Djukić, A. (1998). *Kontinuiteti urbanog razvoja gradova Banata* [Continuities of urban Development of Towns in Banat] (Master's dissertation). Faculty of Architecture, Belgrade, Serbia.
- Djukić, A. (2011). *Očuvanje identiteta glavne ulice vojvođanskog grada u procesu urbane obnove* [Keeping the Identity of the Main Streets in Vojvodinian Towns in the Process of Urban Renewal] (Doctoral dissertation). Faculty of Architecture, Belgrade, Serbia.
- Djukic, A., Roter Blagojevic, M., & Nikolic, M. (2016). Serbian Cultural Territorial Systems First Experiences. In F. Rotondo, F. Selicato, V. Marin, & J. Lopez Galdeano (Eds.), *Cultural Territorial Systems - Landscape and Cultural Heritage as a Key to Sustainable and Local Development in Eastern Europe* (pp. 265–284). Berlin: Springer.
- Djukic, A., & Stupar, A. (2009). Unplanned settlements, (un)expected problems: 'green' solutions for low carbon Serbia. In *Proceedings of 45th ISOCARP Congress - selected papers* (pp. 1–9). Porto, Portugal: ISOCARP/AIU. Retrieved from http://www.isocarp.net/data/case_studies/1388.pdf
- Docci, M. (2006). Introduzione. In *Metodologie innovative integrate per il rilevamento dell'architettura e dell'ambiente, Ricerca COFIN 2002*. Roma: Gangemi Editore.
- Donolo, C. (2012). Il planning dell'improbabile. *Crios*, 1(2), 9–23.
- Dragojević, M. (2008). Contesting Ethnicity: Emerging Regional Identity in Vojvodina. *Studies in Ethnicity and Nationalism*, 8(2), 290–316. doi:10.1111/j.1754-9469.2008.00016.x
- Dufour, L., & Raymond, H. (1993). *Dalla città ideale alla città reale. La ricostruzione di Avola 1693-1695*. Siracusa: Ediprint.
- Dunia, M. (2008). *La città reticolare e il progetto moderno*. Città Studi.
- Elander, I. (1997). Between Centralism and Localism: On the Development of Local Self-Government in Postsocialist Europe. *Environment and Planning, C, Government & Policy*, 15(2), 146–150. doi:10.1068/c150143
- Eran, B. J., & Gordon, D. (2000). Hexagonal Planning in Theory and Practice. *Journal of Urban Design*, 5(3).
- Estapé, F. (1992) Dues dècades d'impuls. In AAVV (Ed.), *Treballs sobre Cerdà i el seu exemple/ Readings on Cerdà and the extension plan of Barcelona*. Barcelona, Spain: LUB. Ajuntament de Barcelona. MOPU Direcció General d'Acció Territorial i Urbanisme.
- Farinelli, F. (1992). *I segni del mondo. Immagine cartografica e discorso geografico in età moderna*. Scandicci: La Nuova Italia.

Compilation of References

- Farinelli, F. (2003). *Geografia*. Turin: Einaudi.
- Farinelli, F. (2009). *La crisi della ragione cartografica*. Turin: Einaudi.
- Fasolino, I. (2012). Il futuro sostenibile dei sistemi urbani. In F. D. Moccia (Ed.), *Città senza petrolio*. Napoli: Edizioni Scientifiche Italiane.
- Feliu, R., & Gabancho, P. (2003). *L'Eixample des de dins*. Barcelona, Spain: Ajuntament de Barcelona.
- Fera, G. (1991). *La città antisismica*. Roma: Gangemi.
- Ferrari, M. (2005). *Il progetto urbano in Italia 1940-1990*. Firenze: Alinea.
- Fiore, V. (1961). Palazzo della S.G.P.E. a Bari. L'architettura cronache e storia, 7, 67.
- Fishman, R. (1987). *Bourgeois Utopias. The Rise and Fall of Suburbia*. New York: Basic Books.
- Fitch, J. M. (1972). *American Building 2. The Environmental Forces that Shapes it*. Indianapolis, IN: Houghton Mifflin.
- Florio, R. (2006). La rappresentazione per la riqualificazione delle aree di studio. In A. Baculo, A. di Luggo, & R. Florio (Eds.), *I fronti urbani di Napoli. I quartieri degradati e le piazze delle città* (pp. 10–11). Napoli: Electa Napoli.
- Florio, R. (2012). *Sul disegno. Riflessioni sul disegno di architettura*. Roma: Officina Edizioni.
- Fodor, P., & Dávid, G. (2000). *Ottomans, Hungarians, and Habsburgs in Central Europe: The Military Confines in the Era of Ottoman Conquest*. Leiden: BRILL.
- Foucalut, M. (1984). Des espaces autres. *Architecture, Mouvement, Continuité*, 5, 46–49.
- Foucault, M. (1967). Le parole e le cose: un'archeologia delle scienze umane. Milano: Rizzoli.
- Foucault, M. (1985-86). Spazi altri. I principi dell'eterotopia. *Lotus International*, 48-49, 17.
- Foucault, M. (1971). *L'archeologia del sapere*. Milano: Rizzoli.
- Foucault, M. (1977). Le jeu de Michel Foucault. In *Dits et écrits II. 1976-1988* (pp. 298–329). Paris: Gallimard.
- Franco, D. (1996). *Lucchi Basili, Lorenza, and Piroddi, Elio. L'ordine nascosto dell'organizzazione urbana: un'applicazione della geometria frattale e della teoria dei sistemi auto-organizzati alla dimensione spaziale degli insediamenti*. Franco Angeli.
- Friedman, J. (1987). *Planning in the Public Domain. From Knowledge to Action*. Princeton, NJ: Princeton University Press.
- Friedmann, J. (1987). *Planning in the public domain: from Knowledge to action*. Dedalo.
- Gaeta, L., Janin Rivolin, U., & Mazza, L. (2013). *Governo del Territorio e Pianificazione Spaziale*. Città Studi.

- Gaeta, L. (2013). La pianificazione spaziale tra mito e storia. In *Modelli e regole spaziali. Liber amicorum per Luigi Mazza* (pp. 47–68). Milan: Franco Angeli.
- Galanti, A. (2009). *Forma urbana, sostenibilità, pianificazione*. Rome, Italy: Aracne Editrice.
- Gans, H. J. (1962). *The urban villagers*. New York: Free Press.
- Gausa, M. (2003). Metapolis (multicity). In *The Metapolis Dictionary of Advanced Architecture. City, Technology and Society in the Information Age* (pp. 430–431). Barcelona: ACTAR.
- Gauthier, P. (2006). Mapping urban morphology: A classification scheme for interpreting contributions to the study of urban form. *Urban Morphology*, 10, 41–50.
- Gauthier, P., & Gilliland, J. (2005). The study of urban form in Canada. *Urban Morphology*, 10(1), 51–66.
- Giallocosta, G. (2006). L'approccio sistemico nella gestione di fenomenologie interscalari. In *Architettura e Approccio Sistemico* (pp. 119-126). Milano: Polimetrica International Scientific Publisher.
- Gilmartin, G. (1995). *Shaping the City*. New York: Clarkson Potter.
- Graves, M. (1977). The Necessity of Drawing: Tangible Speculation. *Architectural Design*, 6, 235–236.
- Greenfield, A. (2013). *Against the smart city*. New York: Kindle Edition.
- Guattari, F. (1989). *Le trois écologies*. Paris: Edition Galilee.
- Guidoni, E. (1978). Strada e isolato dall'alto Medioevo al Settecento. *Lotus International*, 19, 5-19.
- Gutkind, E. A. (1972). International history of city development. Vol. VII - Urban development in East-Central Europe: Poland, Czechoslovakia and Hungary. New York: The Free Press.
- Hall, P. (1992). *Urban and Regional Planning*. London: Routledge.
- Hamilton, I., Dimitrovska Andrews, K., & Pichler-Milanovic, N. (2005). Introduction. In I. Hamilton, K. Dimitrovska Andrews, & N. Pichler-Milanovic (Eds.), *Transformation of cities in central and Eastern Europe: Towards globalization* (pp. 3–21). Tokyo: UN University Press.
- Hardoy, J. E. (1969). *Dos Mil Años de Urbanización en América Latina*. In *La Urbanización en América Latina*. Buenos Aires: Editorial del Instituto.
- Hartanti, N. B., & Martokusumo, W. (2014). Streetscape character as representation of urban identity. Case Study: Bogor. In *Great Asian Streets Symposium*. Singapore: CASA Centre of Advanced Studies in Architecture.
- Hirt, S., & Stanilov, K. (2014). *Twenty Years of Transition: The Evolution of Urban Planning in Eastern Europe and the Former Soviet Union, 1989-2009*. Nairobi: UN Habitat.

Compilation of References

- Ivić, A. (1929). *Istorija Srba u Vojvodini: od najstarijih vremena do osnivanja Potisko-pomoriške vojne granice (1703)* [History of Serbs in Vojvodina: from oldest times to the establishment of Potisje-pomoršje military frontier]. Novi Sad: Academic Press.
- Jacobs, J. (1961). *Vita e morte delle grandi città*. Turin, Italy: Einaudi.
- Jenne, E. (2004). A Bargaining Theory of Minority Demands: Explaining the Dog that Did not Bite in 1990s Yugoslavia. *International Studies Quarterly*, 48(4), 729–754. doi:10.1111/j.0020-8833.2004.00323.x
- Jeremić, M. (2012). Sirmium. In R. Bagnall, K. Brodersen, C. Champion & A. Erskine (Eds.), *The Encyclopedia of Ancient History*. New York, NY: Wiley. doi:10.1002/9781444338386.wbeah16136
- Judith, I., & David, B. (2010). *Planning with complexity: An introduction to collaborative rationality for public policy*. Routledge.
- Kocić, D. (Ed.). (1987). *Sremskomitrovačka hronika* [Chronicle of Sremska Mitrovica]. Novi Sad: Institut za istoriju.
- Kojić, B. (1970). *Varošice u Srbiji XIX veka* [Little Towns in Serbia in 19th century]. Belgrade: Gradjevinska knjiga.
- Kojić, B. (1961). *Naselja u Vojvodini: geneza, sadržina I urbanistička struktura prema arhivskim i tehničkim podacima* [Settlements in Vojvodina: Genesis, Content and Urban Structure according Archive and Technical Data]. Belgrade: Serbian Academy of Sciences and Arts.
- Kolakowski, L. (1966). *Filozofia pozytywistyczna*. Warsaw: Państwowe Wydawnictwo Naukowe.
- Koolhaas, R. (1978). *Delirious New York*. New York, NY: Oxford University Press.
- Koolhaas, R. (1994). *Delirious New York. A retroactive Manifesto for Manhattan*. New York: The Monacelli Press.
- Kostof, S. (1991). *The City Shaped: Urban Patterns and Meanings through History*. London: Bulfinch Press.
- Krestić, V. (2003). *Iz prošlosti Srema, Bačke i Banata* [From the Past of Srem, Backa and Banat]. Belgrade: Srpska Književna Zadruga.
- Krier, L. (1978). Analisi e progetto dell'isolato urbano tradizionale. *Lotus*, 19.
- Krier, L. (1978). Revisione dell'isolato del XIX secolo. *Lotus International*, 19, 33-37.
- Krier, R. (1979). *Urban Space*. New York, NY: Rizzoli.
- Kropf, K. (1996). Urban Tissue and the Character of Towns. *Urban Design International*, 1(3), 247–263. doi:10.1057/udi.1996.32
- Kropf, K. (2009). Aspects of urban form. *Urban Morphology*, 13(2), 105–120.

- Labordière, J.-M. (2011). *Façades de Paris*. Éditions Massin.
- Lamb, C. (1904). City plan. *The Craftsman*, 6.
- Landi, G. (1959). *Istituzioni di diritto pubblico nel Regno delle Due Sicilie* (Vol. 2). Milan: Giuffrè.
- Latouche, S. (2012). *Limite*. Torino: Bollati Boringhieri.
- Laugier, M. A. (1753). *Essai sur l'Architecture*. Paris: Duchesne.
- Laugier, M.-A. (1755). *An essay on architecture; in which Its True Principles are explained, and Invariable Rules proposed, for Directing the Judgment and Forming the Taste of the Gentleman and the Architect, With regard to the Different Kinds of Buildings, the Embellishment of Cities, And the Planning of Gardens*. London: T. Osborne and Shipton.
- Leatherbarrow, D., Mostafavi, M. (2002). *Surface Architecture*. Cambridge, MA: The MIT Press.
- Lefebvre, H. (1968). *Le Droit à la ville* (2nd ed.). Paris: Anthropos.
- Lemajić, N. (2008). *Sremska Mitrovica: Grad vredniji od carske kćeri* [Sremska Mitrovica: City more Valuable than Emperor Daughter]. Sremska Mitrovica: Istorijski arhiv.
- Levy, A. (1999). Urban morphology and the problem of the modern urban fabric: Some questions for research. *Urban Morphology*, 3(2), 79–85.
- Levy, A. (2005). New orientations in urban morphology. *Urban Morphology*, 9, 50–53.
- Lughi, G. (2015). Impatto culturale dei media digitali nell'arte urbana. In F. De Biase (Ed.), *I pubblici della cultura. Audience development, audience engagement*. Milan, Italy: Frano Angeli.
- Luque Valdívila, J. (2000). *Constructores de la ciudad contemporánea. Aproximación disciplinar a través de los textos*. Pamplona, Spain: Universidad de Navarra. Cie Inversiones Editoriales Dossat.
- Lynch, K. (1968). *The Possible City*. In *Environment and Policy. The Next Fifty Years*. Bloomington, IN: Indiana University Press.
- Lynch, K. (1990). *Progettare la città. La qualità della forma urbana*. Etas libri.
- Lynch, K. (1960). *The image of the city* (Vol. 11). MIT Press.
- Lynch, K. (1960). *The Image of the City*. Massachusetts Institute of Technology.
- Lynch, K. (1981). *A theory of good city form*. Cambridge, MA: The MIT Press.
- Lynch, K. (1984). *Good City Form*. Cambridge, MA: MIT Press.
- Lynch, K. (2006). *L'immagine della città*. Venezia, Italy: Marsilio Editori.
- Madanipour, A. (1996). *Design of urban space: An inquiry into a socio-spatial process*. New York: John Wiley & Sons.
- Magnaghi, A. (2010). Scenari strategici e progetto locale: Verso la bioregione urbana. *Arquitectonics*, 19-20, 67–99.

Compilation of References

- Magris, C. (1986). *Danubio*. Milano: Garzanti.
- Maiorano, A.C. (2014). *I fronti urbani del Quartiere Murattiano di Bari*. Un rilievo selettivo del costruito. Ivi
- Maksimović, B. (1948). *Razvoj gradograditeljstva - od starog veka do sadašnjosti* [Development of Urbanism – from Ancient Times to Present]. Belgrade: Naučna knjiga.
- Maletić, M. (1968). *Vojvodina: Znamenitosti i lepote* [Vojvodina: Landmarks and Beauties]. Belgrade: Književne Novine.
- Mangin, D., & Panerai, P. (1999). *Projet urbain*. Marseille, France: Editions Parenthèses.
- Maniaci, A., & Stellino, A. (2005). La Calabria e il terremoto del 1783. Memorie dei danni e disegno delle ricostruzioni. *Storia Urbana*, 106-7, 89–110.
- Maretto, P. (1975). *Edificazioni tardo-settecentesche nella Calabria Meridionale*. Florence: Teorema.
- Marino, A., & Milella, O. (1988). *La catastrofe celebrata. Architettura e città a Reggio dopo il 1908*. Roma: Gangemi.
- Marinoni, G. (2006). *Infrastrutture nel progetto urbano*. Milan, Italy: Franco Angeli.
- Martino, P. (1984). *Quelli di Bari del Sessantadue. Storia della rivolta degli edili*. Bari: Edllico.
- Marzot, N. (2002). The study of urban form in Italy. *Urban Morphology*, 6, 59–73.
- Massafra, A. (Ed.). (1988). *Il Mezzogiorno preunitario. Economia, società e istituzioni*. Bari: Dedalo.
- Massari, G. A., Pellegatta, C., & Bonaria, E. (2006). *Rilievo urbano e ambientale*. Milano: Libreria Clup.
- Mazza, L. (Ed.). (1988). World cities and the future of the metropolises: Vol. 1. International participations. Academic Press.
- Mazza, L. (2008). Ippodamo e il piano. *Territorio*, 47, 88–103.
- Medović, P. (2001). *Praistorija na tlu Vojvodine* [Prehistory on the land of Vojvodina]. Novi Sad: Prometej.
- Mehaffy, M. W. (2008). Generative methods in urban design: A progress assessment. *Journal of Urbanism*, 1(1), 57–75. doi:10.1080/17549170801903678
- Melville, B. (1987). *Moby Dick o la balena*. Milano: Adelphi
- Mikeler, S. (1925). *Istoriija grada Pančeva* [History of the City of Pančevo]. Pančevo: Napredak.
- Mitev, P., Parvev, I., Baramova, M., & Raicheva, V. (Eds.). (2010). *Empires and Peninsulas: Southeastern Europe between Karlowitz and the Peace of Adrianople, 1699-1829*. Münster: LIT Verlag.

- Morini, M. (1963). *Atlante di storia dell'urbanistica*. Milano: Ulrico Hoepli.
- Morris, A. E. J. (1994). *History of urban form: before the industrial revolutions*. London, UK: Routledge.
- Moudon, A. (1994). Getting to Know the Built Landscape: Typomorphology. In A. Franck & L. Schneekloth (Eds.), *Ordering Space: Types in Architecture and Design* (pp. 289–311). New York: Van Nostrand Reinhold.
- Moudon, A. (2000). Proof of goodness: A substantive basis for new urbanism. *Places, 13*(2), 38–43.
- Moudon, A. V. (1997). Urban morphology as an emerging interdisciplinary field. *Urban Morphology, 1*, 3–10.
- Muratori, S. (1960). Studi per una operante storia urbana di Venezia. I: Quadro generale dalle origini agli sviluppi attuali. Roma: Istituto Poligrafico dello Stato.
- Murphey, R. (2004). Ottoman Expansion, 1451–1556 II. Dynastic Interest and International Power Status, 1503–56. In G. Mortimer (Ed.), *Early Modern Military History, 1450–1815* (pp. 60–80). London: Palgrave Macmillan UK; doi:10.1057/9780230523982_5
- Nedović-Budić, Z., & Cavrić, B. (2006). Waves of planning: A framework for studying the evolution of planning systems and empirical insights from Serbia and Montenegro. *Planning Perspectives, 21*(4), 393–425. doi:10.1080/02665430600892146
- Nicola, S. (2013). *La città di Murat fra l'orgoglio e il pregiudizio*. “Ha 200 anni e li dimostra tutti”. Retrieved from <https://occhisullacultura.wordpress.com/piazza-grande/>
- Nicolin, P. (1983). *Dopo il terremoto. After the earthquake*. Electa Periodici.
- Norberg-Schultz, C. (1979). *Genius Loci. Paesaggio, ambiente, architettura*. Milano: Electa.
- Norberg-Schulz, C. (1979). *Genius Loci. Towards a Phenomenology of Architecture*. New York: Rizzoli.
- Obradović, T., & Mitković, P. (2012). The Development of Urban Legislation in Serbia and England. *Facta Universitatis Series: Architecture and Civil Engineering, 10*, 315–332. doi:10.2298/FUACE1203315O
- Ove ARUP and Partners & Rockefeller Foundation. (2015). *City Resilience Framework*. London, UK: ARUP Publishing and The Rockefeller Foundation.
- Panerai, P., Castex, J., Depaule, J.-C., & Samuels, I. (2004). *Urban Forms: The Death and Life of the Urban Block*. New York, NY: Architectural Press.
- Panerai, P., Depaule, J., & Demorgon, M. (1999). *Analyse Urbaine*. Marseille, France: Editions Parenthèses.
- Papa Francesco. (2015) *Laudato Si'*. Roma: Edizioni Piemme.
- Papadia, E. (2005). *La Rinascente*. Bologna: Il Mulino.

Compilation of References

- Passaro, A., & Francese, D. (2015). Rigenerazione urbana e bioregionalismo. *Techne*, 10, 249–257.
- Pavia, R. (2015). Il passo della città. Temi per la metropoli future. Roma: Donzelli Editore.
- Pavia, R. (1994). *L'idea di città*. Milan: Franco Angeli.
- Pavia, R. (2002). *Babele. La città della dispersione*. Rome: Meltemi.
- Petitti, P. (1856). Repertorio Amministrativo (Vol. 3). Naples: Academic Press.
- Petovar, K. (2003). *Urbana sociologija: Naši gradovi između države i građanina* [Urban Sociology: Our Cities between State and Citizens]. Belgrade: Geografski fakultet, Arhitektonski fakultet & IAUS.
- Petrignani, M., & Porsia, F. (1982). *Bari*. Bari: Laterza.
- Petrignani, M., & Porsia, F. (1982). *Le città nella storia d'Italia*. Bari: Bari: Editori Laterza.
- Petrignani, M. (1981). *Bari, il borgo murattiano. Esproprio, forma e problema della città*. Bari: Dedalo.
- Petrignani, M. (1981). *Bari, il borgo murattiano*. In *Esproprio, forma e problema della città* (pp. 13–53). Bari: Edizioni Dedalo.
- Petrović, M. (2005). *Cities after socialism as a research issue*. Retrieved from London School of economics and political science: <http://eprints.lse.ac.uk/23378/>
- Petrović, M. (2009). *Transformacija gradova: Ka depolitizaciji urbanog pitanja* [Transformation of Cities: Towards the De-Politicization of the Urban Question]. Belgrade: Institut za sociološka istraživanja.
- Piccioni, L. (2001). Città e reti insediative nel Mezzogiorno di età moderna. In *Scelte pubbliche, strategie private e sviluppo economico in Calabria* (pp. 217-235). Soveria Mannelli: Rubbettino.
- Pinon, P. (2008). The Ottoman Cities of the Balkans. In S. Jayyusi, R. Holod, A. Petruccioli, & A. Raymond (Eds.), *The City in the Islamic World* (Vols. 1–2). pp. 141–158). Leiden: Brill. doi:10.1163/ej.9789004162402.i-1500.41
- Piroddi, E. (1999). *Le regole della ricomposizione urbana*. Milano: Franco Angeli.
- Placanica, A. (1982). *L'Iliade funesta. Storia del terremoto calabro siculo del 1783*. Rome: Casa del libro.
- Placanica, A. (1985). *Il filosofo e la catastrofe. Un terremoto del Settecento*. Turin: Einaudi.
- Polić, D., & Stupar, A. (2015). Urban Heritage Reconsidered: Redefining the Planning Approach to Historical Areas of Novi Sad. *Spatium (Belgrade)*, 33(33), 92–99. doi:10.2298/SPAT1533092P
- Ponten, J. (1925). *Architektur die nicht gebaut wurde*. Stuttgart, Germany: Deutsche Verlag-Anstalt.
- Popov, Č. (1993). *Autonomija Vojvodine – Srpskopitanje* [Autonomy of Vojvodina – The Serbian Question]. Sremski Karlovci: Krovovi.

- Popović, D. (1957). *Srbi u Vojvodini* [Serbs in Vojvodina]. Novi Sad: Matica srpska.
- Portoghesi, P. (1968). *L'Eclettismo a Roma, 1870-1922*. Roma: De Luca.
- Portugali, J. (2016). What makes cities complex? In *Complexity, Cognition, Urban Planning and Design*. Springer International Publishing. doi:10.1007/978-3-319-32653-5_1
- Portugali, J et al. (Eds.). (2012). *Complexity theories of cities have come of age: an overview with implications to urban planning and design*. Springer Science & Business Media. doi: 10.1007/978-3-642-24544-2
- Principe, I. (1976). *Città nuove in Calabria nel tardo Settecento*. Chiaravalle Centrale: Emme effe.
- Purini, F. (1996). *Una lezione sul disegno*. Roma: Gangemi.
- Purini, F. (2000). *Franco Purini. Le opere, gli scritti, la critica*. Milano: Electa.
- Pušić, Lj. (1987). *Urbanistički razvoj gradova u Vojvodini u 19. i prvoj polovini 20. veka* [Urban Development of Cities in Vojvodina in 19th and the first half of 20th Century]. Novi Sad: Matica Srpska.
- Quétel, C. (2012). *Muri. Un'altra storia fatta dagli uomini*. Viterbo: Bollati Boringhieri.
- Racine, J. B. (1993). *La ville entre Dieu et les hommes*. Paris: Anthropos.
- Rajkov, M. (1968). *Istorija Grada Kikinde do 1918. godine* [History of the Town of Kikinda till 1918]. Kikinda: Istorijski arhiv.
- Reale, L. (Ed.). (2012). *La città compatta: sperimentazioni contemporanee sull'isolato urbano europeo*. Gangemi Editore spa.
- Reale, L. (2010). *La città compatta. Sperimentazioni contemporanee sull'isolato urbano europeo*. Rome, Italy: Gangemi Editore.
- Reps, J. W. (1998). *Bird's Eye Views', Historic Lithographs of North American Cities*. Princeton Architectural Presscop.
- Resilience Alliance. (2007). *Urban Resilience Research Prospectus. A Resilience Alliance Initiative for Transitioning Urban Systems towards Sustainable Futures*. Canberra: CSIRO Publishing.
- Rigillo, M. (2016). Green Infrastructures and Ecosystem Services in urban areas: Research perspectives in environmental design. *Techne, 11*, 59–65.
- Rizzi, V. (1977). *Icosiddetti Statuti Murattiani per la città di Bari*. Bari: Editrice Leonardo da Vinci.
- Romano, M. (1981). Il Leit-motiv della contrattazione politica nel piano comprensoriale di Venezia. *Urbanistica, 71*.
- Romano, M. (2008). *La città come opera d'arte*. Torino: Einaudi.
- Romano, M. (2008). Le città di fondazione dopo il 1783. In *Touring Club Italiano, Piccole città, borghi e villaggio – Sud* (pp. 214–219). Milan: TCI.

Compilation of References

- Rosa, G. (Ed.). (1983). *Realtà, disegno, forma (Architetture di Alfredo Lambertucci)*. Roma: Edizioni Kappa.
- Rossa, W. (2010). "Il piano per Lisbona dopo il terremoto del 1755." *Terremoti e ricostruzioni tra XVII e XVIII secolo*. Soprintendenza Beni Culturali e Ambientali di Siracusa.
- Rossi, A. (1966). *L'Architettura della città*. Venezia. Padova: Marsilio.
- Rossi, A. (1978). *L'architettura della città*. Milano: CLUP.
- Rossi, A. (1995). *L'architettura della Città*. Torino: Città Studi.
- Rotondo, F. (2003). Morfologia e struttura urbana. In Bari. *Morfogenesi dello spazio urbano* (pp. 67-93). Bari: Adda Editore.
- Rotondo, F., Camarda, D., & Selicato, F. (2015). Strategies for dealing with urban shrinkage: Issues and scenarios in Taranto. *European Planning Studies*, 23(1).
- Rueda, S. (2007). *Barcelona, ciudad mediterranea, compacta y compleja*. Barcelona, Spain: Ayuntamiento de Barcelona.
- Rykwert, J. (2002). *L'idea di città*. Milano: Adelphi.
- Rykwert, J. (1999). *The Idea of a Town: The Anthropology of Urban Form in Rome, Italy, and The Ancient World*. Cambridge, MA: MIT Press.
- Sabaté Bel, J. (2014). Las medidas de los trazados ortogonales. *QRU: Quaderns de Recerca en Urbanisme*, 4, 58–83.
- Saggio, A. (1996). *Opere di Alfredo Lambertucci*. Parametro, 212.
- Sala, N., & Cappellato, G. (2004). *Architetture della complessità: la geometria frattale tra arte, architettura e territorio* (Vol. 38). FrancoAngeli.
- Salat, S. (2011). *Cities and Forms: on sustainable urbanism*. Paris: Editions Hermann.
- Salat, S. (2011). *Cities and Forms: On Sustainable Urbanism*. Paris: Hermann.
- Salvemini, B. (1994). La città del negozio. Mercato, identità, poteri. In *Storia di Bari. L. Ottocento*.
- Sanfilippo, E. D., & La Greca, P. (Eds.). (1995). *Planning and design in seismic risk areas*. Roma: Gangemi.
- Sarconi, M. (1784). *Istoria de Fenomeni del Tremoto avvenuto nelle Calabrie, e nel Valdemone nell'anno 1783. Atlante iconografico*. Napoli: Giuseppe Campo Impressore.
- Sassen, S. (1991). *The global city*. Princeton, NJ: Princeton University Press.
- Schiaffonati, F. (2016). The territory of infrastructures. *Techne*, 11, 12–21.
- Schiaffonati, F., Mussinelli, E., & Gambaro, M. (2011). Tecnologia dell'architettura per la progettazione ambientale. *Techne*, 1, 48–53.

- Schimtt, C. (1991). *Il nomos della terra*. Milan: Adelphi.
- Schneider, P. (2007). Disegno: On Drawing out the Archi-texts. *Journal of Architectural Education*, 61(1), 19-22.
- Scionti, M. (1997). L'immagine della città. Architettura e urbanistica nella Bari del Novecento. In *Storia di Bari. Il Novecento*. Roma-Bari: Laterza.
- Scionti, M. (1990). *I tecnici e l'architettura della città. Storia della città. Rivista internazionale di storia urbana e territoriale*. In 51: *Bari moderna 1790-1990* (pp. 73–84). Milano: Electa.
- Scionti, M. (1997). L'immagine della città. Architettura e urbanistica. In *Storia di Bari. Il Novecento*. Roma, Bari: Laterza.
- Secchi B. (2008). Trascrizione dell'intervento "Le forme della città" al primo Festival CittàTerritorioFestival, Ferrara, 17 aprile 2008.
- Secchi, B. (1999). Fisiognomica della domanda. In *Infrastrutture e progettazione del territorio* (pp. 43-52). Pescara: Fratelli Palombi Editore.
- Secchi, B. (Ed.). (2010). *On Mobility: infrastrutture per la mobilità e costruzione del territorio metropolitano: linee guida per un per un progetto integrato*. Venezia: Marsilio.
- Secchi, B. (2005), *La città del ventesimo secolo*. Laterza.
- Secchi, B. (2000). *Prima lezione di urbanistica*. Bari: Laterza.
- Selicato, F. (Ed.). (2003). *Bari. Morfogenesi dello spazio urbano*. Bari: Adda Editore.
- Settis, S. (2010). *Paesaggio Costituzione Cemento*. Torino: Einaudi.
- Sica, P. (1979). *Storia dell'urbanistica. Il Settecento*. Rome, Bari: Laterza.
- Sica, P. (1980). *Storia dell'Urbanistica. L'Ottocento*. Rome, Bari: Laterza.
- Sica, P. (1981). *Historia del Urbanismo. El sigol XIX* (Vol. 1). Madrid, Spain: Instituto de Estudios de la Administración Local.
- Sica, P. (1981). *Historia del Urbanismo. In El siglo XIX* (Vol. 1). Madrid: Instituto de Estudios de la Administración Local.
- Sicari, C. (2008). Editoriale. *Calabria Sconosciuta*, 119, 5–6.
- Signorile, N. (2004). *Occhi sulla città. Architetti e architetture a Bari*. Roma: Laterza.
- Signorile, N., & Gismondi, F. P. (2009). *Atlante '900 per la tutela dell'architettura contemporanea a Bari*. Roma: Laterza.
- Simmel, G. (1989). *Lo spazio e gli ordinamenti spaziali della società*. in *Sociologia* (p. 582). Milano: Edizioni di Comunità.

Compilation of References

- Simonović, Đ., & Ribar, M. (1993). *Uređenje seoskih teritorija i naselja [The organisation of Rural Territories and Settlements]*. Belgrade: IBI.
- Solà Morales, M. (1978). Verso una definizione Analisi delle espansioni urbane dell'800. *Lotus International*, 19, 28-29.
- Solà Morales, M. (1978). Querido Leon, porqué 22x22? *Arquitecturas Bis*, 20, 7–12.
- Solà-Morales, M. (2010). Cerdà/Ensanche. Barcelona, Spain: Ed. Crosas, C., LUB UPC.
- Solà-Morales, M. (2010). Cerdà-Ensanche. Barcelona: LUB-ETSAB.
- Solà-Morales, M. (1994). *Territori, idea, normativa, traçat. El pla Cerdà de Barcelona 1855-1993. Visions urbanes Europa 1870-1993. CCCB* (pp. 33–35). Barcelona: Electa.
- Soria Puig, A. (1992). El Projecte i la seva circumnància. In Cerdà i seu Eixample. Barcelona, Spain: Ajuntament of Barcelona MOPU.
- Spagnoli, L. (1975). *Architettura e urbanistica nella Repubblica democratica tedesca*. Bologna: Cappelli.
- Stanilov, K. (2007). Taking stock of post-socialist urban development: A recapitulation. In K. Stanilov (Ed.), *The Post-Socialist City* (pp. 3-17). Dordrecht: Springer. doi:10.1007/978-1-4020-6053-3_1
- Stanojlović, A. (1938). *Petrograd (Zrenjanin)*. Petrograd: Tolicki-Martinov.
- Stupar, A. (2015). Cold War vs. Architectural Exchange: Belgrade beyond the confines? *Urban History*, 42(04), 662–645. doi:10.1017/S0963926815000528
- Taleb, N. N. (2008). *Il Cigno nero. Come l'improbabile governa la nostra vita*. Milano: Il Saggiatore.
- Terán, F. (1978). *Planeamiento Urbano en la España Contemporánea. Historia de un proceso imposible*. Barcelona, Spain: Editorial Gustavo Gili.
- Terán, F. (1997). *La Ciudad Hispanoamericana. El Sueño de un Orden*. Madrid: Exhibition Catalogue Cehopu-Cedex-Ministerio de Fomento.
- Tira, M. (1997). *Pianificare la città sicura*. Roma: Dedalo.
- Torres Capell, M. (1994). *La Formación de la Urbanística Metropolitana de Barcelona*. Barcelona, Spain: Ajuntament de Barcelona.
- Townsend, A. M. (2014). *Smart cities: big data, civic hackers and the quest for a new utopia*. New York: WW Norton & Co.
- Traub, J. (2004). *The Devil's Playground: A Century of Pleasure and Profit in Times Square*. New York, NY: Random House.
- Trebbi, G. (1978). *La ricostruzione di una città. Berlino 1945-1975*. Milano: Mazzotta.

- Ugo, V. (2002). *Fondamenti della rappresentazione architettonica*. Bologna: Società Editrice Esculapio.
- Unwin, R. (1909). *Town planning in practice: An introduction to the art of designing cities and suburbs*. TF Unwin.
- Valensise, F. (2003). *Dall'edilizia all'urbanistica. La ricostruzione in Calabria alla fine del Settecento*. Rome: Gangemi.
- Vattano, S. (2013). Esperienze europee e italiane Smart Cities: Un modello per la pianificazione smart del costruito. *Techne*, 5, 110–116.
- Venturi, R. (1967). *Complexity and Contradiction in Architecture*. New York: Academic Press.
- Vincenti, M. (2010). *L'architettura del parco nel disegno della città: l'idea dell'arcipelago come strategia di definizione degli spazi aperti e dispositivo di riconfigurazione della forma urbana*. Alinea Editrice.
- Vivenzio, G. (1993). *Istoria de' tremuoti*. Napoli: Giuditta.
- Vojvođanska sekcija Udruženja jugoslovenskih inženjera i arhitekata – VSUJIA. (1924). *Vojvodina*. Novi Sad: VSUJIA.
- Vujošević, M. (2002). *Novije promene u teoriji i praksi planiranja na Zapadu i njihove pouke za planiranje u Srbiji/Jugoslaviji [New Changes in Theory and Practice in the West and Their Lessons for Planning in Serbia/Yugoslavia]*. Belgrade: IAUS.
- Walker, B., Holling, C. S., Carpenter, S., & Kilzig, A. (2004). Resilience, Adaptability and Transformability in Social-ecological Systems. *Ecology and Society*, 9(2).
- Whitehand, J. W. R. (1977). The Basis for an Historico-geographical Theory of Urban Form. *Transactions of the Institute of British Geographers*, 2(3), 400–416. doi:10.2307/621839
- Whitehand, J. W. R. (1981). Background to the urban morphogenetic tradition. In J. W. R. Whitehand (Ed.), *The Urban Landscape: Historical Development and Management* (pp. 1–24). London: Academic Press.
- Whitehand, J. W. R. (2001). British urban morphology: The Conzenian tradition. *Urban Morphology*, 5, 103–109.
- Whitehand, J. W. R. (2012). Issues in urban morphology. *Urban Morphology*, 16(1), 55–65.
- Whitehand, J. W. R. (2015). Seeking an integrated approach to urban form: Tasks ahead. *Urban Morphology*, 19(1), 3–4.
- Williams, K., Jenks, M., & Burton, E. (2000). *Achieving sustainable urban form*. Taylor & Francis.
- Woodruff, S. C., & BenDor, T. K. (2016). Ecosystem services in urban planning: Comparative paradigms and guidelines for high quality plans. *Landscape and Urban Planning*, 152, 90–100. doi:10.1016/j.landurbplan.2016.04.003

Compilation of References

World Health Organization. (1998). Health Cities. In Health Promotion Glossary. Geneva: World Health Organization/Division of Health Promotion, Education and Communications (HPR), Health Education and Health Promotion Unit (HEP).

Zancanella, M., & Vedovato, L. (1981). *La Centuriazione Compiuta*. Biblioteca Comunale di S. Maria di Sala.

Zazzero, E. (2014). Due proposte per lo sviluppo sostenibile. In *Rigenerare la città esistente* (pp. 69-81). Pescara: Sala Editori.

Zevi, B. (1948). *Saper vedere l'architettura*. Torino: Einaudi.

Zevi, B. (1971). Bari americaneggiante. Anticorodal contro goffaggine colonialista. In *Cronache di architettura: Vol. 4. Dai laboratori medici di Kahn al piano di Tange per Tokyo*. Roma: Laterza.

Zevi, B. (1979). Trapianto nel cuore murattiano. In *Cronache di architettura: Vol. 22. Dalla National Gallery di I. M. Pei alla polemica sui "falsi" bolognesi*. Roma: Laterza.

Zucconi, G. (2001). *La città dell'Ottocento*. Rome, Bari: Laterza.

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