

Emergence-urban fabric in the urban design of Ludovico Quaroni: morphology vs typology

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Abstract: This essay presents a – temporary – examination of one of the themes typically found in Quaroni’s texts and projects, including those published here: the bipolar unity between the “emergence-urban fabric” as the radical foundation of the idea of the city. The exploration begins with the first monograph written by Quaroni in 1939, from which this review takes its name. It is developed based on the consideration of other documents; finally, the question is raised of whether or not the time has come to introduce the study of the eventual influence of the ideas and works of Ludovico Quaroni to the most important faculties of architecture in the United States.

Keywords: emergence-urban fabric, morphology-typology, *town design* in USA during the '50s.

Emergence-urban fabric

The axiom of Ludovico Quaroni that forms the basis of his theories on the city, namely that ‘urban fabric’ can be regarded as being logically opposed to ‘emergence’, can be seen as one of his most significant areas of research both in his career as an architect and as a university teacher.

All Quaroni’s urban projects, from his designs for the Città Nuove south of Rome, for La Martella, San Giusto in Prato and the Barene di San Giuliano in Venice, to the settlement of Il Gualdo in the Maremma and his researches on the residential Continuum, were based on the creation of complex residential fabrics whose guiding principle was sometimes an absolutely geometrical arrangement (San Giusto in Prato), but more often consisted of an unrestricted accumulation of volumes, open and closed spaces, light and shade, where the impressive richness of the various strata found in historical cities is replaced by skilfully arranged, seemingly random patterns (Il Gualdo and La Martella).

In his work of creating continuous fabrics for modern cities, Quaroni rapidly set out to define the necessary relationship between typology and morphology, and with a natural facility and effortless

mastery ('sprezzatura' in the Renaissance sense), he made use of all known types of materials (and attempted to update them).¹

Emergence and urban fabric: compositional energy² iuxta propria principia (according to its own principles)

'Emergence' and 'fabric' are important terms that often recur in Ludovico Quaroni's work as an architect and a teacher, and are used dialectically in his writings on city design, where their opposition to one another is one of the axioms that are characteristic of his field of research, which «cannot be restricted to a simple set of influences or schools».³ The two terms also define the compositional consistency of the urban morphology of the city «in the historical development of its *image (figura)*», using typological tools, “without too much trouble”⁴, investigating in every style⁵.

The bipolar unity between the *Emergence-fabric* as the radical foundation of the idea of the city, therefore, expresses Quaroni's inclination to examine city architecture as much as possible *iuxta propria principia*⁶, rejecting all a priori theoretical constraints, and emphasising the importance of the lessons offered us by the cities of the Medieval and early Renaissance periods – the 'naturalness' of the planimetric and

1. Sprezzatura: a term used in the context of musical composition and performance in Italy in the 16th century, referring in particular to recitar cantando, acting while singing; its origins however lie in The Courtier by Baldassare Castiglione, describing the self-assurance or nonchalance with which gentlemen of the court were supposed to deal with problems. Quaroni uses the word in its musical sense: the movement of the monody over the basso continuo which expresses itself gracefully, with ease and therefore with sprezzatura, with effortlessness, to the inflections and tensions of the text (web source).

2. QUARONI 1996, p. 91.

3. CIORRA 1989, p. 7.

4. CIORRA 1989, p. 94.

5. BARBERA 1989, p. 17.

6 The parallel between studies in city architecture and linguistic studies is interesting: Lucio D'Arcangelo, La spirale di Gabelentz, Solfanelli, 2012: “in linguistics today there is an increasing tendency to reject theoretical constraints of any nature whatsoever, and even more so any a priori doctrinaire ideas, in the conviction that languages must be studied without any form of blinkered vision, and as far as possible, *iuxta propria principia*. This far-reaching change in thinking has taken place without any assistance from 'armchair linguists' but instead has been created by those researchers who have gone, baggage and all, into the field like the 'travellers' of old, and have acquainted us with the remarkable linguistic richness of our planet, providing us with information on languages of the most disparate and extraordinary kinds. This linguistic bounty is not a completely cultural phenomenon, and makes language 'a third species of object', the most complex of all, to which even the most unpretentious theoretical expectations cannot be applied.” Here attention is given to morphology, one of the more observable features of language.

altimetric arrangement of volumes – and the compositional energy of the city organism. In fact, by introducing into his research the standards and prescriptions relating to both historical and contemporary urban fabrics and using the tool of ‘guideline models’, and by insisting on the inseparability of the disciplines of city planning and architecture, as well as on the need for «a specialisation within architecture that deals with the ‘portion’ of the continuous process of intervention»⁷, Quaroni came up with the idea of «‘comprehensive quality’, [which] has its origins in the order and efficiency of the spatial system in which all of us lead our social lives, and therefore derives from the development of tools and specific methods within the discipline of City Architecture».⁸ These studies are part of a way of interpreting city design (which, as Quaroni himself mentions in his writings, during the years in which he was working) was defined as Urban Design or Town Design in Britain and America, while in Italy it was known as Urban Architecture or City Architecture. This method of interpreting the urban context goes back to the pioneering work of Camillo Sitte, born around seventy years before Quaroni and often quoted by him in his writings, and to his investigations into the principles and rules which for centuries had been responsible for the creation of remarkable, everlasting urban organisms, their aesthetic beauty balanced by the demands of contemporary living.

In addition to this way of understanding the city, there were also Quaroni’s roots in the Roman school to which he belonged, with its idea of the city as an *organism* made up of essential features that were subject to change, and which had been hierarchically organised by Gustavo Giovannoni⁹, whose work has recently come under renewed critical appraisal¹⁰, and of which particular mention can be made of *Vecchie città ed edilizia nuova*. There is also the idea of ‘city

7. QUARONI 1996, pp. 91, 169, 173.

8. QUARONI 1996, p. 173.

9. D’Amato 2009, p. 23.

10. ZUCCONI 2002, p. 57: “Thirty or forty years ago it would have been blasphemous to draw parallels between the work of Giovannoni and that of the masters of contemporary city planning (Sitte, Geddes, Howard) ... there was a problem of acceptance [...] his work as ‘the adversary of modern architecture’ relegated him to the shadows” [...] the obituary dedicated to him by Bruno Zevi in *Metron* (1947, 17, pp. 2-8) was significant [...] it was published in two versions, one in Italian (F. Ventura, 1995) and one in French (F. Choay, 1998).

housing' of Marcello Piacentini, whose notes, published in his *Nuovi Orizzonti nell'edilizia cittadina*¹¹, on the ideas of the Sitte school, are not altogether positive; he describes them as "exceedingly romantic, resolutely opposed to the atrociously American checkerboard system, but unacceptable because [one cannot envision] an *a priori* scenic plan [...] pre-selected or imposed [just because] the fascination of the medieval city was based on its unexpectedness or randomness».

Mention should also be made of an essay by Piacentini, *Il Volto di Roma* (The Visage of Rome), whose title should remind us of a passage by Oswald Spengler in *The Decline of the West*, «the visage of the city is the soul of civilisation [...] the Hellenic countryside preserved the geometric style, the Egyptian village the cast of the Old Kingdom».¹² These are sentiments that could find a place in Quaroni's thought processes, or be seen in his way of designing the various 'parts of a city' in the diverse contexts in which he has worked, and where he has experimented with all the major residential patterns – checkerboard, radial, free and apparently random – and explored the theme of 'emergence-fabric' (sometimes even 'immurgence'¹³).

Morphology vs Typology?

We must, however, at this juncture point out that 'typology' for Quaroni¹⁴ was not to be confused with 'type', conceived by the Enlightenment (investigations of which are legitimate only in the case of monuments), even though, as Quaroni maintained, «the word 'typology' has been confusingly replacing 'type'¹⁵, perhaps because of the word's aura of scientific fascination». For Quaroni, 'typology' meant simply the study of 'building typologies' and was not to be thought of as a generative process or a 'form-creating form' that was understood

11. PIACENTINI 1922, pp. 60-72.

12. SPENGLER 1957, p. 782: "the Hellenic countryside preserved the geometric style, the Egyptian village the cast of the Old Kingdom. It is above all the expression of the city's 'visage' that has a history. The play of this facial expression indeed is almost the spiritual history of the culture itself".

13. MICARA 2013: as Ludovico Micara remarked in his contribution to this volume.

14. QUARONI 1996, p. 201.

15. The rhetorical figure of metonymy: to use in place of an object a word which is a logical extension of that object – type instead of typology.

a priori – as Saverio Muratori would put it.¹⁶ Quaroni in his writings usually talks of the ‘successful achievement’¹⁷ of a given building-type, as the result of a spontaneous process of a given urban civilisation. Rarely does he mention the idea of ‘morphology-typology’, identifying it as an interconnected problem to be examined ‘in order to formulate correctly a design process’ – as is the case, on the other hand, with the Muratori-Caniggia school.¹⁸

If one reads certain collections of essays from the prolific post-modern period of studies on architecture and the city – in which the strong appeal of the reconstruction of architecture as a discipline¹⁹ and as a diagnostic practice is apparent – particularly in those works which for years have had Peter Eisenman (*Oppositions*) as their main point of reference, or the French works that are associated with the ideas of Bernard Huet (*L’architecture d’Aujourd’hui*) – it can be seen that certain lines of descent were deliberately blurred or abbreviated, because at that time, considering the topics that were materialising, it was urgently necessary to concern oneself with other matters. It was also apparent that certain topics and researches were the property of a very restricted group of experts, whereas in fact they were a cultural heritage shared by Italian and non-Italian schools, even if they had been developed and assimilated in different ways.

In an essay, Attilio Petruccioli mentions that Aldo Rossi, in his book *A Scientific Autobiography*, «casually published first in English in the United States and only later translated into Italian – never mentions the term Typology».²⁰ Also, though both Rossi and Aymonino had tenure at the University of Venice after Saverio Muratori had held a professorship there, neither of them, when discussing city architecture in their publications (even though with different objectives in mind),

16. MURATORI 1963, p. 124.

17. QUARONI 1996, p. 185.

18. PETRUCCIOLI 1998 p.9: For a full-scale coverage of the schools, themes and protagonists of the so-called ‘morpho-typological schools in architecture and geography, their roots in the Enlightenment (Nicholas Louis Durand and Etienne Louis Boullée), and their differences – the French school (Marcel Poëte, Pierre Lavedan – J. Castex, P. Paerai, J. Depaule), the English (M.R.G. Conzen) and Italian (Saverio Muratori, Gianfranco Caniggia vs Aldo Rossi, Carlo Aymonino).

19. COHEN 1984, p. 506.

20. PETRUCCIOLI 1998, p. 13.

barely mentioned Muratori's studies; and yet a cursory perusal of Aymonino's 1965 book entitled *La formazione del concetto di tipologia edilizia: introduzione al corso di caratteri distributivi degli edifici: anno accademico 1964-1965*²¹, reveals that the lessons learned from Muratori are present, inferred and compelling. Furthermore, Petruccioli summarises the opposing positions held by Aymonino-Rossi and Muratori-Caniggia by describing them as a «dialectic of urban form and social action vs a dialectic of modern-non modern»²², and explains that, in any case, both positions were assimilated by the French school (through the unifying sociological filter of Henri Lefebvre), whose major proponents are Jean Castex, Philippe Panerai and J. Charles Depaule. And yet Aldo Rossi has direct recourse to the French school when he states in his book that Lavedane and Poëte are the major reference points for the arguments put forward in his *L'architettura della città*. If we examine the extremely excursive paper by Attilio Petruccioli, *Exoteric, Polytheistic, Fundamentalist Typology, Typological Process and Design Theory*, we can see how complex and intricate is the network of influences and research tools created, as the paper makes clear, by what emerge as the three typo-morphological schools of major importance on the international scene – the French, the English and the Italian. For example, in her detailed analysis of the development of typo-morphological studies, with particular reference to the work of Aldo Rossi and Carlo Aymonino, the American scholar Mary Louise Lobsinger²³ declares: «The enthusiastic reception for typological studies within Italian architecture in the early 1960s arose from a fundamental concern to define the boundaries of architecture as a discipline and to found a theory of the architectural project».

Others in Italy were participants, in the theoretical and practical design field, during the prolific forty year period from the 1920's to the 1960's, in the theme of 'typology and morphology'.²⁴ An interesting example was the project for the 'Horizontal City' in Milan, designed by

21. AYMONINO 1965.

22. PETRUCCIOLI 1998, p. 13.

23. LOBSINGER 2002, p. 45.

24. MENGHINI 2002, pp. 75-66.

Irenio Diotallevi, Franco Marescotti and Giuseppe Pagano in 1940, the evolution of which clearly derived from Ludwig Hilbersheimer.

In a recent paper published in "Lotus International", Cino Zucchi had this to say on the subject:

«The monolith and the carpet, the Unitè d’Habitation and the Horizontal City of Diotallevi and Marescotti, echo continually in contemporary housing projects, which often seem to have renounced the reassuring urban icons of the post-modern period [...] perhaps only the confrontation with the “different”, with the implantation of non-European social customs within the European city-territory, can undermine the all too orderly sequence that has already integrated the varied experiences of “participatory planning” for some time now».²⁵

The ‘monolith’ and the ‘carpet’ given as examples by Zucchi remind us of the ‘emergence’ and the ‘fabric’, terms which Quaroni was using around the same time as the Horizontal City of Diotallevi-Marescotti-Pagano, or even a few years before. If we look at Quaroni’s urban design projects in chronological order, in fact, we find the Development Plan for Aprilia, by Quaroni-Muratori-Fariello in 1936.

From that to the plan for La Martella (1951), the Barene di San Giuliano at Mestre (1959), San Giusto in Prato (1961), the settlement of Il Gualdo in the Maremma and his researches on the residential Continuum (1963-65), his urban designs were always based on the creation of complex residential fabrics whose guiding principle was sometimes an absolutely geometrical arrangement (San Giusto in Prato), but more often consisted of an unrestricted accumulation of volumes, open and closed spaces, light and shade, where the impressive richness of the various strata found in historical cities is replaced by skilfully arranged, seemingly random patterns (Il Gualdo and La Martella).

Furthermore, Antonino Terranova has commented on and analysed, as we shall see below, the numerous humanistic and expressive aspects of the experimental series of theme-based research on Quaroni’s urban design. He defines the recurring sequence of themes that are continuously developed by Quaroni as a ‘gyre’ (the two gyres or opposite double vortices of W. B. Yeats, of which one tends towards the primary and the other to the antithetical) – a metaphor this author also subscribes to:

25. ZUCCHI 2007, p. 87.

«the dialogue between the internal model and the external context, between centrality and seriality, the logic of architecture and the rationale of the city. From architecture to urban planning, first of all (as a place for a new set of paradigms and a new ethics); and then from urban planning (as a place for bureaucratic and legislative degeneration) back to architecture again».²⁶

By studying certain short extracts from works about or by Ludovico Quaroni which deal with the concept of emergence-fabric, and by retracing episodes that bring to light the similarities between Quaroni's researches and those on Urban Design carried out in the USA in the mid-1950's, we intend to examine in the following pages the originality of a way of thinking (which has not perhaps been adequately investigated or given its proper place in an international, historical and critical context), that aimed to put into effect a pragmatic transformation, since, as Quaroni himself maintained, what was needed was «not only knowing how to design according to the laws, but to design the laws themselves».²⁷

«[...] When one thinks about it, with Quaroni, for the first time after the great utopian designs of some of the 'masters' (from among whom, he chooses to re-publish none other than 'The crown of the city' by Bruno Taut) with his foreword – we have the description of an urban utopia... [...] let's imagine two spirals twisted round two coaxial upturned cones (the inverted cones of W.B. Yeats). I would say that the best things by Ludovico Quaroni can be found where the two cones intersect; where objects charged with the sentiments of the city meet urban forms charged with the sentiments of architecture. [...] architectural layouts governed by objective rules of geometry intersect with others whose rules consist of exceptions, variations, eccentricities connected to the freedom of the individual».²⁸

Emergence-urban fabric in works about (and by) Ludovico Quaroni

At this point we shall present some short extracts from publications about Quaroni, or written by him, which endorse the points we have argued so far, and which show that a fertile conceptual debate has developed within the literature on Quaroni, dealing, in fact, with the idea of emergence-fabric. Several times in writings about Quaroni – in particular, in monographs and collections by his pupils – there

26. TERRANOVA 1985, p. 7.

27. This way of interpreting the city is of great significance even in China, in Beijing, in the work of Wu Liangyong: certain similarities should be looked at, and special attention has been brought to his work by the American academy.

28. Cfr. TERRANOVA 1985, p. 19-20.

are continual references to his first treatise from 1939, *L'architettura delle città*²⁹, in which, if only at an embryonic stage, he began to sketch out his own particular method of interpreting the city, which he saw as a physical, social and environmental entity, which could be construed in expressionist terms³⁰. Pippo Ciorra is of the opinion that in *L'architettura delle città*, emergence-fabric is the same thing as the image of landscape³¹, or the image of the historical city, «of the thousand and one designs of the east».³² In his preface to *La città Fisica* (1981), Antonino Terranova analyses the aptitude with which Quaroni clarifies the importance of his research in the 1939 work and the ties that it established with the academic Roman tradition; Terranova then says:

«There is much that is already present in an embryonic form. *L'architettura delle città*, written when Quaroni obtained a lectureship post in 1940 (he had worked at the university since 1937, in the Urban Planning department chaired by M. Piacentini, after a short initial period with E. Del Debbio), establishes how much an environmental and structural idea of the city was crucially important for Quaroni, and immediately links this to the 'two tensions': interpretative shades of meaning are inserted into a theoretical, classical structure, based on such cornerstones of the literature on urban form – Lavedan, Poete, Sitte, etc. – that city architecture in Italy was only to discover in the 1960's».³³

Along the same lines, in another of his writings, Terranova shows how, in Quaroni's thinking, the traditional living city and the ancient city were, in a complex way, both present at the same time, and that his interpretation of the city as an 'organism' (understood as Giovannoni defined it) was also, we can state with due emphasis, close to the ideas

29. QUARONI 1939.

30. Cfr. TERRANOVA 1985, p. 208: the two distinct focal points of Quaroni's urban planning research can be seen here: on the one hand, the study of the city as an organism created by the intricate juxtaposition of a small-scale urban fabric with emergent structures that are more or less monumental, and on the other, an analysis of urban phenomena carried out with the invaluable assistance of other complementary disciplines.

31. CIORRA 1989, p. 15; Pippo Ciorra, op. cit, p. 15: he reminds us that "the allusions to Jaspers and Spengler probably derive from his period of collaboration with Saverio Muratori, which is a chapter in the two architects' careers still requiring detailed study". Following Ciorra's suggestion, it is interesting to note that Oswald Spengler, in *The Decline of the West*, p. 784, declares: "In the earliest times, only the image of the landscape commanded the eye of man. It gave form to his soul and resonated within him [...] the landscape ratified the countryside and strengthened its image; only the later city came into conflict with it, almost as a challenge. Its very profile contradicts the lineaments of nature [...] in the end, the vast metropolis, the city conceived as a world apart, close to which no other world can exist, begins its destructive work on the face of the landscape".

32. CIORRA 1981, p. 216.

33. TERRANOVA 1981, p. 5.

expressed in the urban studies of Patrick Geddes (an evolutionist) and Ebenezer Howard (an ecologist):

«in 1939, Ludovico Quaroni published *L'architettura delle città*; in its introduction he shows a knowledge and understanding of the complexity of the traditional living city and the ancient city (which Gustavo Giovannoni was defining as an 'organism' in those very same years); an understanding which removed the partisanship equated with the various tendencies within the prevailing theories on urban districts».³⁴

In his monograph on Quaroni published in 1989, however, Pippo Ciorra highlights the ground-breaking nature of the Roman architect's researches on historical cities, especially as regards the question of urban models of growth and foundation; in fact, Ciorra writes that Quaroni is:

«... aware that the burning issue of Italian Rationalism, both in the thirties and after the war, is that of models of urban growth and foundation. Quaroni devoted his best efforts to the question. From the time of *L'architettura delle città*, written to obtain a lectureship before leaving on military service, he began to see history as essentially urban history, as an evolving relationship between 'emergences' and 'fabric', lasting many thousands of years; he also began to perceive his pupils as future collaborators in the project of a 'wonderful city that eventually takes the shape of the *Tower of Babel*».³⁵

In addition, the central role played by the conceptual system of emergence-fabric in his ideas of the city is further confirmed by its recurrence and the variety of contexts in which Quaroni develops it in his writings. Here we present certain significant passages that will be of assistance in our discussion of the topic.

In the paragraphs that serve as chapter headings in the book edited by Antonio Terranova (1986), after introducing the terms Major Architecture and Minor architecture, Quaroni says:

«Strangely, maybe because of my familiarity with rooftops, cats and church domes in my childhood and adolescent years, I have always known, long before I had any ideas about becoming an architect, that my interest in a city was not for all the little houses in themselves, or for the monumental building taken out of context, like in the tourist photos of Alinari or in books of art history, but for the whole mass taken together, the cocktail of monuments and houses large and small, in other words, for the game of contrasts and counterpoint played out by houses and monuments together, or 'emergences' and 'fabric' as I like to call them, even if in many

34. TERRANOVA 1981, p. 156.

35. CIORRA 1989, p. 23.

cases the ‘emergences’ are smaller and lower than the buildings that make up the ‘fabric’.³⁶

Again, in his *Immagine di Roma*, Quaroni explains his “taste for designing the modern, but with a taste for the ‘monument’³⁷”:

«In the ancient city, the relationship between the surroundings, the emergences and the fabric was a precise and vital one, which actually created an extremely important architectural ‘structure’. So while the city chaotically sought out a new social structure [...] architects continued to insist on the monument, and on the ideal city [...]. The city was something that grew and developed independently of the work of architects: the Paris that we know best, with its boulevards, is the result of a combination of building speculation and forms invented by money-grubbing developers who adapted pieces of eighteenth century architecture to the modern tastes of the nouveaux riches. After the Neo-classicists, no architect worth the name was seen to be associated with city design [...].»³⁸

In this collection of quotations on the subject of emergence-fabric, chosen as examples rather than as an exhaustive overview of the topic, mention must be made of Quaroni’s idea-rich introduction to the translation of Bruno Taut’s book *Stadt-korone* (1919) – translated as *La Corona della Città*³⁹ – which was published in 1973; in it, Quaroni laments the lack of:

«a historical exposition of architecture that disregards the individuals who symbolised and personified the various periods; this fascination for personalities has pushed into second place the interest in the occurrence itself, which should take prime position, and all the attention directed towards the monument [...] and] the excessive devotion paid to the creator by a sterile interpretative establishment have sadly curtailed the number of valid texts that are capable of aiding us in using the past history of architecture to form a clearer idea in our minds of this cultural domain, which is also of immense importance for the purposes of establishing areas of study.»⁴⁰

Emergence-fabric, reshaping the city ‘as a whole’: Ludovico Quaroni and Urban Design in the USA in the 50’s and 60’s

Are there possible connections between Quaroni’s ideas on the city and the academic debate that was being pursued in the United States halfway through the 1950’s, especially with regard to the emergence-

36. TERRANOVA 1985, p. 142.

37. TERRANOVA 1985, p. 73.

38. QUARONI 1966, p. 214.

39. TAUT 1973.

40. QUARONI 1973, p. IV.

fabric principle? The need to 'establish areas of study' created by the 'lack of a historical exposition of architecture that disregards the individual' - and thus also enlightenment models - is expressed by Quaroni in his 1973 preface to Bruno Taut's book, which was so weighted with utopian as well as pragmatic ideas. This theme does not appear to be altogether frequent in the literature concerning Quaroni; there are other, different key-words that recur more often in the glossary involving the work and thought of the Roman architect that was developed over the years. In Quaroni's case, moreover, the desire to create 'an area of study' leads us to recollect the Arezzo Seminar of 1963 and his *thwarted* intentions there.⁴¹

A more interesting approach might be to enlarge upon his principle of morphology versus typology, by investigating certain circumstances, and to see if the urgency with which Quaroni promotes research into an interpretive model of the city, that could better accommodate the emergence of new realities, was influenced by his awareness, either directly or indirectly, of certain events that were enlivening the debate on Urban Design taking place in the US from the mid-1950's to the start of the 70's. We must take into consideration the fact that Quaroni spent some time in Boston in 1957-58, teaching at the Massachusetts Institute of Technology. If we put together some events and some names, this may help us understand any possible connections between Quaroni's position and the research on the city that was being developed in America at the time. We should remember, also, that the question of 'specific area of study' in architecture was one of the most continually explored issues in British and American academic centres, and therefore was discussed in those centres which had had a significant role in the development of Urban Design, both as an academic discipline and as a profession, and which, according to Eric Mumford⁴², were heirs to the teaching of Jose Lluís Sert (Harvard), Colin Rowe (Cornell) e Robert Venturi (Penn).⁴³ This was what Eric Mumford said in his paper at a conference on Urban design held at Columbia University, New York, in 2002.

41. BARBERA 1989, p. 21.

42. MUMFORD 2002.

43. Penn: The University of Pennsylvania.

David Smiley, who teaches at Barnard College at Columbia, during the same conference gave an analysis of the results of two conferences held in Boston⁴⁴: one in 1955 organised by "Architectural Forum" where debate took place on the topic: «the time has come for a major decision whether or not to carry on with the central downtown district of the metropolitan city, and how»; the other at Harvard: José Lluís Sert, in the proceedings published in "Progressive Architecture" in 1956, opened the conference by stating that the problems of hygiene, traffic and obsolescence of American metropolises «lies in re-shaping the city as a whole». The two conferences, summarized by Smiley in his paper under the abbreviations Forum/NRDGA and PA/GSD, also implicated political and administrative bodies. Among the participants, significant papers were delivered by Richard Neutra, Edmund Bacon, Victor Gruen, Friedrich Adams, Garrett Eckbo, Hideo Sasaki, Jane Jacobs, Lewis Mumford and Gyorgy Kepes.

Garret Eckbo, along with many others, made an analysis of the problem of controlling architectural scales⁴⁵: the issue was connected to the wider problem of the relation between man and his environment – Eckbo especially maintained that «the landscape, urban or otherwise, ‘was a continuous’ thing which could not be fragmented or broken into abstract parcels without connection to inhabitation». ⁴⁶ He was followed by Richard Neutra, who said, «landscape permeates us ... [so there can be] no separation of the environment and the individual...».

Gyorgy Kepes, on the other hand, stated that there were no gaps between «our perceptual abilities and the new scale of the man-made environment. We are out of scale with the world and only a new ‘value scale’ attuned to the new technologies of modern life, would reconnect experience with our landscape».

These statements and topics are very close to Quaroni’s thoughts on the city and to his teaching method.

44. David Smiley, *A Tale of Two Conferences: Urban Design and Urban Discourse in the mid-20th Century*. Framing paper delivered for the conference “Urban Design: Practices, Pedagogies, Premises” at Columbia University on April 5-6, 2002. File available at: <http://www.arch.columbia.edu/files/gsap/imeshared/Briefing%20Materials.pdf>.

45. RIONDINO 2012, p. 119.

46. BARBERA 2009.

There is also another connection we need to take note of: from 1954 to 1959 Kevin Lynch and Gyorgy Kepes carried out a research project at MIT entitled *The Perceptual Form of the City*.⁴⁷

Further confirmation of the relations and connections between Quaroni's ideas and those of Kevin Lynch is given by the titles of two well-known books by Quaroni, *L'immagine della città*, published in 1968 and *L'immagine di Roma* in 1969. In the late 50's, in 1957 and '58 to be precise⁴⁸, as mentioned above, Quaroni was in Boston for a brief period of teaching at MIT during the deanship of Pietro Belluschi (in office from 1951 to 1965), and so he must have been in contact with Lynch and with all the people involved in the debates that have been briefly outlined above.

1959 was, in addition, an almost mythical year in the history of Italian architecture. In Venice an open competition for the 'Cep Barene di San Giuliano' – public housing and services for the so-called *gronda* or "eaves" area lying between the Venetian lagoon and mainland –, took place that year, in which Quaroni took part with a remarkable design project; he brought officially into the project group an MIT student, Ted Musho – who was later to be a partner in the studio of I. M. Pei – who had, in the MIT course with Quaroni, come up with ideas that, according to Quaroni, proved to be fundamental for his conception of the design project for the Barene di San Giuliano.

We should recall that Belluschi, an engineer from Ancona, designed the *Cathedral of Saint Mary of the Assumption* in San Francisco⁴⁹ along with Pier Luigi Nervi, and probably had a role in

47. <http://libraries.mit.edu/archives/exhibits/kepes-lynch/>.

48. On Quaroni's teaching activity at MIT we have the following documentary evidence: 1) Quaroni himself, on page 149 of his 1989 book edited by Terranova, on the subject of the Barene di San Giuliano, mentions the student co-author Theodore John Musho; 2) the database of MIT degree dissertations records that Ted Musho graduated in August 1959 – as is written in his dissertation published online: <http://dspace.mit.edu>; 3) thanks to a conversation with Antonino Saggio, I had further direct confirmation of Quaroni and Kevin Lynch's mutual acquaintance. Giancarlo Guarda, born in 1928, Antonino Saggio's uncle, a Fulbright scholarship student at MIT who graduated with Piccinato at IUAV, and is known in Italy for his 1964 translation of Lynch's *The Image of the City*, and for his subsequent career in ITALconsult and the World Bank in the USA. Guarda was in Boston while Quaroni was teaching there and translated one of his lectures at MIT. Guarda also remembers that Lynch and Quaroni used to have dinner together; 4) Lucio Valerio Barbera affirms that he started working at Ludovico Quaroni's office at his third-year at university, that is to say in 1958, and that in the office people used to tell of Quaroni's travel in USA as something already happened.

49. In 1961-62 Pier Luigi Nervi was invited to Harvard for the renowned *Charles Eliot Northon Lec-*

organising the exhibition on Nervi's work at MIT at the same time as he himself was delivering the *Charles Eliot Northon Lectures* at Harvard, next door to MIT, from 1961 to 1962, according to the account of Robert Einaudi, a student at the time at MIT who collaborated in Rome with Nervi in publishing the lectures for Harvard University Press. In those years, then, the interest in Italy and its architecture was by no means negligible in Bostonian academic circles.

As Mario Manieri Elia said in an interview with Lucio Barbera, discussing Pier Luigi Nervi's teaching at Rome Sapienza, «in the Faculty of Architecture at that time (1954) there were two different mentalities existing side by side, and one of these was looking backwards at the past. There were a lot of teachers who had been around during the Fascist era; [...] we saw Ludovico Quaroni and Pier Luigi Nervi as two people who represented change, with their cohorts of assistants; they were the people who would have pride of place in any future Faculty. I personally recognised a special relevance in those two architects».⁵⁰

However, there were other indications of interest and putative affinities between Quaroni and the Boston school of architecture. In 1959 a combined research centre between Harvard and MIT was established in Boston, known as the *Joint Center for Urban Studies*; this was set up during an inaugural conference entitled *The Historian and the City*. In the proceedings published in 1963, edited by Oscar Handlin and John Burchard, there was a section entitled *A selection of works relating to the History of Cities*: for Italy, reference was made to the published works of the following: Marino Berengo, Alberto Caracciolo, Carlo Cocchia, Francesco Cognasso, Francesco Campagna, Saverio Muratori, Luigi Piccinato, Ludovico Quaroni⁵¹, René Rochefort, Giovanni Russo, Giuseppe Russo and Giovanni Treccani degli Alfieri. So Quaroni was presumably well known at the time to American academics interested in urban studies at Harvard and MIT.

In the above-mentioned paper by Eric Mumford, he says, in fact, «many aspects of urban design education in the United States have

tures.

50. MANIERI ELIA 2011, p. 179.

51. QUARONI 1959.

been shaped by various and often conflicting European ideas [...]».⁵² However it would appear that at that time there were fairly reciprocal influences at work between the US and Italy on the topic of Urban Design. Also, the critical success of some works was due to their being translated by certain young scholars who later became prominent in Italian professional and academic circles, Gian Carlo Guarda, Loretta Shaeffer, with a foreword by Paolo Ceccarelli for the *The image of the city* by Lynch, and in the USA Joan Ockman, Diane Ghirardo, with a foreword by Peter Eisenman for *The architecture of the city* by Aldo Rossi apart from the personal association, there was the mutual interest in academic research shown by various people: the last book by Lynch, *City Sense and City Design. Writing and Projects of Kevin Lynch*, published posthumously by Tribid Banarjee e Michael Southworth, shows that Lynch was fully aware of all aspects of the Italian territory, of the smaller towns and the landscape.

The need to re-shape thinking on the city, something expressed by Quaroni on numerous occasions, was clearly perceived by other scholars – above all Americans.

In 1973 Spiro Kostof, an academic at Berkeley (born in Istanbul) published a review for the "Journal of the Society of Architectural Historians"⁵³ entitled *The Third Rome: the polemics of architectural history*, with an analysis of a significant list (eleven books) of works on Rome, both pre- and post-Unification.⁵⁴ The review is very dense and long – around twelve pages – and shows how conscious Kostof was of Italian urban and architectural accomplishments and of the urban history of Rome. In particular, he looks at Quaroni's *Immagine di Roma* in some detail, and asserts that:

«Quaroni surveys the entire urban history of the city, from its foundation to the present. He should be read as a broad introduction to our subject. Acknowledging that 'the history of a city cannot always be made to coincide with the history of its urban – architectural,

52. MUMFORD 2002.

53. KOSTOF 1973, pp. 239-250.

54. Among the authors of texts he comments on are: Franco Borsi, Paolo Portoghesi, Ludovico Quaroni, Gianni Accasto Vanna Fraticelli Renato Nicolini, Italo Insolera, Leonardo Benevolo. The title was certainly a reference to the book *La Terza Roma, lo sviluppo urbanistico, edilizio e tecnico di Roma capitale* published by the Roman Union of Engineers and Architects in 1971.

administrative, social, and economic – structure’ he nevertheless sets out to sketch, with no small effect, ‘the relationship of cause and effect, perhaps reciprocal, that exists between these’. The book adds nothing to the factual research of either the history or the urban structure of Rome, but highlights and exorcises it».

Kostof thus defines as ‘exorcism’ the conceptual work that Quaroni had developed on the urban history of Rome, and appears to agree that the history of a city does not necessarily coincide with its urban structure. He mentions, however, Quaroni’s tendency to use history, and especially urban history, as material for design.

In ‘Quaronian terms’, therefore, exorcism could be understood as the emancipation of those elements that pre-deterministically contribute to the development of the envisaged design.

Here it might be appropriate to add another quotation from an American publication that refers to Quaroni and his work: an ‘ancient’ review of *L’architettura delle città*, from 1941, published by Valentin Müller, a German archaeologist and teacher at Bryn Mawr College in Pennsylvania.⁵⁵ Before beginning a detailed series of notes on the works and monuments included in Quaroni’s curriculum, Müller asks himself some serious questions about the architect’s intentions, having understood that the book is not about the history of the city or the history of art. In his detailed review, he gives an outline of Quaroni’s research, allowing the theme of emergence-fabric to materialise indirectly, a topic that Quaroni, if only at an embryonic level, had been working on since 1939 and which he would utilise in various ways in the design projects of the following years:

«It is no easy task to write a fair review of this book, because the author states in the beginning that he did not intend to write a history of town-planning or of art. He can thus answer any criticism by saying that it does not apply to this purpose. What then is his intention? The reviewer would like to interpret it as follows: to contemplate the achievements of the past, to admire the variety of forms which arose in the course of time and to understand their specific character, all that in order to arouse enthusiasm for the beautiful monuments still lasting into our times which must be carefully preserved and not spoiled for the sake of modern traffic or the mania for aggrandizement. The author has an excellent understanding of the main principles of town-planning and a fine feeling for artistic values; his emphasis on unity as an important principle and on the relationship between nature and the works of man is certainly valuable, but not so neglected by others as he wants his readers to believe».

55. MÜLLER 1941, pp. 269-27.

This comment from 1941 is quite important, especially as it confirms the intrinsic value of Quaroni's first monograph of 1939 and his ideas on the city. For example, Kevin Lynch ends his presentation of *The Image of the City*, written in 1959, by saying, «At least it is clear that urban design has nothing to do with form in itself, but with form as it is seen and used by man».⁵⁶

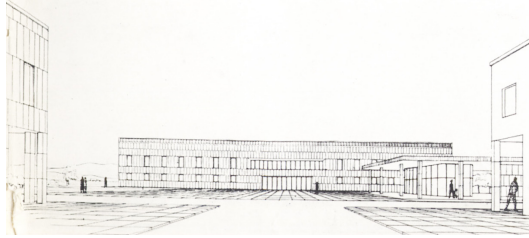
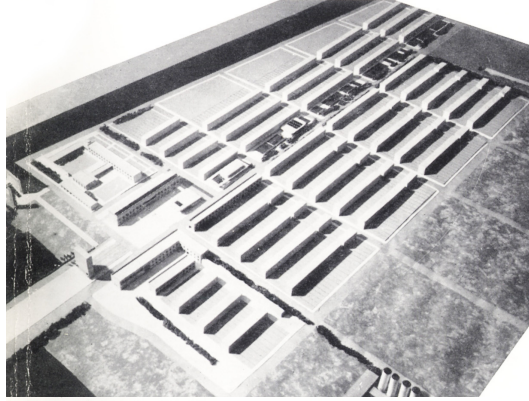
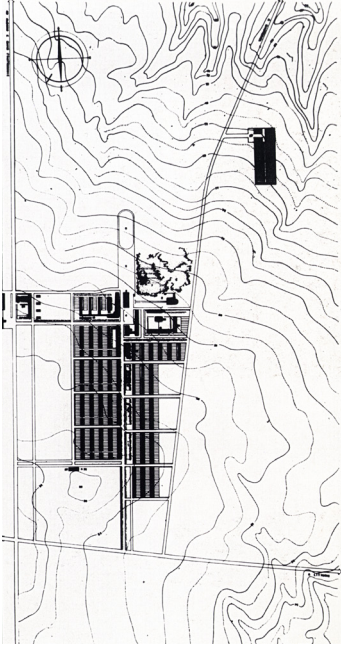
The connection between Quaroni and non-Italian architectural writings, therefore, needs to be investigated in more depth and in a more detailed form than has been presented in this paper.

Nevertheless we feel it is important to end this examination of the 'emergence-urban fabric' theme in the literature on or by Ludovico Quaroni by quoting from the essay *Omaggio a Quaroni. Retrospectiva antologica 1947-1962*, by Paolo Portoghesi, written in 1963:

«The choice made by Quaroni derives from an obligation that is more complicated and critically more arduous, which is to seize upon a vital impulse rather than a static exemplar, to set out a method that has the merit of not being confused with a style. [...] Alongside his actual works of architecture, the exhibition includes a series of panels giving an overview of Quaroni's activity in the field of town design. Particularly worthy of note is the famous site plan for the Quartiere di Prato, one of the most ill-fated projects of INA Casa's second seven-year programme, since it was never built. After his first endeavour of the Tiburtino residential district, which still showed signs of uncertainty and ambiguity, Quaroni experimented at Prato with an idea of a cellular fabric based on a swastika-shaped connecting structure that endowed the whole with a dynamic repetitive rhythm. The standard building type is spatially arranged in larger paired nuclei giving rise to a combination that is both compact and spread out and has much more of a city-like character than his earlier designs. The Quartiere di Mestre, another ill-starred project, carried forward the ideas present in the Prato design with a more advanced form of combinatorial methodology which gave the impression that Quaroni and his collaborators had a specific interest in the distinctiveness of the serial procedures found in mathematics and contemporary music. For the first time, the design of the new city becomes the result of a process where there is a return to those parameters of multiplicity and randomness which appear to be fatally absent from the urban planner's vocational calling as a visionary creator».⁵⁷

56. LYNCH 1969, p. 21.

57. PORTOGHESI 1963, p. 248; references to this work appear in TERRANNOVA 1985, p. 19 and ROSSI 2006, p. 397



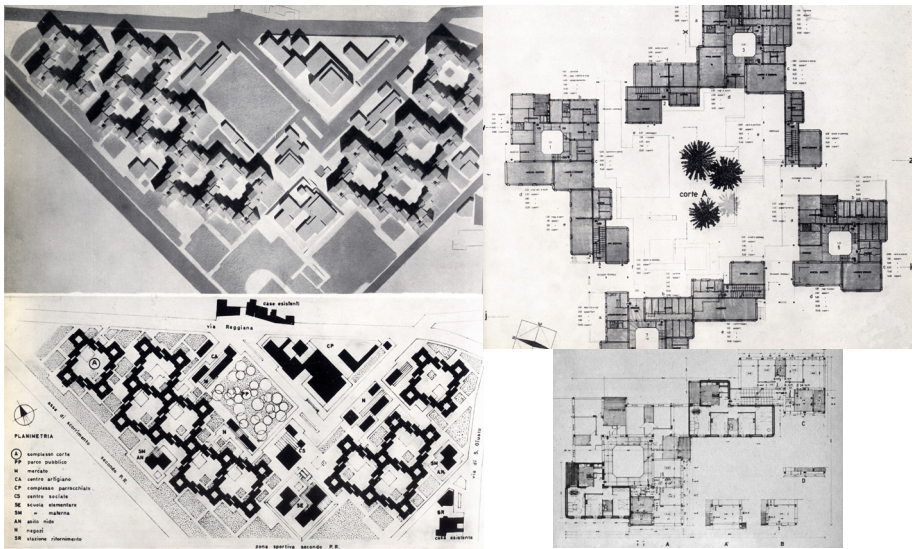
Progetto per il Piano Regolatore di Aprilia (1936)



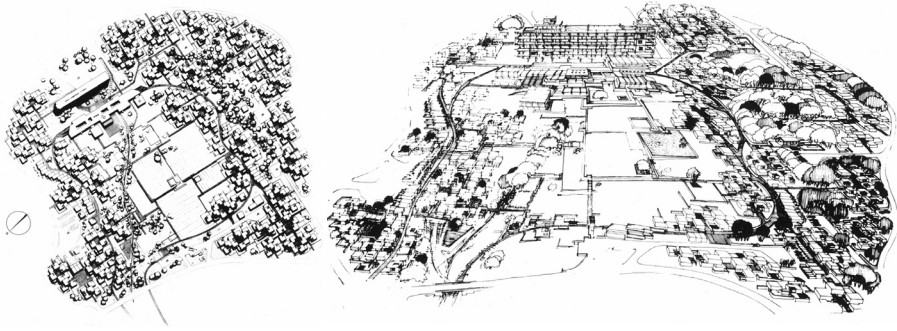
La Martella, Matera (1951)



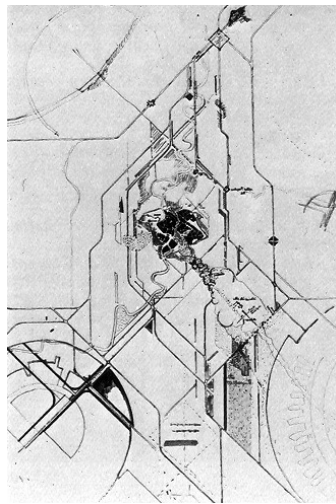
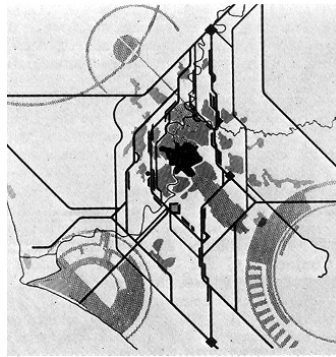
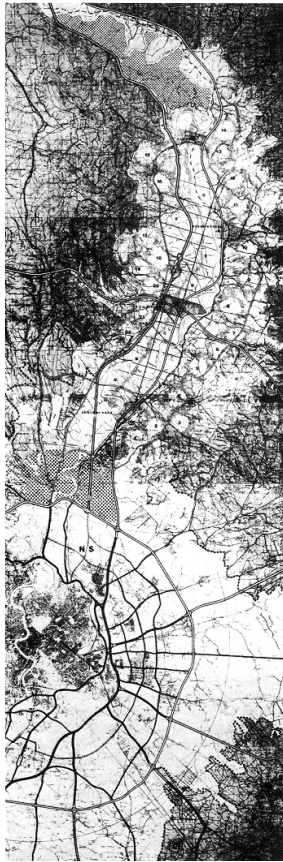
Barenne di San Giuliano, Mestre (1959)



San Giusto, Prato (1961)



Il Gualdo, Maremma (1962)



Continuum residenziale (1963-65): Tesi di laurea di Livia Toccafondi

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