The elementary part of the city

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ABSTRACT - The paper reflects on some methodological and operational experiences carried out in the last century and also on the notion of "elementary part" as a method of construction of the residence in the contemporary city in relationship to the nature. The discourse, moving from the Enlightenment's antecedents as the Squares and Crescents or through the analysis of some projects by the masters of the Modern Movement - also as a critical review of some of his initial assumptions - tries to classify the practice of construction of the city that renounces to the compact city system made by urban blocks, streets, squares and gardens and offers complex neighbour units with large extension and services and free portions of natural soil inside. This hypothesis, that opposing the nineteenth century city, is manifested in projects and constructions that significantly recover the principles of the classical city in a renewed relationship with nature / landscape and with the dialectics between residence and civil centres. An idea of "open and polycentric" city able to contrast the spread of the nebulized city, but without proposing a mere densification but identifying certain repeatable units able to absorb the fragments of the sprawl of the contemporary post-metropolis. Furthermore, this hypothesis can be applied also in some areas of the consolidated city to reintroduce, in its core, selected portions of nature.

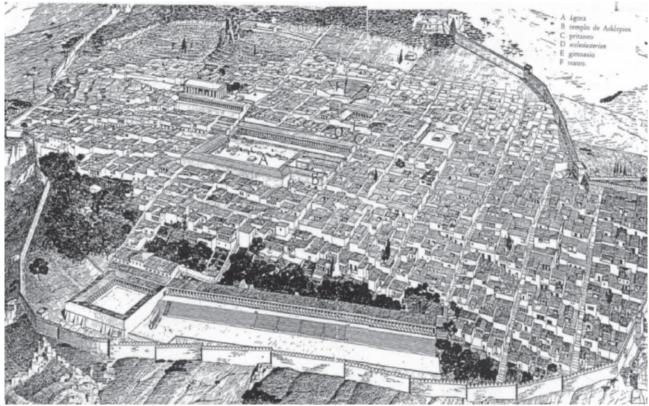
The proposed classification is divided into the following sections:

- The classical cities as polycentric city;
- The compact city as unique or whole artifact;
- The city of the Enlightenment: from the square to the courtyard blocks;
- The city of the Modern Movement: utopias, principles and methods;
- The new dimension: quartal, quadras, urban sectors;
- Examples by the masters: Le Corbusier/Hilberseimer/Mies/May;
- The neighbourhood as a self-sufficient part: Libera/Cosenza;
- The idea of the city as set of defined parts: Rossi/Aymonino;
- The idea of polycentric city and elementary part: Monestiroli;
- Development prospects in the periphery and in the consolidated city: Bisogni.

The suggestion structure is defined by investigation of the logical urban composition and by paradigmatic examples taken as reference.

Introduction

The contribution intends to reflect on some experiences (methodological and operational) developed in the last century and not only, around the notion of "elementary part" like a way to build a residence in the contemporary city in relation to Nature. The reasoning moving from the identification of some Enlightenment antecedents such as the Squares or the Crescents and through the analysis of some projects of the masters of the Modern Movement - also as a critical review of some of its initial assumptions – for end with the masters of the Italian school, try to classify this practice of construction of the city that renounces the compact city system made for blocks, streets, squares and gardens and proposes complex residential units of large extension with services and free portions of natural soil inside. A hypothesis which, opposing the nineteenth-century city, is expressed in projects and realizations, significantly recovering some principles of the classical city in a renovated connection with nature / landscape and in the dialectic between residence and civil places. An idea of an "open and polycentric" city able to face the dispersion of the nebulized city of these years without proposing, however, its mere densification but identifying some "repeatable units" capable of absorbing and understanding within them also fragments of the sprawl of contemporary post-metropolis. Also, this hypothesis can also be applied in some areas of the consolidated city to bring back selected portions of nature. The articulation proposal is defined through the clarification of the compositional and urban logic of the paradigmatic examples taken as a reference.



1. View of the reconstructive hypothesis of Priene.

The classical city as a polycentric city

The classical city and in particular some greek cities like Priene, Mileto, Pergamo and Olinto in their general structure, through the exact location of civil or religious places and also starting from the fundamental distinction between Acropolis ἄκροπὸλις (the upper city) and Asty άστυ (the low city), in relation to the landscape and the orography define not only a series of centers or poles but also homogeneous and distinct urban parts. In the greek city it's clearly recognizable the dialectic between nature, primary places and residence areas that within a unitary construction defines from time to time the distinctive character of each city starting from some organizational and common formalities principles. The residence areas are structured on repetition indifferent of courtyard types, in their composition, define the basic unit of construction that is the block or platea that identified by perimeter roads in the its measures and comparison (quadrangular, rectangular, trapezoids) characterizes the architecture of every single part. Each part in approaching with the others – in reason of the presence of central places: agorai, areopaghi, natural elements (think of the waterways, harbours, hills) - relates in a way constitutive to the civil places that, in turn, in their form and dimension represent a resumption and amplification by reason of position, of the connection with the landscape and relative centrality. In Priene, in particular, this paradigm is clearly expressed. The city lies on the slopes of Mount Micale according to four terraces that identify not only as many parts but also the position of civil places: the acropolis, the area of the theaters, the agorà and the gymnasiums. The city in this "auroral" moment stands out like "other" from the surrounding nature (Ferraris 2006), which is regularized and made habitable to allow the construction of the pòlis where to gather a community that recognizes in it common values to which correspond modes of private and public living and from which you can observe nature and external territory: what Plato called the *Khôra γώρα*.

The compact city as unique or whole artifact

The paradigm of the greek city and then of the roman one (which already represents an exasperation) through the centuries until to the threshold of the eighteenth century determines not only its growth but also a series of relevant innovations. From the medieval fortified city - think of the good and bad government of Lorenzetti - in which the civil places become the reification of the secular power of the church and of the secular one of the municipalities and merchants and the residence areas define a new connection of view with the street through the row type and the block type; and then in the geometric precision of the Renaissance city with the invention of the noble palace which in turn also determines the many Palazzi della Ragione for civil power;

until to the Baroque one in which the scenographic axes and the triangulations between the various centers are privileged with a notable complication of the urban layouts and the corresponding building types, the city becomes a very articulated organism that however can be assumed as a great and unique artifact. A great artifact, a "big house" as in Alberti's definition, made up of many full and few voids which, once again, is opposed to the natural and agricultural exterior because condensation of interests, powers and values distinct but related to those of the dominating territory. This relative clarity that was recognizable - even in the same city in the presence of several juxtaposed urban cultures - it degenerated into the nineteenth century with the demographic and extensive explosion of the great European capitals. Paris and Berlin at this time aren't resumed in a single artifact of which it's possible to recognize and define the form but present themselves as an asphyxial or rhetorical multiform thickening that not allows us to recognize the differences within, the morphologically defined parts, but through the construction of large infrastructural axes and the iterative dynamics of the rent block (Panerai, Castex, Depaule 1980) it expands its boundaries beyond the walls in a homologous way producing an unstoppable process of erosion of the surrounding territory in which the few spaces of nature that still contains are reduced to gardens and parks for the embellishment and the decorum of the great bourgeois metropolis. If in Paris the Haussmannian Plan (Londei 1982), deletes or distorts the gothic part of the city center, in Berlin the densification of the late Baroque Friedrichstadt tends to the exasperation of the Mietkasernen (Hegemann 1930), than to maximize the profit and the rent of the "urban soil" (Bernoulli 1951), determines conditions of crowding and unhealthiness comparable only to the slums of suburban London of the first industrial revolution. However, there are some positive attempts to include the city again in a unique general design, for example Vienna with its Ring or the Piano del Poggi for Florence. It's precisely to respond to the crisis of the Nineteenth century city that in the early years of the last century possible "anti-urban" alternatives such as the linear city or the garden city were hypothesized. Hypotheses that, however, are far from proposing an effective alternative to the big city in a renewed connection with the countryside and the territory (Renna 1980) and, for this reason, soon 'serve' their parasitic dependence on the central city.

The Enlightnment city: from squares to court blocks

The hypothesis of the Enlightenment city in which the physiocratic connection with nature becomes the basis for a city open to the territory and with great collective artifacts placed in a crown or as in the case of the squares of London (Rasmussen 1972), within the same urban area consolidated even if more external respects the ancient and original center. Some great plans referable to this idea of the city - like the Napoleonic one for Milan, that of the Duke of Noja with the great Outils of Fuga in Naples until to great elaborations by Ledoux for Chaux - testify this attempt to redefining not only the limits and the general form of the city but above all to aspire to a renewed connection with nature and the landscape that how in Hackert's canvases it could redefine the connection in non-contradictory terms between city and countryside to aspire (like in Laugier) to "infrastructural the nature to live in it" without reducing it to simple embellishment or land of conquest. To these projects and hypotheses, often to the limit of the utopian, we can find very few realizations that often represent a exemplification. In addition to the experience of squares in which pieces of nature don't tamed they still become the place of view of great residential units, at the beginning of the Twentieth century, in the continental experience, but still referring to this concept, an attempt is made to reformulate the block or row block of the nineteenth-century city through the introduction of the large block residential courtyard. From Karl Max Hof by Henn to Vienna (Tafuri 1980), until to the great courts of Oud in the Tusschendijken and of Brinkman in the Spangen (Casciato, Panzini, Polano 1990), at the crescent of the Berlin-Britz and at the court of the head of Freie Scholle of Taut the passage is absolutely linear. It's try, in other words, even under the pressure of the working masses and the related egalitarian instances, to define once again for construction urban of elementary units - the Höfe – often large or very large dimensions until to monumentalize the sense, able to contain pieces of nature to be contrasted to the homologation of the urban block of the "stone city/Steinerne Stadt" (Hegemann) defined only as the negative and the result of the street layouts projected towards the outside of the city.

The city of the Modern Movement: utopian principles and methods

The idea of the city of the Modern Movement, like is known, linked to some issues of the green movement is defined first of all through the great utopias formulated by its main masters. The city for three million inhabitants of Le Corbusier and the vertical city of Hilberseimer, or the *Stadtkrone* of Taut, represent the paradigms of reference of this new urban concept with some important internal differences. Both in the case of Taut and that of Le Corbusier the model is **still of a monocentric type** with the city for business and for institutions in the center and the open blocks or *redents* to boundary. In the case of Hilberseimer, it's further

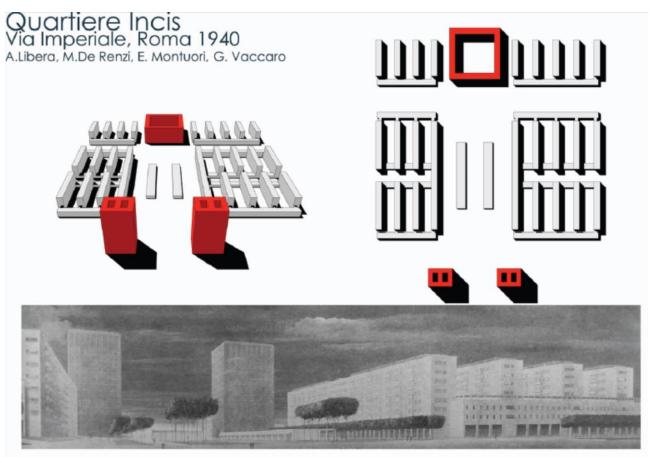
developed starting from the project for the Gendarmermarkt of Berlin the urban type of the great mixed block for offices and residences to be proposed both as an element of rationalization of the existing city both as a base module of the Grosstadt (Cacciari 1973). In all described cases, with significant exceptions in the studies of Leonidov and the Russian dis-urbanists, the new city even if contain new and large portions of the nature fails to articulate within it distinctive parts and civil poles that can define it an open city but, like in all great utopias, configures a model of city understood as a very extensive entity in which however the unique center and the increasing density are still the only characteristic trait. In the case instead of the districts of Ernst May in Frankfurt (Grassi 1975), the possibility of defining an complete entity is experimented on a reduced scale, the Siedlung, which in relation to external nature to the city is able to create a new system of **crown centers** of the consolidated city where the main principles of construction proposed in the various CIAM and in the theories of Gropius and of the same Hilberseimer are verified and defined: the independence from the road layout, the use of mixed types, the orientation of the buildings, the presence of great open parts, the connection with the services and facilities on the settlement scale. The Frankfurt experience or that of the Berlin siedlungen - think to the Siemenstadt - attest to this generous effort to define elementary units more articulated than the simple block that can combine and relate places for to stay, natural parts, residences, services with a modality that, if from the linguistic and technical point of view it appears innovative, on the other side tends to reproduce small extra moenia colonies that can be found antecedents in the villages or in the small self-sufficient medieval towns of the European tradition in open controversy with the experiences of green towns still excessively dependent, in terms of management and public places from the big city.

The new dimension: quartal, quadras, urban sectors

Moving from these experiments on the satellite quarters, at the end of the 1930s, some research is focused on the definition of new **complex and repeatable units** like, in a sense, a oppidum castrum but open repeathat are able to accommodate internally spaces-nature and collective facilities and that, in their iterating and composing, define a broader urban construction than starting from a hierarchy of infrastructure systems can be presented as a new city model. A hypothesis, new but at the same time very ancient, in which the void prevails over the full, in which each conforming unit is autonomous and at the time to be able to combine itself with others to define homogeneous parts and interiors places extremely structured formally and qualitatively above all through **the combination of different building types** in reason of the density, of the ways of living, the places of view and the articulation of the spaces public for the first time entering to be part, with great green spaces, of the elementary units constituting the general layout of the city. The detailed study of this new modality, anticipated by *Siedlung Goldstein* of May or to Plan for Dessau of Hilberseimer, will be realized e verified both in the new soviet cities (De Michelis, Pasini 1976), with i *Quartal*, both in the *quadras* or *super quadras* in Latin America, think of Brasilia, or even in the *Wonzelle* proposals but only partially realized by Scharoun for East Berlin in the immediate post-war period.

The examples of the masters: Le Corbusier/Hilberseimer/Mies/May

Above all the masters of the Modern, after the war, will experiment the evolution of the block or the district in some projects and realizations in Europe, America or Asia. If on the one side Le Corbusier proposes in Marseille and then in Firminy and in Berlin great isolated unitè-falansterio, like new way to construct the natural landscape, a sort of "great ships" landed in the green sea of the open territory, and at the same time he specifies to Chandigarh (Dal Co, Bonaiti 2008), a unit very similar to that of the urban sectors in a clear connection with the local centers and the great Capitol; on the other side, May, Hilberseimer and Mies are mainly oriented on the specification of the new urban units and on the ways of theirs composition/combination. Mies and Hilberseimer - who in America had deepened a new model of "city region" (Hilberseimer 1967) made by serial units interrupted "like the teeth of a comb" with pieces of nature - in the Lafayette Park a Detroit (AA. Vv. 2010 - Red. 1957), set up - within the city continuous made of great roads and intensive occupation of the lots - a new urban hypothesis that reintroduces the natural element and makes to become it, in great linear park, the place of view and representation of the residences, of the tertiary and facilities. The minimum construction unit is founded on the one side by the combination of terraced houses and patio single-family houses repeated in sequence according to an additive/iterative procedure made of overturns and proportional controls similar to those that Mies used for the single architectures and on the other side of the collocation of some common houses that define the character of the whole settlement and are also in close to complementary connection with great empty of the park. Similarly, Ernst May (Seidel 2006 - May 1987) in USSR - at the head of the so-called "brigade" - in building numerous cities, in the case of the Sozgorod Avtostroj reaches a sector with a tripartite structure: residences - park and services - residences - of considerable interest. The unit repeatable for its square shape and for the variability and adaptability of its fronts manages to combine with others of similar plant to determine a very articulated weave able to decline according to the roads that surround its and to define, in the two directions, a continuous system of public spaces and empty. A hypothesis of "urban architecture" that reversing the connection between the figure and the background, on a large scale, proposes a **clear order structure** largely determined by natural voids than for expansion and reemployment can become "diffused" and "localized" public places, to which the whole city can refer in relation to the geography of the places, to the infrastructure, to the productive parts.



2.A. Libera, M. De Renzi, E. Montuori, G. Vaccaro, Quartiere Incis, Rome 1940 (redrawing of N. Pironti).

The neighborhood as a self-sufficient part: Libera/Cosenza

Also in the italian post-war experience, after the important tests of Terragni in Como or Luigi Cosenza in Naples, still referable to the experiences of the northern European districts, some masters deepen, often only with of projects, these new perspectives and urban construction methods. In this way the project for the Rione Incis in Rome of Adalberto Libera, De Renzi, Montuori and Vaccaro of 1940 (Polin, Marzari 1989) is completely paradigmatic. In "difficult" years in which, soon after, it will start the neorealist tests from "Strapaese" of the Tiburtino and then of the large districts CEP, Libera proposes – with a structure similar to that perfected by May - a **piece urban of great importance and compositional clarity**. It's precisely a great sector overlooking the Via Imperiale with two rectangular towers that anticipate the great free void with commercial facilities, dominated by the public building for showing and conferences and surrounded by six block organized "like the teeth of a comb" extremely articulated in the alternation of open courts and in the counterpoint between tall and low buildings on the perimeter and inside. A experimentation unfortunately not pursued by post-war reconstruction that only in some rare cases it will be reformulated as for example in the project of the horizontal Unit at the Tuscolano of the same Libera or in the houses for without roof in Viale Augusto by Luigi Cosenza.

The idea of city by parts: Rossi/Aymonino

Starting in the 1960s the "italian school" returns to reflect on these topics especially in theoretical and operational elaborations of Carlo Aymonino and Aldo Rossi. We attribute to Rossi (Rossi 1966) the re-

proposal and clarification of the idea of the city as a single great architecture made of primary places, urban facts and residential areas that will become one of the points of reference of that "urban science" that still represents one fundamental lesson for the clarification of the structure and settlements principles of the ancient city. Aymonino, for his part, in the study of evolution of the modern city (Aymonino 1965, 1975) and in his contributions on urban analysis, defines the concept of "urban part formally completed" as a possible answer to the chaotic growth of cities expanding with the already vast and indistinct urban suburbs that they surrounded the consolidated centers of the major European cities (Polesello, Rossi, Tentori 1960 - Rossi 1961). The concept of the urban part - that doesn't coincides exactly with that of the district (Mumford 1954) but it imagines as its broader generalization on the formal level - like that of study area, will become a premise to the subsequent theoretical elaborations on destiny of the contemporary city. In this sense, projects such as the San Rocco in Monza by Rossi and Grassi, Gallaratese in Milan by Aymonino and Rossi, or the Zen in Palermo by Gregotti, although in their internal differences, they can be to consider in this idea to define units of the clear plant and of the completed form able to settle in the metropolitan dispersion as "fragments of recognizable order" with respect to nebulization and dissolution of individual and/or speculative residence. The plants of these districts are a cultured reflection on the heritage of the ancient city, of some of its tracks and the modern one as in the debt contracted in Palermo with Dutch examples of the great courts or superblocks or as in the case of the San Rocco which proposes a radical criticism of the Nineteenth-century city in the inversion operated between the road system and the blocks that here aren't full, but became empty to accept large green courtyards.

The idea of a polycentric city and the elementary part: Monestiroli

This tradition of studies and proposals has been deepened and continued by work by Antonio Monestiroli that from the second half of the last century, he concentrates his attention on the possibility of combining the concept of part urban with that of open city. His theoretical writings from the exhibition to Triennale of Milan in 1995 with the emblematic title "The center elsewhere" (Monestiroli 1995) to end with the very recent research "La Casa" (Monestiroli, Semerani 2011) but also and above all his projects, testify to this responsability on the one side to define and specify the hypothesis of an "open and polycentric" modern city (Monestiroli 2002) able to realize that "project unfinished" repeatedly evoked by Habermas and, on the other, to deepen the characters both of the civil places [Bovisa, San Donato, Pioltello] and of the units residential [Ling Gang, Scalo Farini, Cesena]. In the various examples cited there is the attempt to define as clearly as possible - like in the examples of Mies and Le Corbusier - some completed entities/figures, of size compliant, strongly articulated typologically and morphologically together with natural spaces and neighborhood services, which in their iteration, location and rhythm define new urban parts or entire cities. Places to stay where through the counterpoint of large green spaces and civil centers can still recognize that alternation and complementarity between living private and public living that are the basis of the same essential idea of city as a place of representation of the shared values of a conscious community. These searches concern both peripheral areas or central areas but also, as in the project for Les Halles, also places within the consolidated city in which the field and natural soil appear again as a new place of view and representation of the entire city.



3.A.Monestiroli, Project for the reclamation of the Scalo Farini's area, Milan 2009.

Developments prospects in periphery and in consolidated city: Bisogni

In absolute harmony with these positions of the "Milan school", Salvatore Bisogni's work moves, also, on these two complementary polarities: civil places and residence. Concerning the first pole the hypothesis of the construction of civic "clods" (Bisogni latest) is formulated which in topologically composing two or more public buildings, stand as **finite** and **concise** units able to contrast the dispersion of the metropolitan city. Also in this case there is no lack of studies in which even in the compact city through the revival of large hiatuses in the urban continuum [Montecalvario], it is still possible to include parts of nature and landscape as an opportunity for redevelopment and reorganization of degraded or congested areas. With regard to the question of residence in the original application of the principle of the urban sector as a device capable to **rationalize** and **order** the magmatic edification of the vast suburbs in the north of Naples (Bisogni 1996), it notices how this necessity to identify in the construction of the elementary part endowed with a clear structure far from determining a schematism and an indifferent and homologating repetition, it is possible - precisely because the part is endowed with its morphological clarity - to reconstruct and re-propose, even if only in fragments, a possible urban order capable of summarizing and to reconfigure the sparse formless *sprawl* of these years even referring to it - as in the case of the five municipalities in the north of Naples – informally to the original settlement structure, still visible but inoperative, of the Roman centuriation.

Conclusions

As we tried to show in this synthetic attempt of classifying and describing different ideas of the city, every time in the course of history we wanted to propose a coherent urban model, we have necessarily had to engage in the clarification and formulation of some settlement principles that have always had as their concrete

counterpart the elementary part: from the isolated block of classical age, to the block one, to the palace, to the court block up to the urban. The waiver abdication of the present contradictory and confused condition (Capozzi 2011) to reflect "again and again" on the need to define this methodological and operational armamentarium produces not only the in-form and indistinct dispersion and nebulization of the *generic*, *liquid* or *junk city* (Koolhaas 2006), in a progressive privatization of the city transmuted into post-metropolis (Gregotti 2011) and into a wicked **consumption of natural soil**, but the loss of the city's assumptions as a place where it is possible to find a **balanced relationship between residence**, **civil spaces and nature**. A desirable and better city, which abandons the false and nostalgic densification myths, having to be able to represent our common values, where the chaos that surrounds us is still possible - as for Lukács - to propose an order, a *kosmos*, which reflects and magnifies the our life, a life still worth living, a city for our age which, as Mies reminded us, "also has its own greatness".

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