The Renewed City. New Settlement Principles for the "Re-Construction" of the Urban Form in the Disused Areas

Francesco Defilippis

DICAR Department, Polytechnic of Bari Via Orabona 4, 70125 Bari, Italy frdefilippis@libero.it

ABSTRACT

The paper will deal with the theme of "re-construction" of the urban form in the areas made available by the industrial, military or infrastructural dismantling processes. Assumed as a "resource" for the contemporary city (often for their "strategic" position), these areas offer the opportunity to focus and experiment new settlement principles capable not only to resolve (on the morphological, spatial and functional level) the relation between the parts of city that were previously divided but, above all, to combine the compact and continuous condition of the city with the presence of wide empty spaces of "nature", intentionally re-introduced into the new urban context.

Accepting the challenge of re-building our cities in order to make them corresponding to the aspirations of our time (sustainability, livability, well-being), our research proposes an alternative response to the current settlement "practices". Against the principles of "dispersion", that means the "pervasive" occupation of the urban and suburban soil and the indifference to the peculiarities of the places, it proposes the principle of "densification" and "compaction" of the built volumes in morphologic units that, besides being evocative of the urban condition, are capable to confer to the empty spaces, inside or between them, the value of public places defined by their reciprocal relation.

The purpose of this approach is to subtract the empty space (natural or artificial) to its destiny of residual undefined space between "solitary" buildings, in order to give it a higher value: to contribute to the definition of form of the city of our time.

KEYWORDS: urban renewal, disused areas, city and nature, densification vs dispersion

1 THE DISUSED AREAS: FROM "OBSTACLE" TO "RESOURCE" FOR THE FORM OF THE CITY

In the debate on identity and form of the contemporary city the issue of disused areas occupies a prominent position. In the perspective of the reduction of soil consumption and of the consequent conservative and regenerative instances, they are commonly considered as an important reserve to compensate for the "lacks" of the city (lacks of natural spaces, services, places and public buildings ...) and then as an opportunity to provide it with the lacking spaces and "facilities".

Within the complex and sometimes frenetic processes of transformation, where the different interests (public and private) try to settle and balance, one loses sight of the issue of the form of city and character of places, namely the problem of the form that the city should have to correspond to the recognized character of the places. Often the settlement principle is suggested mechanically by

"functions" and "parameters", whose choice, linked to the interests at stake, is made in contexts other than those that have historically been appointed to make it.

The reduction of the problem of transformation of the disused areas to the problem of function and definition of the corresponding architectural solutions (building and urban types) induces to reason by freestanding "objects", that is by "solitary" architectures, disowning the "relational" nature of the urban form. The role of interpreting a part of city or a place within it is then attributed to the single architectures rather than to their mutual relations, that is to a sum of "monologues" rather than to a "dialogue". This partly explains the growing attention to the "figurative" component of architectural form, rather than to its "syntactic" structure. This also explains the residual value which the empty spaces often assume, since they are intended as generic "adjacent" areas rather than as places necessary for the representation of the spatial relation between the architectures or the urban parts that define them.

In terms of architecture, the disused areas, as well as all the urban voids, pose primarily a problem of morphological and topological nature, that is, a problem regarding the urban form and the character of the urban spaces. The typological issues are well-posed and become productive for the project only if they are based on this problem, recognizing its central role. In fact the disused areas, especially those inside the consolidated city, are above all areas of "crisis" of the urban form. They are areas where the development of urban form has been over time compromised and hampered by the presence of industrial or infrastructural plants, characterized by their insurmountable fences. They constitute "pathological" discontinuities, foreign bodies hard to "phagocytize" that impose on the body of the city their own measures, related to their specific functions. The problematic nature of their presence is usually manifested by the condition of the marginal areas, usually connoted by decaying urban fabric and valueless urban spaces.

Once freed by the industrial plants and redelivered to the city, these areas change from obstacles in extraordinary resource, revealing their potentiality for the redefinition of the *forma urbis* and its possible "re-construction" in light of the aspirations of our time. This potentiality is linked to their exceptional dimension compared to the dimension of the whole city and to their strategic position with respect to consolidated urban parts (fulcrum position) or significant natural elements belonging to the geography of places (board position).

The dismantling and delocalisation processes, triggered by different reasons, therefore constitute for the contemporary city a unique opportunity that should be primarily exploited to "redraw" its form, catching opportunely the potentialities contained in the large empty spaces generated by them.

2 THE "RE-CONSTRUCTION" OF THE FORM OF CITY, NEW SETTLEMENT GRAMMARS FOR THE URBAN RENEWAL

Within this research that considers the problem of transformation of the disused areas primarily as a problem of a morphological / topological nature, the founding moment of the project can only be directed to the identification and definition of the appropriate settlement principles. This process presupposes the assumption of an idea of city capable to interpret the contemporary city - its characters and its problems - and give answers to the instances of our time (sustainability, livability, wellbeing, ...).

Recognizing the polycentric condition of the contemporary city, corresponding to its new territorial dimension and its subsequent composition by morphologically distinct parts, this research assumes an idea of city founded on a renewed relation with nature conceived as the "context" of the urban construction as well as a place destined to accommodate the new collective spaces (Defilippis, 2012). Against the "pervasive" continuity and "indifferent" dispersion of the contemporary city, based on the principle of wildfire growth (inherited from the nineteenth century monocentric city), this idea of city opposes the discontinuity, densification and finiteness of the urban construction in the continuity of the void of nature, assumed as a value because it is the place of the relation between the built parts as well as the place in which it is possible to make recognizable the forms of nature, both those of the physical geography of the territory and those of the anthropic transformation of the cultivated countryside.

This idea of city can generate new corresponding settlement paradigms. Paradigms capable to combine the urban characters of the historic city (the "internality" and density of its spaces) with the "externality" and dilated dimension of the empty spaces of nature. Paradigms able to define a new relation between the "solids" and "voids" that summarizes the discontinuity of the urban construction with the finiteness of its parts (Moccia, 2012).

The "grammars" through which this idea of city is applied and declined in the different contexts, therefore tend toward the "densification" rather than the "dispersion". Developed through the use of the own categories of the urban morphology ("continuous"/"discontinuous", "concentrated"/"sprinkled", "open"/"delimited", "unitary"/"serial", "polar"/"isotropic"), they allow you to combine the "compact" condition of the consolidated city with the empty spaces, that are conceived as space of relation between the built parts as well as spaces necessary for the identity and recognition of the form of the elementary units that constitute the same parts.

The projects described below, along with the other projects developed as part of this research, constitute the "field" of the definition and experimentation of these "grammars". They express different settlement paradigms that, referring to the same idea of city, highlight the different relation that the forms of the urban construction can establish with the empty spaces, intended both as "structuring" elements of the city than as representative elements of the form of the natural landscape.

2.1 The case study of the area of the railway corridor in Bari

The theme of this first case study is the re-construction of the form of the city in the central urban areas made available by the dislocation of disused railway plants.

The context is that of the city of Bari, recently graduate to metropolitan city, and its railway node destined to become one of the nodes of the Italian High-Capacity, connected to the High-Speed Corridor 5 (Helsinki-Valletta) through the line Naples-Foggia.

The challenge accepted by the project is to define and assume a new infrastructural arrangement, corresponding to the new strategies of the national and local mobility, capable to involve the entire city, triggering processes of redefinition and renewal of its form. The new arrangement, based on the displacement of the railway line from the current position, which divides the city into two parts, to an outside perimetral position, would release by the bundle of tracks the whole area between the Murat quarter and the twentieth-century expansion. Once made available, this area would be a "resource" to rethink the form of the city through the definition of new possible relations between the parts that compose it.

Downstream of a critical reflection about the settlement principles it's possible to adopt for the construction of this kind of urban voids and about the historical forms assumed by the urban block along its progressive transformation from a "closed" to an "open" configuration, the project proposes the idea of construction of a "urban fabric" consisting of elementary units (buildings in the shape of "L") combined together so as to define, through controlled "topological" variations, a concatenation of urban spaces, now open and facing towards the two sides of the city, now closed and internal to the "urban fabric" itself. The first are paved spaces placed at a higher level, above urban basements; the latter are spaces of nature. The "frame" of the new urban system is constituted by the prosecution of the orthogonal grid of the Murat quarter, that is stronger than the uncertain paths of the twentieth century expansion. By this grid it takes the orientation and hierarchies but not the pace, obviously related to the dimension of the traditional urban block. The new pace of the grid is established according to the programmatic objective of defining more dilated urban spaces, capable not only to put in relation the parts of the project but above all to evoke within the "congested" city the wideness of the spaces of nature.

The elementary units are arranged so as to form unitary urban "islands", namely macro-blocks placed in succession along the central axis of the composition: the longitudinal pedestrian boulevard that connects the new railway station, located at the head of the system, with the old one. In correspondence with the latter, the central axis intersects with the orthogonal axis, also pedestrian, which connects the old town of Bari to the disused military area of Caserma Rossani. Here the project situates a great courtyard

building, a kind of "castle" that defines a new "stronghold" for the city, destined to a permanent pole for the promotion of cultural and productive activities of the Apulia region. The old station maintains its function for the local railway lines (buried in the terminal section) and for a rapid underground connection system with the new station (automated people mover).

The urban "islands", recognizable by their unity and completeness, together with the elementary units that compose them, register with their forms (the towers, the loggias, the orders of the openings of the facades, etc..) and their variations the peculiarity of the places that they build and on which they overlook (crosses, squares, green spaces). Their morphological articulation combines the continuity and compactness of the consolidated city with a volumetric density adequate to the creation of new places for the city, corresponding to the aspirations of our time.



Figure 1: Masterplan

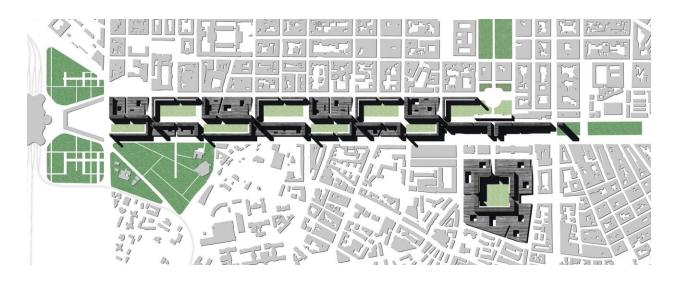


Figure 2: Planovolumetric



Figure 3: The urban unit. Plan and elevation on the central pedestrian boulevard

2.2 The case study of the area of the disused cement plant in Monopoli

The theme of this case study is the reconstruction of the form of the city in coastal areas made available by the dismantling of old industrial plants.

The context is that of the city of Monopoli, a medium-sized coastal city, located at south of Bari. The area in question is that of the abandoned cement factory located on the largest of the three "peninsulas" that articulate the coastline enclosed within the harbor basin, between the outer and inner breakwaters. In turn, these two piers are grafted to the two external "peninsulas", one of which is occupied by the oldest part of the city and by the castle of Charles V, built on its point.



Figure 4: Planovolumetric

It is a degraded area but at the same time it has a great value for the entire city both for its strategic position in relation to the port and for its closeness to the central places of the city (the old town and the nineteenth-century town). The enclosures of the factory currently create a physical barrier between the city and the port and prevent walking along its quay. The demolition of the plant, which began last year, will offer to the city the extraordinary opportunity to regain the relation with the sea and rethink the form of the entire waterfront, counting on the availability of a wide area.

According to our approach, the interpretative key of the area is contained in the relation between the physical form of the coastline and the form of the city. Monopoly is located along a section of jagged rocky coastline characterized by the alternation of protrusions and indentations, points and bays which corresponds on the topological level to an alternation of convexity and concavity, "externality" and "internality." The particular form of the harbor is the expression of this physical conformation of the coast and its interpretation by the city, especially by the old town. In fact the way in which the old town "builds" this topological condition is paradigmatic. It settles on the points architectures having a "convex" character as the castle and the ramparts of the old urban walls, which take the value of urban "stronghold"; and at the same time it defines the bays (Cala Porto Vecchio and Cala Batteria) as they were internal places of the city, "squares of water" delimited by architectures that overlook on them.

The project recognizes and assumes this principle (evidently not recognized by the modern part of the city) and tries to continue and complete the urban sequence of "points" and "bays", interrupted by the cement plant, up to the point of the jetty, which is considered the new "stronghold" of the city.

The settlement grammar and the form of the elements of the project correspond to this intention. The towers, constitutively "convex" elements, mark the points (Punta del Tonno, Punta del Trave e Punta della Dogana); the linear buildings (with their loggias and their external elevated walkways) edge and define the concave water space of Cala Fontanelle.

The other objective of the project is to bring and represent within the city and its harbor basin another condition: the natural condition of the coastal landscape. For this purpose we decided not to saturate the "peninsula" of the cement factory, but rather to leave it mostly free in order to give it back to the nature and its forms. In the project it becomes in fact the urban place in which you can find and recognize the natural character of the coastal landscape, connoted by the cliff and by the Mediterranean garrigue.

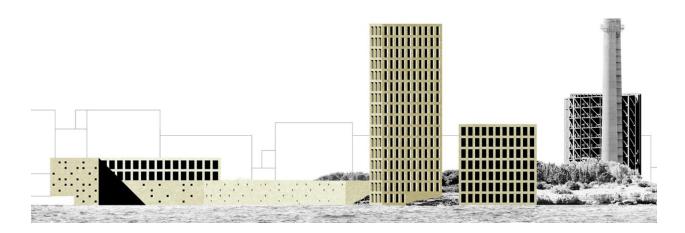


Figure 5: The new waterfront

The empty open space of the *garrigue*, which seems to act as a counterpoint to the compact and lithic "clod" of the old town, constitutes an urban space alternative to the stone squares and public gardens of the city of Monopoly, but highly representative of his condition of seaside city. It is defined by the reciprocal relations that are established between the elements of the project (new and recovered), held together by the continue "carpet" of the *garrigue* and welded to the city from a frame of hierarchical paths that links together the places of the project and the buildings that define them.

3 CONCLUSION

In continuity with the Italian tradition of urban studies, this research aims to outline a theory of the urban design and define the relative settlement grammars applied to the problem of the disused areas in order to direct the related processes of transformation and regeneration toward far-reaching solutions for the city, adequate to the potentialities expressed by the same areas and at the same time corresponding to the aspirations of our time. Aspirations which implies a new way of thinking and dwelling our cities and that can only find the answer in solutions capable to re-imagine and re-build their form.

4 ACKNOWLEDGEMENTS

The projects illustrated were drawn up in two distinct contexts. The first was developed in the Degree Workshop of the Degree Course in Architecture of the Polytechnic of Bari, dedicated to the theme of the railway node of Bari Centrale (a. y. 2013-2014). The second was developed in the International Urban Design Workshop "Re_Build the Urban Form", an Erasmus Intensive Programme organized by the author and other professors of the Polytechnic of Bari (Monopoli, September 9-21, 2013) (web-1). The Degree Workshop, coordinated by the author, was composed by the following students: C. Buono, G. Ciaccia, C. Maggio, F. Loprieno, G. Palmisano, A. Scisci. The design team of the EIP Workshop, coordinated by the author and Carlo Moccia (Scientific Coordinator of the Programme), was composed by the students N. Catella, G. Galliani, I. Iosca, D. Ragno, G. Torsello, G. Tupputi and tutors E. Melchiorre and A. Paolillo. The author would like to thank all the students and tutors for their passionate work and Carlo Moccia for his enlightening contributions to this common and shared research.

REFERENCES

- Defilippis, F. 2013. Discontinuous polycentric city *vs* continuous sprawled city. The urban voids as "resource" for the form of the city of our time, in "Proceedings of the International Conference on "Changing Cities". Spatial, morphological, formal & socio-economic dimension", Gospodini A., Ed., Grafima Publications, Thessaloniki, Greece, pp. 532-541.
- Defilippis, F. 2012. La ricerca della forma della città del nostro tempo, AIÓN n° 19/2012, Rivista Internazionale di Architettura, Aión Edizioni, Firenze, Italy, pp. 135-145.
- Moccia, C. 2012. Grammatiche della forma per la città del nostro tempo, in "Architetture razionali per un metodo condiviso", A. Tognon and C. Simioni, Eds., Aión Edizioni, Firenze, Italy, pp. 77-83.
- Moccia, C. 2011. Amor Vacui. Luoghi per la città del nostro tempo, in "European City Architecture. Project, Structure, Image", Amistadi L. and Prandi E., Eds., Festival dell'Architettura Edizioni, Parma, Italy, pp. 120-123.
- Web-1. www.rebuildurbanform.com/en