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## Continuity and discontinuity in the urban form

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#### Abstract

Methods of urban morphology offer an opportunity to develop holistic approaches to sustaining heritage cities, which address local cultures and identities, through an analysis of the evolution of the place and its interpretation in spatial and architectural practices. Particularly, the dialectical relationships of elements of urban form on different scales or instances of the same element can be investigated. For example, the structure of plots is a result of the sequence of transformations, description of the history of the part of territory: multi-level diagrams with a representation of the chronological sequence of structural development could be a key to the logic of a dynamic process, even when the urban fabric presents an orthogonal grid. In fact, in these cases, we can recognize the process of transformation of the urban fabric throughout the hierarchically produced order between the roads that have come to be determined over time (readable in the arrangement of the entrances of the buildings, in the distribution of commercial activities, the height of building and largeness of the street). However, there is a difficulty in finding the key specificities of a particular piece of urban fabric, especially for specialists who investigate their indigenous environments (which they take for granted), at the stage of familiarization with the method. The paper illustrates the evidential efficiency of the comparative method, presenting the intermediate results of the ongoing comparative morphological case study of the development of an urban form of colonial cities Krasnoyarsk (Siberia, Russia) and Quebec (Canada), which were both established in the 17th century in a similar climate, and have clear morphological similarities and evident differences. The first could speak about objective features inherent in the construction of cities, regardless of the socio-political and economic context, the second can indicate the unique specificities that are most characteristic of the place under consideration.

Keyword: Continuity and discontinuity, Place of transformation, urban design, urban form

### The town as a "Place of transformations"

The Shape of the city is the expression of build capability for humanize a unbuilt place, but at the same time it is also the face of the individual and collective genius loci. Spirituality's face of who have been able to masterfully interpret and form the place, giving character and organization at the natural place. It is the masterful outcome of the individuals and collective experiences as practices destined, into the time, to become "rules", that today we can recognize in the buildings and that at one time were shared between all the cultural area people. Art that was "knowing how" and to transform; art, whose etymological root ar - in Sanskrit, means: adapting, producing, build well.

We could understand the city, and the historical one in particular, as an expression of art, so as suggested Marco Romano (Romano M. 2008), but I believe that today can be better to consider the idea of Riccardo Dalla Negra (Dalla Negra, 2016), that suggests to us to consider the town rather 'the place of

transformations'. This concept seems better suited to explaining both the complexity of historical urban fabrics and the dynamic process in the form, also the simplest one. That today we can recognize within the new settlements, that instead, at first look, can appear a casual juxtaposition of serial elements put together along the path or within a limited area.

Without limiting this paper on the general sense of the value and meaning of the shape of the town, the concept 'Place of transformations' seems more appropriate and useful then 'work of art'. This is frequently preferred from who wants fundamentally to recognize the generically artistic value of the historic urban fabric. (Pellegrino P., 2006). It represents the sequence of the transformations interspersed episodically by moments of continuity, discontinuity, rebirth, metamorphosis. An osmosis between the building type and urban fabric, as between 'prevalence of the building' over the shape and serial development of fabrics. (A. Levy, 1999). Continuity and congruence in between the buildings and the fabrics Vs dominance of an edifice on the building fabric. The overlapping of new forms and volumes on the previous settlement, that brings new "order" into the city. An Intentional discontinuity (new building) where every addition, each superimposition must be necessarily connected and referred to the larger general system, composed of previous prevailing fabrics and urban building. Forms linked to the experiential uniqueness of the actor or actors, which intentionally and exceptionally built the "works of art" (Pareyson, 1958). It is an object ontological useful to the subject to reach the truth; an aesthetic and functional synthesis, that the subject takes out and impress at the same time inside continuous metamorphosis process.

So, designing a building means, in some way, reinterpreting the object formed and reformed by the spirituality and vital experience from acting subjects, and at the same time reinventing and returning the object for the new idea of the city. The 'place of transformation' is opposed to the intervention of simple conservation, albeit limited to the recognized 'work of art', because it risks bringing the object to oblivion, to be exhibited, certain to be visited, but barely to be live. In fact, if we consider the urban form as the product of the actions of many individuals, as unique unrepeatable experiences. Its knowledge can only prove to be an active guide to action, a source of experiences to operate, certainly not for a random discontinuous making, but for a new "invention" consonant and congruous to the contemporary context.

The shape is often expressed in type-scheme and type-idea (a priori), figures and suggestions useful for organizing and transforming the building and connective tissues, which by merging and "blending" into the types, to generate new forms and architectural unit and consequently new connective axes. Therefore, if in the 'place of transformation' every addition, each new connective axis, superimposed on the pre-exists urban fabric, is linked to the previous phase, will be two the phenomena that, in the case, we could consider for the design: The more or less 'spontaneous' of the formation (initial) and that the most critical one of restructuring (secondary).

The formation of a new building fabric is often anticipated from the small change in the original form. This is the substratum on which the building aggregate itself is inserted. Often the transformation and the densification of the building, develops in the block and in the lot, alters values and hierarchies between the

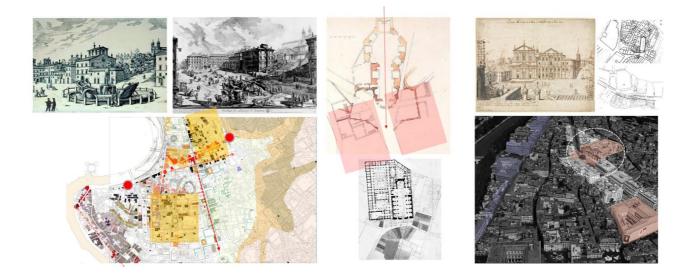
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paths, and occasionally causes new centralities in the fabric, sometimes together with a square that becomes external relevance of the prevailing unit.

The Restructuring, unlike formation, almost always manifests itself by overlapping, if not even by building substitution. It is intended to make the urban 'story' more complex. We could metaphorically imagine these transformations as the corrections made in a written text. It will be easy, in fact, to observe this phenomenon in any map of the town where such transformations have occurred and to recognize, in the forms, the story of the building events, the overlapping and adaptations implemented the pre-existing urban drawing. This will be well as the rewriting of the urban text, a different text / drawing, linked to new or renewed prevailing elements (Carlotti P. (2017).

Correcting to rewrite the text obliges us you to work on the detail expressed by the cadastral plot, on that individual cadastral unit whose geometric outcome is almost always attributable to the hands of those who have worked on the material reality. So at one time a building was transformed by reusing its parts to make something else, one invented the new shape starting with what could be recovered from the existing edifice.

The materials and the art of building contained, one time like today, the "compositional invention", but differently from today, in the past times one necessarily had to make use of what was already available and above all one was technically limited by what one knew make.

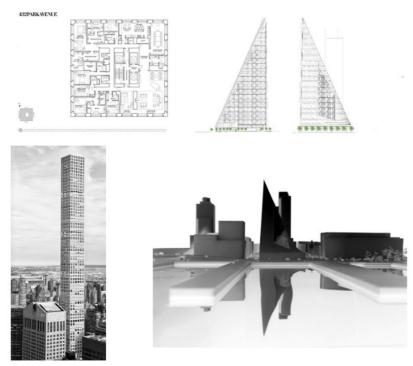


**Fig. 1**. Roma, Morphological reading of the cadastral map of the area of the Augustan expansion (Imperial, medieval, 16th and 17th century phases). In black: cadastral parcels relating to row houses with regular shapes (pink line: trace of the axis that connected the Pantheon with the mausoleum of Augustus). (Red and orange and blue).

## Congruence in continuity and in discontinuity

Rem Koolhaas's statement "fuck you the context" has been much discussed, also supported by writings by Koolhaas himself, who, referring to "bigness" (Koolhaas, 1994), provokes the reader with the large dimensions of the buildings related to the newness of the metropolis. So as also Richard Meier, for whom instead, the context that counts and must be expressed is the present. Meier talks about white, tries to refer to a language that he believes to be shared, enhances the solids and voids, but also speaks of a "static architecture, does not grow over time", aligning himself at the choice for the discontinuous project, which is however also contrast. He wants to impose itself on the dynamic nature of architecture, which instead transforms itself, continuously changes function and relationship with the larger context.

The intervention in discontinuity, in the historical fabric, is often considered a contradiction, both in Rome and in the NY, like for example the case that Meier criticizes the interventions of Vinoly R. and Ingels B. (Casicci, 2016), because they are ridiculous and out of context and because interrupt urban continuity.



*Fig. 2* NY, new skyscrapers (Vinoly R. and Ingels B.) that R. Meier considers in discontinuity and contrast with the urban fabric of the city

A criticism analogous to that made at many contemporary interventions in many historical contexts, and continuously alive in the debate between those who want absolute respect for the pre-existence and those who instead claim the legitimacy of the intervention and transformation. Although since the time of the post-war reconstruction no one had doubted about the legitimacy of contemporary intervention in the historic fabric, in practice, the difficulty to reach to a shared approach to the subject, has separated those who recognized themselves in the idea of forming form from those who, practicing historical disciplines, poorly digested what was proposed outside the history, ending up proposing superficial arrangements that do not even consider the figurative unity of the facade (Dalla Negra, 2011 - Carbonara G., 2011). Now if it is

true that the maestro of restoration had always defended this practice of the project activity, and although even people like Bonelli had never questioned the legitimacy of contemporary intervention, it is also true that the legitimate claims of who design culture practice were never fully accepted. Recently the trite *querelle* between conservators and innovators has been politically overcome inviting the architects of the star system, considered *super partes*, openly deployed in defense of the culture the project that offers easily a widespread consent. (La Cecla, 2008). Although, someone (Piano R., 1998) has clearly stated that Architecture is an art to produce useful things, often something one does that strike the collective imagination of those who, from the outside, are unable to grasp the expressive scope of a self-referential language. In a time of populism's rebirth, an architecture that becomes media, unexpected, is well received by a civitas that has long been waiting for a strong change. The use of images and large, impactful constructions has always left their mark on the city and in the collective imagination, easily recognizable (J.W.Goethe 1991, p.50). Icons that have determined singularity and consequently imposed a long metabolization, which, however, if taken in the right direction, can also offer an interesting lesson for the critical and conscious project.

If in a context mainly preserved and characterized by artifacts, that only occasionally show shortages, it is legitimate to speak on the integration of the voids (Mileto, 2008), in a context characterized by heavy stratifications and conspicuous adjustments, dictated by necessity, it will be useful reflect on the typological significance and the role of the project in the progressive adaptation of the unit to the wider system. So, if within a settlement the growth of the population produced the change of type (from courtyard house to row house or still to building type in line), the prevalence of a subject could be reflected on the building, which consequently will prevail on the fabric through new specialized forms and characterized by new functions (noble palace).

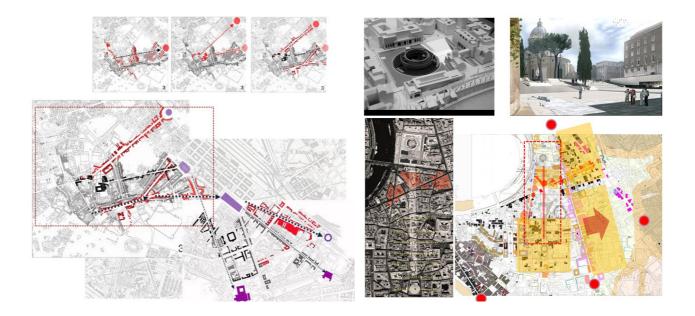
#### Prevalence and hierarchies in the urban form

The law that led the formation / renovation dyad could be considered the genetic codex of the city's urban patchwork at the present day. In the historic urban fabric, the semantic significance of the cadastral design, it depicts the graphic storytelling of the process that shaped and transformed it. We could find the 'form matrix', that belonged to the original building types, transformed then into the most elementary types, still recognizable in the cadastral partition and in the footprint of contemporary buildings. Geometries that belong to urban systems reformed in contiguity and congruence, expressions of permanence or change of economic status and civil coexistence (Pellegrino P., 2006). Typical is the restructuring road, within urban drawing. It is recognizable for the irregular and trapezoidal shapes, that we can look at the cadastral drawing in the bands of pertinent (Carlotti P. 2014)

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Instead into the regular grid of contemporary cities, we can observe the hierarchization in between the roads. This dynamic produces a kind of super block, that A. Moudon calls hypergrid and superblock (Moudon, 2019) and which decline the particular character of the restructuring path.

Probably the Urban morphological research must extend beyond the three basic levels. Looking to "downward" within the buildings, or to "rise" to the urban scale. Rooms and corridors nest in the buildings, as the units of the plan are nested in the neighborhood, districts, or city (Berke & Moudon, 2014) and the multilevel of the urban form is parallel to that of the social structures. The nesting (Berke & Moudon, 2014), which Caniggia named "scalar nature of the building fabric", and that is expressed in the space-time dimension of the cartographic representation, otherwise perceived as a confused intertwining of signs.



*Fig. 3. Expansion of the city of Rome in the 19th century. The connection between the new centralities and the new urban axes is evident. (Right) the project of the new centrality in Piazza Augusto Imperatore in Rome* 

#### Conclusions

Sometimes, in the practice, we fascinated from the evidence and submerged original geometry in the urban form, by the footprint left by the Roman Empire (in the Mediterranean areas), that is particularly permanent compared to the restructuring and transformations planned or simply implemented in the modern and contemporary age.

But both in the ancient city and in the modern and contemporary one, this metamorphosis seems linked to a sort of "genetic code", which conditions the choices and subsequent forms. More or less congruent design and architecture, linked to special buildings, masterfully and intentionally inserted as a discontinuity in the fabric and superimposed on the modern and contemporary fabric.

So, reflecting on the rules and practices that have contributed to the urban form, we can, with the project, try to restore the balance between the parts and the whole, between what is inherited and what belongs to

the actual reality more general urban; this through episodic actions also in discontinuity, but above all calibrated on the local dimension.

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