

Research Title:

Specific realities and new hypotheses for urban analyses and urban design - Tirana as a case study

Abstract

This research is a reflection on how we think about cities, observe, analyze and transform them. Cities along their history develop unique characteristics. Often, these characteristics tend to be simplified or sterilized because they do not comply with our predisposition about how the world should be. In this concern, this research is an effort to explore on how to “extract” specifics from a given reality and how to regenerate and give them life, as an alternative to the city suffocated by the mechanic thinking and constant exclusion of the organic and natural phenomena. The underlying patterns of these phenomena are futile and may pass unseen or unobserved unless we change the way we see them. For this the research identifies the main urban patterns in Tirana and their essential qualities trying to outline a methodology for observing, analyzing and potentially designing the city.

In this concern, the research calls to enlarge the focus of observation for a more profound and holistic understanding of the physical form and the underlying formative principles. The analytical process tries to interpret the meaning of parts and wholeness in the urban realm under the quantum perspective. This conceptual shift involves more sensitivity to interpret the latencies and multiple reality of a world where *both/and is the rule*. As Zohar and Marshal (1994, p. 54) say, this kind of wholeness is an *unbroken web of overlapping internal relationships* created by the wave aspects which give rise to new systems with a *new corporate identity*. It is in this sense that in the quantum world the new emergent reality is not the sum of its parts, because interrelationship is involved in its creation. In parallel to that, the research tries to see the urban patterns as an unbroken wholeness in time-space, aroused from relationships of present and previous elements, being those material or non-material (particle-wave). This means that *apparently separated “things” are aspects of some larger whole* (Zohar and Marshal 1994 pp. 59-60), because of the arousal effect of the interfering patterns from different space(s) and different time(s) that affect the local temporal environment, as no space and time between them exist. In this research, this kind of unbroken web appears under the label of *society-space-time (SST) continuum* (Arida, 2002 p. 157) *as an energy field of potential events*. It is this concept that correlates the different events in the specific history of Tirana, the different anthropological cultures, the different places, or the different times in a web of wholeness which exists beyond the local SST. Based on this logic we can reach a deeper understanding of the urban patterns and see their emergent qualities as horizons (territorialities) aroused from different space time societies, interfering with each other and the local temporal environment. The created emergent quality is similar but different from the original ones. Therefore, patterns are considered as manifestation of territorialities (horizons) “caught” in the SST web of wholeness.

The research tries to explore the wholeness of urban patterns also under the concepts hired from *fractal city* (Batty and Longley, 1994) and *complexity* approaches (Mitchell, 2009). According to the former, patterns contain in their internal an invisible (underlying) structure of relations. Thus, the degree of order we see in the external form is deeper and comes out from relationships and hierarchy contained in the internal form that manifest properties of a system with structure: with its static, understood as aggregation of elements in subassemblies; and its dynamic, understood as recursive behavior at which base stays the repetitive nature of irregularities across scales. This complex behavior involves a *large networks of individual components* that enter in relationship through *signaling and information exchange* (Mitchell, 2009 pp. 12-13). Thus, even in this case, the wholeness poses qualities (and identity) that arise only through relationships and interactions that evolve from self-organization to self-regulation.

In order to understand the statistical model of this complex behavior the research undertakes an observation and measurement process of the system-form (pattern), and analyzes the *algorithmic information content* (Mitchell, 2009 p. 111) contained in the recursive regularities that characterize a range of forms relative to the essential qualities of space. This information is a number of steps and sequence of actions that involve repetition of operations to be performed, and that serve as input for the modeling process (of the pattern) through generation techniques. Therefore, considering patterns as an *invisible structure of relations* (Batty and Longley, 1994 p. 47), which underlie the external form, was crucial to approach their holistic dimension by adding the meaning deriving from quantum, fractal and complexity approaches. This is directly reflected in the way we see order and chaos, or planned/unplanned and organic etc.

The research starts with historic analyses and conclude with an attempt to organize the data in a model that emphasizes the characteristics of a specific reality. The proposed methodology contains a strong historic and anthropological idea, touching upon important issues such as how to transform organic or spontaneous (informal) in urban quality; or how to give space to a system of apparently irrational rules within a rational system; and have not only a top-down approach, but also a real bottom-up process. Throughout the research I try to bring evidence that the information for city design and/or city self-regulation is contained within the city itself, but we should refine the lens of observation to see the full picture. This is my clear position related to the research question. For this I propose a methodology where the computational nature of urban phenomena goes along with the historic anthropologic idea. They do not exclude each other, contrarily, they are part of the unbroken SST web.