

The Groundscraper City *A Post Crisis Vision for the City Center of Volos¹*

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Abstract

The degeneration of the urban and natural environment and the arising of an urgent demand for a new kind of democratic participation in political decision-making have led to a re-thinking of the present and the future of cities. The very essence of Greek modern cities, affected by economical and social crises, has always been how to continue processes of accumulation and stratification. These considerations are the basis upon which to theorize a new aesthetic for the city starting by re-thinking the role of its constitutive elements. The city center of Volos is re-thought to envision a new multi-functional productive landscape with collaborating units that are both self-sufficient and sustainable following two main objectives: 1) to re-think the relationship between private and public by re-programming surfaces and altering hierarchies between buildings and open spaces, and 2) to re-convert urban mechanisms in order to implement new ways of production and leisure.

Keywords: Ground, Skyline, Crisis, Topography, Commons.

1. Introduction

The degeneration of the urban and natural environment and the arising of an urgent demand for a new kind of democratic participation in political decision-making have led to a re-thinking of the present and the future of cities worldwide. While these phenomena are global, they are characterized in each specific context by some peculiarities in the way each local landscape has been designed, written, created, and used over time. Moreover they bring to the fore the relationship between humankind and its environment in its local expressions. In the current economical and environmental crisis that affects both the urban and the natural environment, there is an urgency for the revaluation of collective goods. Modern cities are collective compositions with a narrative power where the boundaries between private and public cannot continue to be considered merely in terms of property (Touraine, 1997; Sennet, 1977).

¹ "Groundscraper City" is the outcome of the "Unit 4: Urban Typology I // Building (block) Typology" of the "Volos at the Extremes" Design Masterclass, organized by Urban Transcripts and hosted by the Department of Architecture of the University of Thessaly in Volos on October 2013. Guest tutor: Fabiano Micocci; Host tutor: Carolos Galanos; Participants: Athina Fousteri, Dimitra Starida, Filothei Zisopoulou, Foteini Lenta, Arta Bytyqi, Evangelia Papadopoulou, Myrto Thanasi, Eleni Tatiana Vasileiadou.

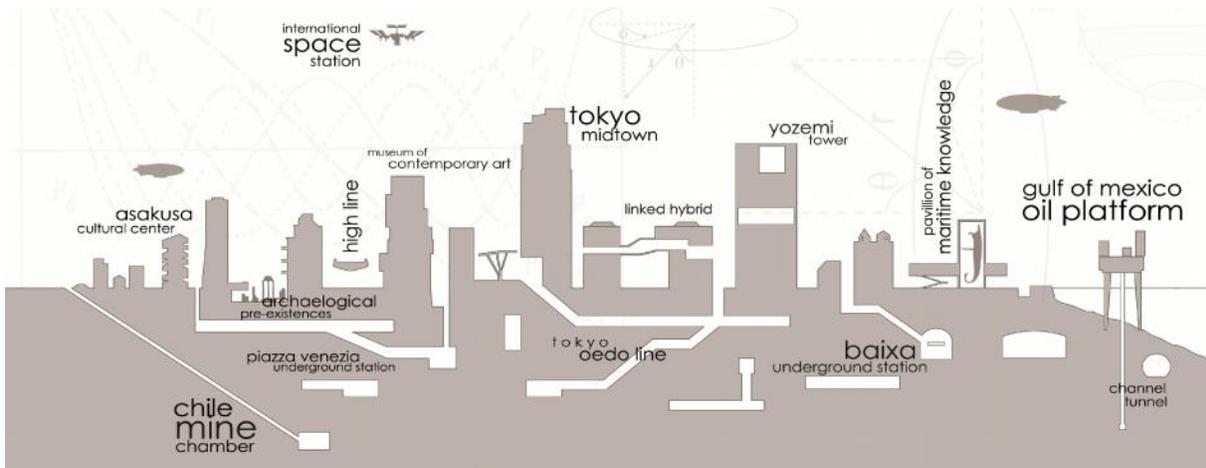
Private property rights and profit rates embedded in urban housing typologies have thus to be altered to re-evaluate the public role of private properties for the transformation of the urban landscape. Matters of this kind are taken into consideration for an intervention in the city center of Volos, the fourth biggest city in Greece, by re-considering intrinsic urban materials as the primary resources to envision a future evolution of the city after the economic crisis.



Urban typologies and natural landscape @ <http://e-thessalia.gr>.

2. The "Thick Topography" as a method of intervention

Re-thinking the city means to find new tactics that start from city's inner qualities. Two concepts are priors in this investigation: the respect of the *field* that includes the contemporary existence of objects in continuity with merged events but with the respect of the identity of each (Allen, 1985; Ewing, McGowan, Speed, Bernie, 2011); the use of *topography* as the tool of recognition of the reality through a phenomenological and scientific attitude (Ignasi de Solà-Morales, 1996).



The "thick topography" is defined by the urban section extended from the ground to the skyline @ Cristiano Lippa.

The city as a *field* is thus set out by the combination of architectural objects and the socio-economic conditions that contributed to the production of the actual form of the urban environment, as the result of a process of accumulation over time. The "thick topography" of a city takes into account all the layers accumulated between the ground floor and the skyline as manifestation of social, cultural and economical circumstances. These considerations are the basis upon which to theorize a new aesthetic for the city starting by re-thinking the role of its constitutive elements and re-defining the field of the architectural intervention into the city section (Lippa & Micocci, 2012a; 2012b).

3. The "urban thickness" of Volos

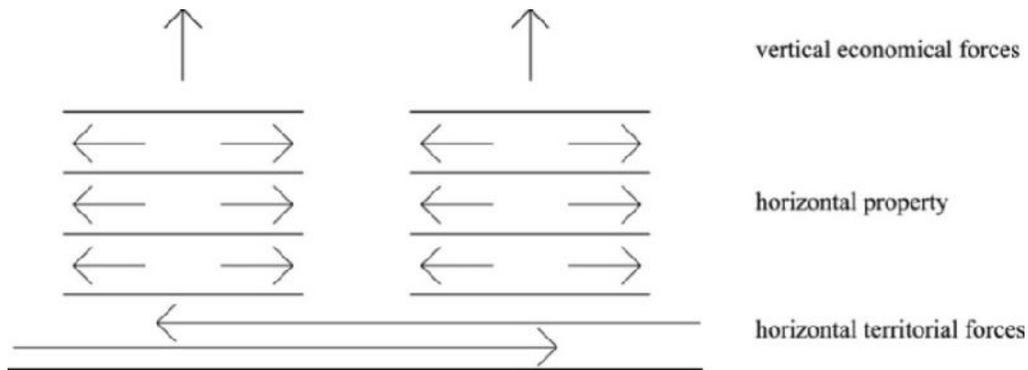
Processes of production of the city, their consequences on the resulting urban form, and their future evolution are investigated here. The *polykatoikia* (πολυκατοικία in Greek literally means multi-dwellings), the typical Greek multi-storey apartment building, has become the symbol of modern Greek cities: it features the most common construction systems (*maison-domino*), it defines the basic environmental space, and it reflects social dynamics of urban coexistence at the human scale. The *polykatoikia* embodies a double scalar meaning: on the one hand it continues the tradition of the Mediterranean multi-storey and multi-functional buildings (starting with the roman *insulae*), hosting diverse, interlaced, and interchangeable functions; on the other hand, it constitutes the basic unit for the construction of the modern city (Leontidou, 1990). Volos, as most modern Greek cities, is made up by assembling this basic module of modest dimensions, repeated endlessly on regular grids. Its individuality is thus dissolved into the vast urban landscape engendering the heavy-coated surface on the city's skyline (Leatherbarrow, 2009).



Typical dense and mixed urban blocks of Volos City Center @Urban Transcripts.

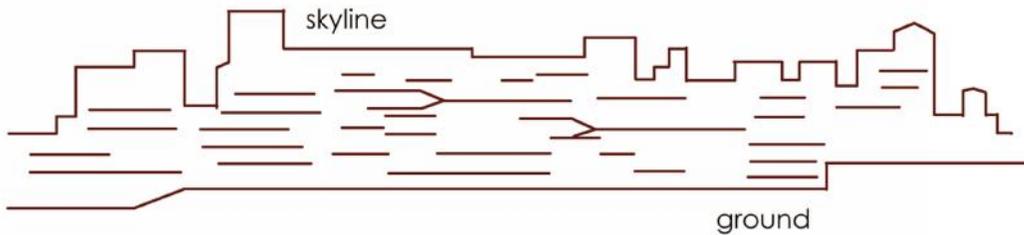
The urban environment is defined by an extended and variable 'thickness' that coincides with the vertical extension of the buildings, itself resulting from the dominance of principles of economic exploitation of the soil. This thickness has a measurable extension that starts from the level of underground geological formations until the skyline of the city (Lippa & Micocci, 2012a; 2012b). Urban strata within this thickness are defined by the ever-present *maison domino* system of the *polykatoikia* and composed by multiple levels of concrete slabs that outline the constructed urban mass. The main qualities of this typology are its adaptability, the

extreme permeability between the inside and the outside, and the creation of intermediate spaces, voids, and sheds at each level (Kotionis, 2012; Micocci, 2012).



Scheme of the combination of economical vertical forces, horizontal relations in the multi-storey apartment buildings and the horizontal extension of the ground floor @ Fabiano Micocci.

Each stratum is thus characterized by a great mobility of users and activities, in the end complementing one another. The matter has never been how to define the shape of a stratum by an ordinate and controlled urban process or design idea, but rather how to continue processes of accumulation and stratification (Rivkin & Melidaoui, 2007).



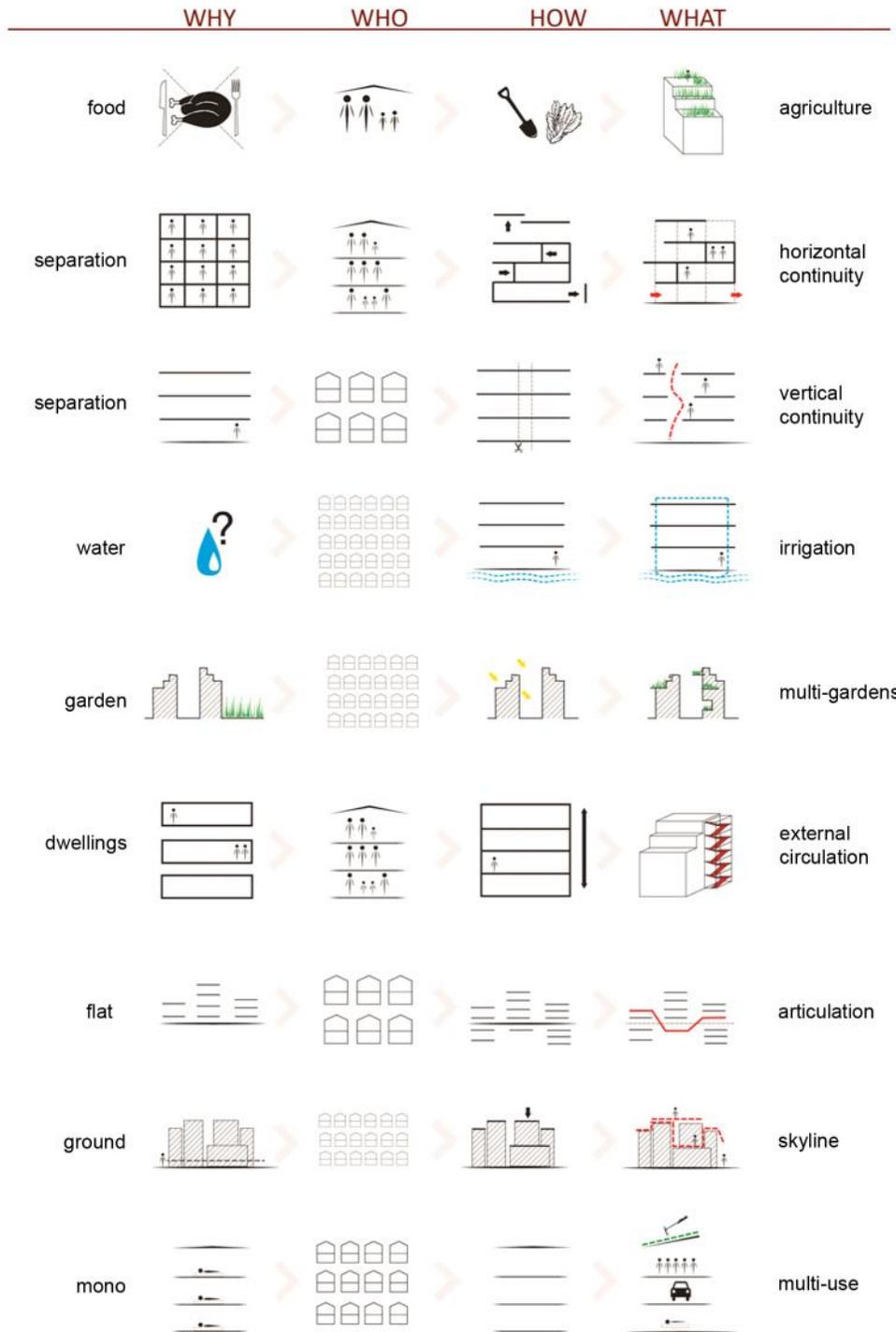
The field of intervention of architectural operations is between the ground and the skyline of the city.

4. A collective strategy

A collective strategy is proposed to reconvert the city center of Volos into a new sustainable device with a renovated sense of belonging where citizens are actors directly involved in the transformation and the managing of the city. A set of interventions are defined accordingly to objectives to satisfy the collective demand for a more qualitative, sustainable and economically dynamic environment.

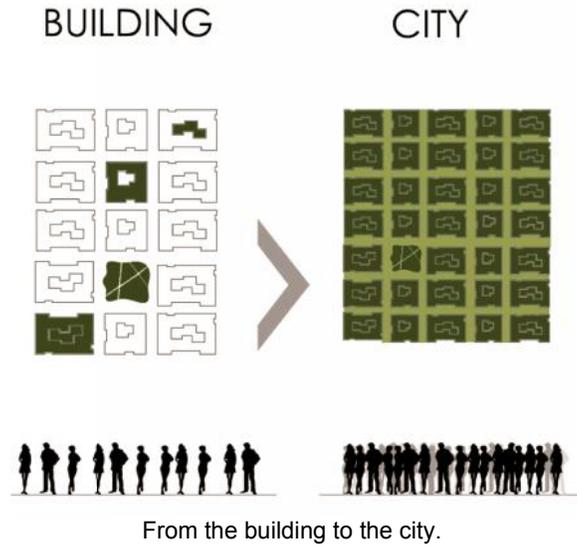
Prior is the identification of the current lacks that deteriorated Volos City Center during recent years, mostly depending by the current economic crisis (the lowering of incomes, the accentuation of individualism, the difficult accessibility to food for low income families), by congenital structural territorial conditions (the risk of water shortage and earthquakes), by the consequences of the wild economical exploitation of the soil (absence of green areas and parks, the proliferation of multi-storey apartment buildings, the lack of planning, the absence of porosity between the streets and the internal courtyards), and by the features of the *polykatoikia* (dwelling distributed almost at each floors, the diffuse apartments' ownership, the flatness and homogeneity determined by the homogenic repetition of the same standard typology).

To satisfy these objectives, a set of operations are proposed that can be applied in time accordingly to exigencies and that could involve different actors. These operations alter the actual configurations of the *polykatoikia* enhancing an effective vision that put forward the *maison-domino* system as a new archetype for urban interventions.



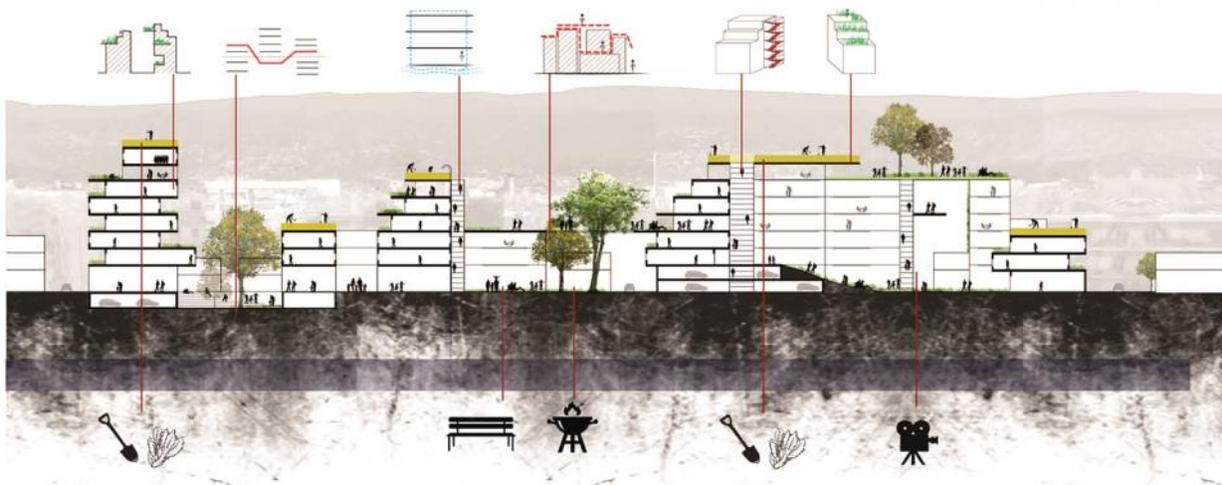
Matrix of operations: why (problems to be solved), who (the participants), how (the strategy), what (the outcomes).

The "matrix of operations" is a toolbox of actions to implement in the city through collective participation. New common activities for production and leisure together with high specialized jobs are mixed in a sustainable framework made of pedestrian horizontal and vertical circulation, common spaces and a new light infrastructural systems that will grow accordingly to the exigencies.



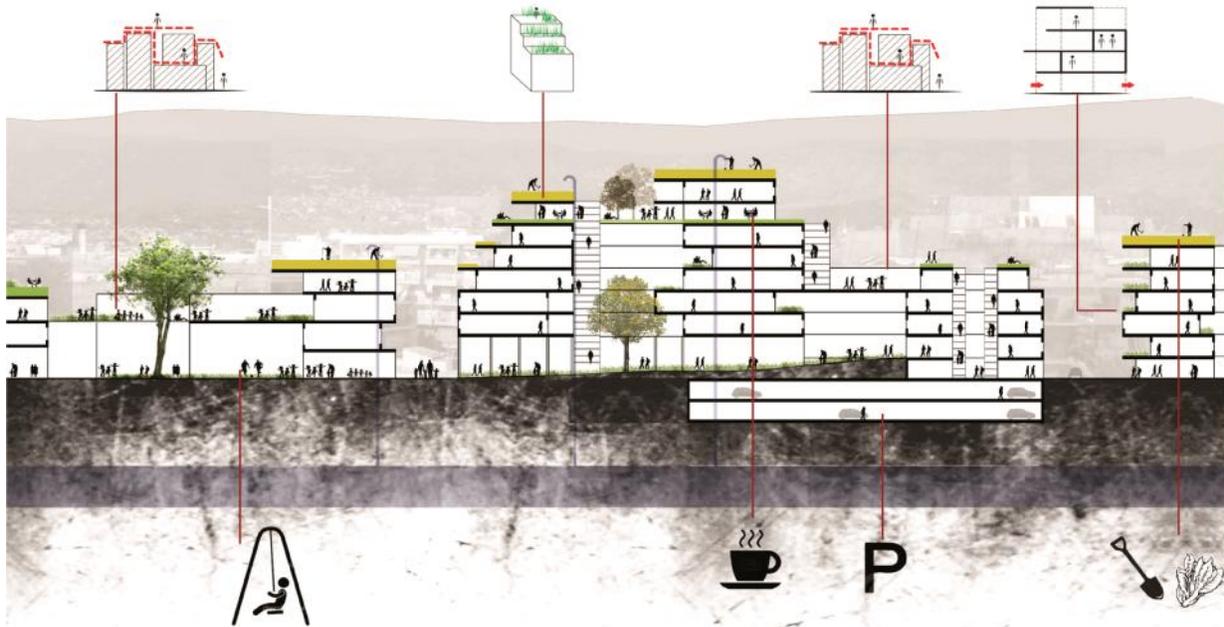
5. Results

The re-appropriation of the city is envisioned by a constant re-modulation of the basic typology of the *polytakoitia*. The vertical flexibility and the free plan, the well-known properties of the *maison-domino* system, are enhanced and overcome considering the existing structure as a multi-layered ground where a cellular propagation disrupts the single building's unit, expanding horizontally.



Groundscraper City, urban section.

The ground, humiliated by capitalistic exploitation through parcellization, has lost its natural, physical and cultural properties (Frampton, 2011). An alternative to vertical development have been envisioned during the 70s by the team composed by George Candilis, Alexis Josic and Shadrach Wood. Describing the project for the Free University of Berlin, Shadrach Woods pointed out that "in skyscraper type buildings disciplines tend to be segregated. the relationship from one floor to another is tenuous, almost fortuitous, passing through the space-machine-lift. In a groundscraper organization greater possibilities of community and exchange are present without necessarily sacrificing any tranquility." (Kronic, 2003)

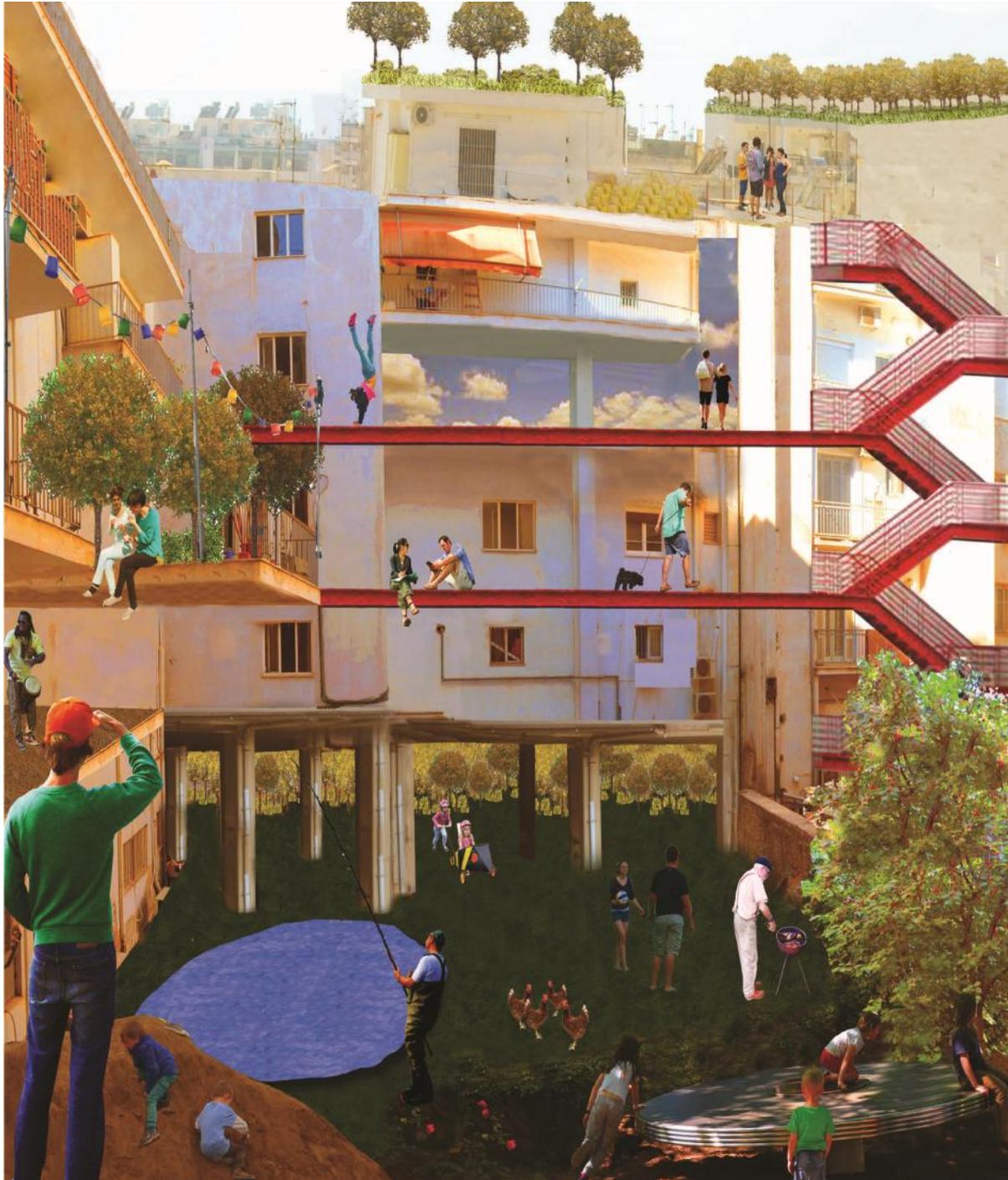


Groundscraper City, urban section.

A new density is proposed as a widespread distributed network of activities that can reduce distances, separations and individuality and, on the other side, re-enforcing the social consistency based on common habits and individual and collective needs. Eschewing any urban planning, the metabolic growth of the city is thus driven not only by economical forces, but by a new sense of belonging generated by the active participation of citizens in the making of the city (Maki, 1964). The result is not foreseen as a new urban design, but as a process of transformations which outcomes are not possible to be estimated.

6. Conclusions

Here a new multi-functional productive landscape is envisioned with collaborating units that are both self-sufficient and sustainable. By introducing new systems of environmental congruence between natural and highly sophisticated artificial materials, economy to ecology will be aesthetically linked (Ábalos & Herreros, 2002). A new urban richness is thus defined by its unpredictability and unplanned series of actions-reactions that can trigger individual creativity and un-expected aftermaths.



Groundscraper City, view from the internal block's courtyard.



Groundscraper City, the new city's skyline.

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