

Architecture in Motion: Hinged Spaces for Future Cities

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Abstract: Contemporary society is an overcharged information system. Technological advances and the mechanization of construction and design practice deeply changed global culture. The issue of the identity of the city and the gradual loose of interaction between the mankind and the urban realm compel architecture and urban planning to wonder about their final purpose. The city, as well as the universe, is a reality in a continuous state of flux. The interpretation methods of urban tissue and the envisioning process of future cities might consider Le Corbusier's idea of rhythm, related to his reading of the Acropolis of Athens, as a very current topic. The early definition of syncretism, introduced by Plutarco to describe the Cretan alliance, suggests reflections on the essence of architecture and stimulates interesting considerations on the role of ideology in those disciplines which deal with urban, environmental and social health. Several case studies disclose that the positive effects of the reclaiming of built spaces are connected to the capacity of architecture and urban planning to consider the principles of variation, permeability and interaction. The MAXXI Museum in Rome by Zaha Hadid and the StoreFront for Art and Architecture in New York City by Steven Holl represent two different interpretations of urban fluidity. The main challenge for architecture could be to stop claiming space for a self-exhibition. Reconsidering the value of human perception to rebuild the urban phenomenology and create spaces that offer a thrilling social experience might open our minds towards new horizons.

Key words: variation, syncretism, reclaiming, urban fluidity, human perception

1. Introduction

Contemporary society is an overcharged information system. Technological advances and the automation of construction and design practice deeply changed global culture. Even though the advantages of an easier everyday life are almost evident, it might be noticed that the uncontrolled hi-tech growth generates a harmful process for the environment and the collectivity. The phenomenon of dissociation of personality that we inherited from the second post war period has been rapidly increasing. The hard rift between the intellect and the emotion seems to be far from being resorbed. The tendency of using technology in the attempt to take care of the illnesses of the city might give way to an opposite action of damage creating doubt, anxiety and fear.

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The interpretation of the second half of XX century by S. Giedion [1] and the statements expressed by Barry Popkin in explaining why "the world is fat" show interesting analogies. Although they start from different points of view, the results of their researches highlight physical and psychic diseases of our community showing an overall alarming state of health. We are gradually moving into a post human reality where the distinction between human and non-human is blurred and mechanization appears as a supreme asset [2].

In the second half of XIX century the medical treatment of sicknesses as tuberculosis and lunacy corresponded with the advent of Modernism. Since the birth of first Sanatoria in The Netherlands and the construction of massive housing estates, architecture had been seeking to interpret the needs of the post-war society, which was ravaged both on social and environmental side. The makings of new materials and the necessity of thickening the urban tissue of industrial areas scarred the architectural production of that period.

Similar circumstances affect contemporary reality. The urgency of reducing global warming, the demands for strengthen the recourse to renewable energies, the growth of pollution constrain architecture and urban planning to avoid ambiguity in dealing with sustainability. Urban landscape has profoundly changed during last decades. Skylines look like competitors during a gasping race to the top while the conditions of suburbs highlight the inefficacy of current construction strategies.

The city, as well as the universe, stands in a continuous state of flux [3]. In a reality that is highly influenced by the Internet, the risk of producing ephemeral contents is tangible. The harmful effects of industrial development involve every kind of knowledge. Nowadays architecture seems to be focused on hyper-technological built systems. This trend points out the tendency to conceive this discipline a mechanized imposition that is not capable to take into account both the scale of the individual and the natural dimension. The value of the experience in the process of revitalization of built spaces appears as not yet completely recognized. The issue of the identity of the city and the gradual loss of interaction between the mankind and the urban realm compel architecture, urban planning and landscape architecture to wonder about their ultimate scope.

2. Methodology

2.1 Rebuilding Urban Phenomenology

This contribution seeks to underline the importance of architectural and urban design in contemporary society. The eyes explore the urban realm as a set of streets, landscape and buildings. The arrangement of built and unbuilt volumes ought to express coherent proportions in order to transmit coordinated sensations to the brain and give an intense pleasure to the soul.

In this sense, the interpretation methods of constructed spaces and the envisioning process of

future cities might deal with Le Corbusier's idea of rhythm, which is related to his reading of the Acropolis of Athens [4], as a very current topic. The project for the Palace of the League of Nation in Geneva, presented by the Swiss-French architect in 1927, suggests an original idea of urban phenomenology that is focused on human perception.

The city may be visualized as a dam that contains, embanks, sluices and finally spills the space giving to it a solid shape [5]. Providing active public areas that interact with civic and private buildings could lead to the creation of healthier urbanisms where the dimension of the individual constitutes the main value.

Several cases study disclose that the positive effects of the regeneration of built spaces are connected to the capacity of architecture to take into consideration the principles of variation, permeability and interaction. The MAXXI Museum in Rome by Zaha Hadid and the StoreFront for Art and Architecture in New York City by Steven Holl represent two different interpretations of urban fluidity. The project for the MAXXI Museum might be considered a model of integration of new buildings into context with cultural and historic importance. The intertwining of the overlapping wings generates inner and exterior powerful spaces. Zaha Hadid's work succeeds in creating manifold areas of interaction by connecting the whole block in all directions. The fluency of shape and the contrast between the light and the heavy are clearly perceptible everywhere, from the external atrium to the hall. The idea of fluidity pervades the entire building. The ability of going beyond the visible and establishing an emotional connection with the mankind makes the MAXXI an example of both landscape and social renewal.

The Storefront for Art & Architecture by Steven Holl discloses that architectural design is capable to stimulate changes on the urban scale despite low-budget conditions [6]. The project moves from the idea to reply to the debate about deconstructivism through the experimentation of hinged spaces. Rather than modify the geometries that remain static in the construction, the same geometries move engendering spatial experiences that change in parallax. The front of the art gallery, which is located at the crossroads of the districts of China Town, Little Italy and Soho, is envisioned as an interactive element made up of hinged walls that rotate around both the axis and convert into benches and tables. The frontage embodies the concept of variation and flexibility: it can serve as the classical front shop when it is closed, while it interacts with the urban dynamics and brings the art in the street, when it is open. This space succeeds in changing its configuration to adapt to the fickle circumstances of the city life through its façade.

3. Results

3.1 Urban Dynamics as Flux of Centrifuge Forces

Several cases of architectural and landscape regeneration that are able to support the reconciliation between the emotional and the intellectual sections of the mankind may be considered an efficient method to face the issues of social and environmental sustainability.

We could attribute to urban structure the qualities of human body. Our organism works as a system of centrifuge forces where the brain is the receiver and the transmitter of signals, which convert into actions through a flux of nervous propagation. In the same way, architectural and urban revitalization projects act as catalyst agent for positive forces and promote social changes. Buildings, public and private spaces, which succeed in merging programs, morphology and landscape with light and matter, could engender multisensory experiences and trigger physical and emotional re-activation mechanisms.

This article should not be considered a report that provide for a therapeutic treatment for the city. It aims to engage the issues of contemporary reality by reflecting on the importance of architecture and highlighting the successful experiences of urban reclaiming. The constitution of the "Academy of Neuroscience for Architecture" in San Diego, California, the introduction of neuroscience studies in the faculty of Architecture of the University of Arizona, Tucson, Arizona and in the New School of Architecture + Design in San Diego, California, demonstrate the growing interest in the inter-disciplinary connection between architecture and neurobiology.

The case study of MAXXI in Rome shows how architecture and landscape renewal processes that provide deep changes of urban dynamics are capable to improve the quality of life of communities. Taking into account the opportunity of creating lively public areas through hinged spaces, whether in large or in small systems, could be the most productive way to deal with the issue of the identity of the city. It may be evaluated the opportunity of improving the structure of metropolitan and peripheral areas through clever interventions of regeneration so as to build a new urban phenomenology both on the micro and the macro scale. Providing public policies that attempt to trigger a ripple effect with the aim of restoring abandoned and degraded public spaces might represent the key strategy for the construction of future cities.

4. Conclusion

The word syncretism was originally introduced by Plutarco to describe Cretans alliance. Despite they used to fight each other, the inhabitants of Crete decided to join forces against the common enemy.

The tangible risk of implosion of the city and the evident decay of peri-urban areas induce reflections on the role of ideology in those disciplines that deal with environmental and social well-being [7]. Considering the state of health of contemporary cities, questioning the importance of theory in architecture and urban planning appears necessary. Theory is based on predetermined principles and, consequently, it is anchored to ideology. During recent decades the self-referential attitude of architectural production has been causing a deep rift in the urban tissue: the city has lost its identity and several parts of it have been relegated in a dangerous state of quarantine.

Worldwide scientific researches disclose that the universe exists in a perpetual condition of relativity. Architecture should be able to interpret this sense of uncertainty and specificity of the world. Architecture ought to represent a hybrid entity, which is linked to circumstances and programs that merge with morphology, climate and landscape. The ever-growing phenomenon of pollution and the exaggerated density of urban realm compel architects to develop the faculty of thinking by envisioning spatial configurations capable of interpret cultural and environmental needs so as to trigger virtuous cycle of social interaction, landscape preservation, physical and psychic health phenomena.

Architecture, urban planning and landscape architecture must get out of theoretical constraints and stop claiming space for a self-exhibition. Creating spaces that offer thrilling experiences and reconsidering the value of human perception in city dynamics might open our minds towards new horizons.

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