

Explanation of Non- Euclidean Pattern of Space in Urban Planning

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Extended Abstract

Introduction

With the domination of Kant's epistemology and instrumental reason in social science and human geography, interpretation of space has been based on neo physics that it is often equivalent with intuitive and physical experience and the place of capital and its reproduction. Therefore, we have represented the ontological transformation of space concept and by the way we enumerate the characters of non- Euclidean pattern in urban planning. Intended purpose of ontological transform of space is the epistemological chaos due to functional transformation and unfolds of another view from existence and the entity of space. Unlike to the past each citizenship, simultaneously have been experienced amongst warp and woof of multi-level spaces in the different functional scales like global, regional, international, national and local. To urban experience, Euclidean geometry discuss on the organization of objects in physical space while non- Euclidean pattern in planning imply to collapse of Euclidean world order, sustained beings and standard assumptions that have been dominated on our understanding from world in the two-past century. Non-Euclidean pattern in planning is strongly normative and based on values. Ultimately the increase in population and the arrival of modern technology elements such as automobile or high-density urban areas have resulted in the disappearance of the interconnected space of space and socio-cultural factors that make the experience of the place or city meaningful. The lack of this field puts the need to explain the urban environment based on the non- Euclidean pattern.

Materials and Methods

This research is a fundamental type and its methodology is inductive reasoning. The research method is, also, analytical- critical.

Discussion and Results

The contemporary city space is a differential space – time that makes itself. Time and space in the agriculture era meant the combination of a group of situations such as zones, climates, plants and animals and human tribes etc. Space and time in the industrial age has been tended to create unity and harmony and going on the direction of continuity and necessity. But the time and space of the urban period (now) are differential. The networks and infinite streams are different in overlapping. From the transportation ways to the information flows and from goods and commodities to signs exchange and symbols. Dialectics creates the centrality of a very powerful differential motion. The pattern of Euclidean planning is based on the concept of spatial planning that recognizes limited variables from view of economical rationality, linear attitude, centralism, prediction of events and organization based on comprehensive and long term plans. Therefore it faced more with objective and tangible and decisive definition of space. The contradiction between non-Euclidean planning and recognized Euclidean and geometric pattern specify the conceptual situation of each of them. Planning in new pattern is normative while competitor pattern is neutral in terms of normative and its basic criteria are efficiency in achieving the purposes and objectives that are often defined from external view.

Conclusions

The Conclusion is that this pattern is not based on quantitative indexes such as urban decision making based on prediction and pure and limited modeling from vast and qualitative realities of

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urban spaces such as metropolitan but like postmodern thoughts reliance on crisis of vast and modern narratives that had been a base to definition of place and space. Therefore, it focuses on non-geometry pattern of urban planning that it performs decision making and city plans with interference and participation of local communities and citizenships. In this process, the hierarchical pattern and from top – to – bottom that is alongside with Euclidean pattern of planning replaced with network pattern and bottom- to- top. Regarding to concerns and contemplation that exist on protection of Islamic-Iranian pattern of urbanism, the focus on non- Euclidean pattern in urban planning can be replaced with comprehensive and detailed urban development plans that often these plans have Euclidian approach and non-normative view. Also, non – Euclidean pattern is a suitable solution to old and immemorial problem of mutuality of person against society or originality of action against structure. Regarding of being- normative of non- Euclidean in planning and focuses on local communities represents a type of movement between action and structure. In other word this pattern is focused on both the individual and the community.

Keywords: Euclidean planning, non- Euclidean planning, space, time, civil society.

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