Urban Forms in Planning and Design

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Abstract:

This paper on urban form in planning and design is intended to discuss how the old concepts are changing and new meaning of the urban form is emerging in the planning and development of urban centres. The paper is an attempt to elucidate the basic concepts of the urban forms and how they are perceived at different levels of the planning and design exercises.

The paper finally concludes with findings and recommendations which can guide the future course of development of new towns and the growth of the urban centres.

Introduction

If we call the 20th century the age of urbanization and urban life – this is because never before in the history of mankind urbanization grew so fast – the new century has experienced us people with packages of rural life who live in an urbanized world. Transition is complex phenomenon that includes important technological, economic, social and political aspects.

The process of economic globalization today is having profound impacts on national and urban economies and patterns of spatial development in most regions of the world. In the face of fierce competition for attracting international investment capital and upgrading their position in the global network of world cities many urban centres are forced to create and maintain new comparative advantages by creating economic synergies through the establishment of urban alliances and growth corridors. This has led to the development of new urban forms based on complementary functions as a necessary condition for maximizing such synergetic economic activities.

The emergence of a renewed 'market-oriented reasoning' has dramatically changed the way public urban policies are discussed and carried out. This has had dramatic consequences for how urban space is planned and designed. It is not only urban 'form' that has changed, but also how architects and urban planners perceive the role and function of urban space.

Economists and other social scientists have tried to study urban form more or less rigorously for the better part of two centuries.

Form

The history of form has its roots in ancient Roman lexicon. The Latin form of "form" is "forma". It is used in the same form in the majority of modern European languages such as Italian, Spanish, Polish, and Russian. It is pronounced and written as form in English, French and Germany. However, the long history of this word and its wide use has created ambiguities in semantics of the word. Apparently etymology of the word may lead us to a transparent meaning of this word at present. Tatar Kivich is one of the renowned Western researchers who has paid deserving attention to the semantics and etymology of the words. Kivich believes before any survey on historical transformation of the word in various artistic fields we must first identify its multiform semantics, and then continue with the etymology of the word. To do this, Kivich has made an interesting innovation. He has tried to put form in front of its opposites in order to identify its semantic areas before going into etymology. He says: "Aesthetic researches have clarified at least five meanings for form, all of which need deserving attention for correct understanding of concepts and discussions on form." (Ramin, 1998)

Form is taken as the arrangement and discipline among various components of any work.

Form in the meaning of what is directly perceived by senses. Form is a concept that indicates the presence of something that distinguishes it from other subjects. Form is the conceptual essence of something that is placed opposite casual features. Form

means contribution of the mind for understanding things.

Urban Form

In the contemporary cities that are always subject to changes and developments, unmethodical expansion, and constant addition of components the form too, faces new challenges and problems. In this connection Dr. Nasr writes: "Our traditional architecture and urban development were seriously damaged by imitating European architecture and urban planning. Almost all of the new constructions are ugly. The majority of the new buildings are terrible as far as Indian traditional culture and aesthetics, social and human relations that Islam has publicized, and their impacts on natural environment are concerned" (Nasr, 1995).

To prevent the emergence of these problems and the appearance and deterioration of pluralism and alienation in city form, we ought to boost capabilities and skills for controlling and organizing new constructions and sometimes sparse and scattered construction.

In the past, development of cities in India was subject to relatively fixed and resolute laws, therefore, there were common laws in connection with city form in India such as the presence of a consolidated and uniform generality, conformity to nature and living environment, conformity of residential units and urban elements, observing artistic and aesthetic considerations and finally observing hierarchy.

Presently, the urban form has undergone drastic changes with no conformity to the previous rules and regulations. These changes have affected the relations between mass and space, city form and natural environment, culture and social relations and have broken apart the previous bonds and identity of the cities. As in urban planning field, mental grease of a group of researchers has led to formation of some types of approaches paying attention to the impact of culture and its various manifestations on city form. Learning about intellectual principles, rules and laws, the process of design and consequences will be very effective in constructive interference in the city form.

The presupposition placed emphasis on the role of urban planner as a subjective factor in promoting the quality of city form. This is because constructive components of city form – on which we will discuss in this study – are all capable of promoting the quality of city form. They can also overshadow these features or even destroy them. Therefore, since interference of city planners is effective in city form, it is important to study way of using their approaches in realizing each of the above. Indeed, the objective behind studying various approaches is identifying criteria and doctrines publicized by these thinkers. Although any city planner can impose his thought, approach and methods in city planning to his share, it is necessary to scrutinize the views and experiences of the city planners who have entered into the city planning literature through paying attention to city form and the role of culture. In spite of the fact that awareness on these opinions is not sufficient for promoting the quality of city form, we can openly claim

that it is the precondition for entering into this discussion.

EFFECTIVE FACTORS IN FORMATION OF URBAN FORM

ECONOMY

- City is a phenomenon in relation with its type of livelihood
- Capital
- Work power (people, government, designer)
- Management
- Existing policies, rules and government bills
- Obstacles and restrictions (possibilities and limitations)
- Sources and profits

SOCIETY

- City is a phenomenon in relation with its society.
- Chronological and historical background
- Science and art
- Way of thought and cosmology
- Philosophy and ideology
- Technology and knowledge
- Mentality
- Population
- Language
- Race

- Religion Traditional and cultural glimpses
- Rites and rituals
- Value

NATURE

- City is a phenomenon in relation with its nature
- Geographical specifications, Location, Topography
- Ecological and climate features
- Water, Rain
- Soil
- Wind
- Plant
- Sun
- Town scape

COMPONENTS ELEMENTS OF URBAN FORM

We want to have a look of the city and how this look should improve. Look at it in its self-actuality. Look at it more than two dimensions height, time, location, mentality, life, sense, people, plants, buildings, space, solids, voids, etc. If we consider a city multi-dimensional, the urban form is personified, i.e. it is presented like a living creature that has body and spirit. Its body is studied in three scales of macro, medium and micro level and people, activities, smells, scents and sounds and other mental and sentimental as well as non-fixed elements that constitute a city in its generality form the spirit of the city.

MACRO SCALE

CITY FIGURE:

Evolvement of the city's fabric in to the space creates figure of the city. The city figure is manifestation of liveliness, power, collapse, density and mysterious greatness. Since the approach to city structure is macro in scale, it is free of details. In this sense, the city can be likened to a statute that has risen from the midst of space. Its components are either natural things such as mountains, valleys, water, lakes, trees, and greenhouses or manmade such as buildings and sites, ups and downs, solid and voids places, routes, etc. These are seen in two cases, either when entering a city area by plane or from high-rise strategic points. The observer must be either in a place above the city or below the city.

COMPONENTS ELEMENTS OF CITY FIGURE:

- Entrances and Exits
- Solid and Void
- Skyline
- Silhouette

MEDIUM SCALE

IMAGE OF CITY:

In this scale such factors are introduced that are seen and memorized, that recalling of which causes happiness. In other words, the image any individual saves in his mind with observing elements of the city that is associated with certain memories when he recalls it. These factors may be a single building, transitory, a borderline separating part of the city, an attractive locality center or even the locality itself with certain features.

In other words, such factors are surveyed that help the individual to read and find his way. This image is engraved in the mind of individuals based on the common culture and thought. The city with legibility and manifestation leaves a bright picture in the mind of the watchers and visitors and seems to them well-designed and beautiful, distinguished and considerable (Fig.5).

COMPONENTS ELEMENTS OF IMAGE OF CITY:

- Land mark
- Route
- Edge
- Node
- District

MICRO SCALE

CITY FACE:

Those visual factors of cities body when is noticed immediately after entry

It is comprised of the clearest visual factors in the city that are seen immediately after stepping into the city. In other words, all observable elements in the city seen at close range are classified in this category.

COMPONENTS ELEMENTS OF IMAGE OF CITY FACE:

- Elevations
- Spaces
- Furniture

URBAN FORM AND NATIONAL LEVELS OF DEVELOPMENT

The cross-sectional correlations between urban forms and indicators for national levels of development confirm the large difference that national wealth makes. Higher purchasing power correlates positively with more complex landscapes and larger proportions of open space, and negatively with Density and Compactness. The higher the average income, the more "sprawling" the urban landscape becomes. Since wealthier people can afford more private motor vehicles, and wealthier countries can afford more highways, higher purchasing power parity correlates strongly with higher levels of motorization. In most developed countries, and especially in the US and Australia, high motorization contributes directly to the ease of living in the outlying suburban area. As the correlations show, higher motorization is associated with low density, a fragmented urban fringe (both less compact in the center and more complex) and abundant open space. On the contrary, under conditions of low motorization, residents of cities in developing countries cannot live far from their working place which is normally in the inner city. The result is more compact urban form.

Analysts have disagreed as to the effects of communications technology on urban form. Berry (1973) and Fishman (1990) argued that the modern communication spurs urban decentralization, as traditional central cities take on polycentric urban forms. Others (Gottmann, 1977; Hawley, 1986; Hall, 1997, 2002; Guillespie 1992) contend that communications technology fosters a counter-process of concentration in CBD or other forms of urban nodality.

Globally, the indicator of telecommunications infrastructure accords with the first of these contentions. Highly inter co-related with wealth and vehicle ownership, the number of telephone lines per capita corresponds at least as strongly as these other two indicators with measures of dispersed settlement. Even more than wealth and motorization, the communications infrastructure correlates positively with more complex urban form and open space. It also correlates negatively with density and compactness.

All of the spatial metrics except for Centrality correlate significantly with at least two of these three socio-economic variables. The higher the average income and levels of telephone and vehicle ownership, the higher the ratio of the open space, and the higher the irregularity of the urban landscape, the lower the urban density and the more fragmented the urban core. In regressions, these socioeconomic variables accounted for up to just over a third of the cross-sectional variations between countries. Within developing countries as well, dispersed settlement appears most significant in the fringe areas of cities in the more developed regions,

such as Guangzhou in the Pearl River Delta of China and or the urbanized coastal areas of Brazil and India.

It is also noteworthy that Centrality did not correlate significantly with the socio-economic variables. One reason for this lack of a relation may lie in the way that urban transportation networks in many countries have altered traditional monocentric urban forms with strip development or new nodes of concentrated urban development.

URBAN FORM AND SPATIAL ACTIVITY PATTERN

To identify important dimensions of urban form in shaping individual's spatial activity patterns, this research develops and selects three direct measures of urban form based on the literature, the data availability, and their relevance as key components of the built environment. The three selected measures are building density, retail accessibility, and street connectivity, respectively measuring the density, diversity, and design dimensions of the built environment.

SOME OF URBAN FORM MEASURE IS SHOWN BELOW

- BUILDING DENSITY
- RETAIL ACCESSIBILITY
- STREET CONNECTIVITY

CONCLUSION

Urban planners should constantly keep in mind alternative participatory practices for managing the city, and include its users in decision-making processes. In other words, efforts should be made to include in the administration of the city those who would otherwise be considered 'incompetent' to manage it.

The opportunity for change in the Urban Planning field rests in its inherent interdisciplinary character. It has the power to generate change by coordinating various fields of knowledge, technical and non-technical, to instigate political-institutional changes, participation (thus contributing to a true 'public sphere') and promote valuable spatial change.

There are alternatives to technocratic and formalist approaches to urban problems that allow public participation, help to build new modes of spatial intervention, and thus genuinely strengthen the public sphere. Contrary to the belief that cities must concede to the top-down requirements of globalization and relinquish equality as a valid parameter for policy-making, there *are* alternatives for sustaining homogeneous and egalitarian development in cities today, both in developed and developing countries. In the interests of social stability, it is important that urban planners and other urban actors continue to experiment and prioritize these new alternative instruments for participatory urban management in the coming years.

- Societies, run in any system, possess special goals and ideals.
- The major duty of culture is displaying these mental ideals by the palpable forms and in the process of this transformation urban planning plays the major role.
- Architecture and urban planning is indeed the bedstead of culture.
- Cities are cultural products themselves.
- Culture affects urban planning, which is a sign of the ruling system of values and forms it.
- People give identity to their living environment by culture, i.e. collection of values, beliefs, cosmology and joint symbolic systems, and change an unidentified space into a place with identity.
- In its general sense, one can say the governing system of values in the society is manifested in the structure of the society.
- Aesthetics is a variable and multi-dimensional category that is interpreted by the public culture, that is to say the collection of values, beliefs, cosmology and common symbolic systems.
- An environment is of desirable features that assure a sense of welfare and happiness for the society, that itself promotes culture.
- The culture in societies is affected by economic and social and political and environmental enlightenment. This is a bilateral procedure.
- Urban form is affected by the culture in societies and vice versa.

- Promoting the quality of urban form is carried out through cultural promotion and vice versa.
- Culture in the societies is under the influence of three influences; national, religious and modern enlightenment.
- The structural personification of culture is manifested in its spatial setting.
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About Author

Shashikant Nishant Sharmais a professionally qualified Urban Planner and Planning Consultant by profession. He has written since 2003 and he has scores of books published. His area of interest is diverse which you can see from his literary works. Poetry, lyrics, Ghazals, short stories and thoughtful essays on current affairs and urban planning issues are his area of deep interest and continued writing. Being brought up in a rural area, got educated in sub-urban area and now living in metropolitan city, Delhi, he has been able to gather many experiences on diverse fields especially on political, cultural, socioeconomic and environmental issues. His graduation in physical planning from School of Planning and Architecture (SPA, Delhi) added new dimensions to his thinking and writing. He is currently pursuing post-graduation from the Indian Institute of Technology (IIT), Roorkee.

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