Re-reading morphological concepts to face globalization: using typo-morphology to excavating modern and contemporary forms

Mazyar Abaee

School of Urban Planning, College of Fine Arts, University of Tehran, Iran
E-mail: mzr.abaee@ut.ac.ir

Abstract. *Traditionally typo-morphology deals with reading cities, chiefly historical cities, to retrieve legible urbanism after Modernism changes. During Modernism period and after that new types of forms and new kinds of functions inserted to urban fabrics all over the world which this process can be seen as a mutation of urban form everywhere. Disadvantages resulted from Some of these forms are the main reasons which morphological studies turned his head to historic cities to find traditional approaches which can answer better the functions responded by these new forms. But some of them includes functions never exist before. This mutation happened once again during the globalization process. Globalization gave birth to new types of forms and new kinds of function. Typo-morphology based on a deep background of concepts and methods found many ways to study historic urban forms. This article argues using typo-morphological methods for understanding and taxonomy of new forms can lead us to knowledge for how to bolter these new forms for further exploitation. In this regard the notion of type in classical studies of typo-morphology, philosophical interpretations of 20th century and methodologies developed by different schools of typo-morphology is reread. Based on such scrutiny judging all these forms can be possible and give some legitimacy to stay in or abandoned from the repertoire of urban types. The article ends with a proposal for a methodical exploration of classical notions of morphology to study the mutation process happened after modernistic changes and the new round of changes known as globalization.*

Keywords: Typo-morphology, Globalization, Modernism

Introduction

It seems unacceptable that "urban form" as a general term had a meaning in ancient cities. In another world people in old civilizations, ancient territories and our old cities hardly had any idea about the notion of "urban form". But by contemporary interpretations ancient and traditional urban forms were functionally acceptable, not only for old everyday life, but also some of them can respond, more or less, the contemporary way of life in some scales. Today urban morphology of middle ages, Renaissance, and baroque cities in Europe, and Islamic, Indian and Chinese and East Asian cities before Modern era can be considered as a rich repertoire for architecture and urban design, today. But it is obvious that there are many enormous changes in way of life that the method for using best appropriate forms in urban context is a matter of thought. These changes happened by Modernism and Globalization, here called as two round of urban form mutation, and the main question which is tried to be answer is in which way urban morphology can dominate these all changes.

Methodology

The article fundamentally uses interpretative, Hermeneutic research methods. The temporal process of changes in urban form is reviewed and synthesized with based on roots, development and changes of Modernism and Globalization. Urban morphology, also, reviewed as an approach facing problems of urban form. In hermeneutical terms this procedure led to understand the morphological concepts from new point of view, to excavate its ability to faces changes and non-historic forms.

Reviewing the past: Modernism, Globalization, and the role of urban morphology

Historicity of urban morphology and the problem of modern discontinuity

Applying historical urban forms can be seen in contrast with rapid urban changes in modern period. Catastrophic ending of 19th century comporting sudden increase of population, hygiene problems of cities, congested roots and streets, and unorganized spread of suburbs, made many reformists and architects, as Lammpugnani (1985) shows, to develop reforming of ideal concepts of cities (Wagner 1895, Statham 1897, Howard 1898, Garnier, Berlage (1902-1915), Le Corbusier (1922). Modernist concepts based on Protestant ethics and soul of capitalism (Weber 2002), pure Descartesian rationalism, growth of technology (steel, concrete and armed concrete) and in context of post-war period took traditional urban fabric under a heavy surgery. Reformists and idealist tried to create a fabric responsible to many changes happened in this new world which can tolerate the pressure of mass population, new transportation facilities, and hygiene requirements of cities. These led to creation of many new forms and types totally different from routine traditional urban forms, as well as new types of activities. Tall buildings, hypermarkets, highways and subways, and new formal expression of monumental buildings injected to soft and smooth fabric of traditional cities. The most influent change has been

reversed relation of mass-space which modified spaces from closed polygons surrounded by buildings to a fluid liquid which tall buildings were floated in it (Ostrowski 1970).

The "city" changed from an organic environment, being in peace with context and having humanistic scale, to a mechanic mass, superimposed to environment and gigantic dimensions. Rhetorically and poetically, we can use the word "mutation" as a metaphor for this changing process. Naturally a city might transfer from one formal condition to another, but trough this mutation the word transform can be used to explain this conversion. This condition spread out of Europe and influenced many other cities like Islamic cities and East Asian ones. The mutant urban form could be seen everywhere across the world in mid 20th century. This condition led to many approaches which can be classified to two main categories, in the same direction and the other in opposite. Typo-morphology (also urban morphology) is one of these antithetical approaches.

Typo-morphology in 60's was a clear effort to retrieving all formal values of pre-industrial urban form. Many elegant works, theoretically and practically, formed by pioneers of urban morphology, like Conzen (1960), Vidler, (1977) Colquhoun (1969), Argan (1963), Moneo (1978), and members of Muratorian School. Many projects have been done, mainly in Italy based on morphological concepts. But during these efforts, another process of mutation happened once again.

Another round of mutation, global forms

Based on Late capitalism, post Fordism and informative evolution, all manners of businesses, transportation, giving birth to new telecommunications, flow of labor and professional forces between countries (Stiglitz 2007), changed many formal aspects of cities once again. Naturally new types of activities are derived out of this new condition, and some of new formal changes are exactly in continuity of modern concept. Giving birth to airport cities, in scale of a whole region, CBDs and world trade centers, in scale of districts, megamalls, and international exhibition complexes, in

scale of big buildings and complexes, and many small stores with universal exposé, like Mc Donald's, Subways', Starbucks' and so on, are samples of "modernistic universal continuity" (Guggenheim and Soderstrom 2010) .

Here the Ingredients of global development are not similar to its modern alternate. The concept of mobility penetrates in all aspects of development of Global Era. So, here the problem is not domination of modern technology. The concept of mobility penetrates in any physical entity, so the matter of development is not using concrete, or steel structures, but using any facility to make data, money, materials and people floating all over the world. This will happen to serve global flow of finance work better to serve international financial companies, brands and trademarks. Buildings are built to be a place for universal brands and markets.

There is another formal aspect of globalization in cities. Buildings themselves become as new brands which can travel from their context to new country, like activities. Any form from any context can be decontextualized and has been used in another atmosphere. A great sample of this is the type of "villa". In real state's advertisement all over the world we can see images of "villas" fundamentally belong to places far from the market's regional/territorial boundary. Kint (2010) presented a "Scottish villa advertisement in Indian market. Many other types of buildings/activities can be found similar to this one. Bungalows, resort cottages, fancy royal houses and other types of buildings are trying to have market from East Asia to Middle East, and from Africa to South America, as well as Europe and North America.

According to this any individual person can experience, "somehow", "same" activity, in the "same" special configuration, no matter what's the context. He can inter a global-branded coffee-shop, and see people, nearly from many countries beside the host countries people, Experience a global-like atmosphere, and again return to local social context. According to this, "branded" building has a possibility for user to be disconnected from context and connect to it whenever he wants. This can be considered as another round of mutation which made a time-space black-holes in city fabrics, which no-one can refer them to any specific place or social context.

Urban morphology and challenge of discontinuity

The basic considerations of urban morphology jargon were to conquer the problem of discontinuity resulted by modernist changes. In this regard urban morphologists tried to reread rich repertoire of European typology and morphology of old medieval European cities. They categorized block types, street patterns, plot lots and buildings to formulate a mechanism for piecemeal change in urban fabric or to inject new formal configurations in building projects.

Urban morphologist criticized the modern concept of mass and space. First of all the idea of pure functionalism (as a design rationale) and plastic abstraction (as aesthetic preference) of modern design are disqualified (Vidler 1977). Mainly, the modern relation between mass and space of urban configurations became a subject of criticism. Modern designers saw urban space as an endless and unbounded phenomenon like a liquid which can reach any place when it is flowed on land, and can go around free-standing buildings. This pattern of mass-space relation named Tower in Garden by Le Corbusier. The main claim of urban morphologist, in this regard, was to reverse the relation of mass and space (Krier 1979). Returning to medieval pattern, morphologically, urban space is preferred to be bounded by buildings and being a closed space, like a liquid bounded by bowls and jars linked together by narrow pipes (the last one can be considered as streets).

In relation to this urban configuration and mass-space mixture, building types can find places in morphology, which are not no more considered as a result of functional rationale, but formally have an independent value which can contain deferent activities without heavy manipulations and historically are elements of identical and historical continuity (Rossi 1982).

The concept of historical continuity and criticism of permanent destruction/renewal of modern thought led to an historical obligation of urban morphology. Here, the word history can be seen as a place of scrutiny. The question is where is the ending point of history? Today, in the beginning decades of 21th century can we still credit the beginning of modern mutation as the ending point of "history" and read "historical urban fabrics" which formed before that? Or we can, should or must consider "history" as a process which it's ending point day by day? Does urban morphology, substantially deals with form, or time? And is there any attention timeless forms can be found in theoretical debates of urban morphology, or not? Recently the approach of ISUF to practical aspects of morphology can be a undeniable tendency to considering the subject of contemporary time and considering history as a process which can find its end, only in "today". Writings by Sheer (2013) and McCormack (2013) shows such tendency, but more accurate Nasser (2013) targeting the subject of contemporary city and morphology.

It seems that the concept of non-alignment of urban morphology and history can be found in fundamental texts such as Vidler (1977), Calqohoun (1969), and Moneo (1978). But initially the question will arise that what can be the alternative of urban morphology's historicity and to what extend this alternative(s) can work(s)? and moreover, what can be the rule of the historicity itself.

Disscusion

Trilogy of a century: Modernism, Globalization and urban morphology

Relying to any concept for changing urban environment deals with a deep-rooted need for that concept, whether it works or not. According to this, we can see the raison d'etre of modernistic urban form in need for furious after war construction, raison d'etre of global forms in an extensive need for inter-territorial connectivity, rooted in vast scale of mobility, and raison d'etre of morphogenetic approach in exact need for historical and identical continuity.

The first sparks of modern thought after renaissance deals was results a dichotomy between subject and object (based on descartesian thought which led to new duality between self and outside world which ended to victory of outside world. Understanding objects (without subjective interpretation) led to objective studying methods of environment base on measurement and scaling. Quantitative approaches came out this point of view in sciences which dominates many fields including architecture and urban considerations. Any line of enquiry, any test of existed knowledge needs a clear answer about its credit, a positive or negative answer. According to this modern building process is based on quantitative calculation about population mass, transportation needs and construction requirements. Such elements do not deal with sensual, perceptual, social and identical needs of human being, because objective approach of modern though tried to superimpose objective results worldwide on life of every human being. Tall buildings, huge transportation lines, vast unbounded spaces and ultimate zoning are result of such line of thought. Moreover, rush in construction is fundamentally a modern development process. According to modern formal aesthetic an ideal form does not belong to it context and can be found everywhere, and uses everywhere.

Globalization era is begotten of an idea about time and space, beginning with primitive telecommunication tools. This idea does not change the presence of time and space but tries to deny it. The ideal of globalization is ultimate mobility and connectivity. The world of globalization, metaphorically, is similar to its required infrastructure, digital technology and mobility. The matter of globalization is to transfer data, capital, goods, people, as much as, as fast as, and as far as it can. In this world, anyone, any object and any kind of data, can, should and must be able to, move from one place to another, and be disconnected from its context and be connected in new one. So, forms in global era are neither belong to their context nor to any other contexts, and simultaneously can be found everywhere. One can see a complex, a kind of spatial configuration, a type of ornament or decoration in different place of

the world. One can enter a mall in Dubai and experience snowfall of northern land, one can be in India and see American Dream houses, and one can be in Tbilisi or Shang Hi, or Prague and enter a Starbucks coffee shop, or one can be in Tehran, Athens, or Istanbul and by Benetton cloths. It is obvious that digital technology let people to experience many events far from its place, like watching a world cup game happening, for example, in Moscow, standing in front of a giant monitor in Berlin. It is not a matter of reflection that "where we are" because we can experience the whole world in any places in every time. No matter the time and place, we are in no time and nowhere.

But the matter of urban morphology is exactly related to time and place. Continuity deals with a form related to its context and to its past. Urban morphology retrieves pre-modern urban forms and elements because they have a continuous background of existence. Urban morphology focusing on form of settlements in diverse scales sees forms in relation to each other. This relationship can be seen based on time or space. A single definite form can be interpreted in relation to its past forms, to evolutionary variations of itself in future, and to adjacent forms, forms before its existence or precedence, or form after these. Typology of these forms belongs to a place or a time, simply to somewhere.

Table 1 comparatively shows these concepts in a short glance. It is obvious that modernism and globalization defined new needs which their selves generate forms for these needs. Despite the efficiency of these forms, they have been used and spread all over the world and many everyday requirements are being answered by these forms. The existence of these new forms and simplicity of their use are undeniable. Urban morphology which refers to history can dominate these forms and dissolve all of them in its legitimate everlasting approach, by considering "history" ended in present time. The main question here is to find concept in urban morphology debates to conquer typology of everywhere and typology of nowhere and melt them to typology of somewhere.

The jargon urban morphology and contemporary forms

Regardless of genealogy of the word, type, which is not so crucial for practical actions, reviewing this concept must be started from mid 20th century conceptualization of Argan (1963), Colquhoun (1969), Vidler (1977), and Moneo (1978), Although all these are based upon thoughts of Quatremere de Quincy, Abbe Laugier and first of all Goethe, which built up the concept of type, in architecture, which is applicable in urban design and planning now. Argan used the word "type" versus "prototype" which means a configurative form exist a priori to all designed examples derived from it. But "type" is result of a reduction process

Point of view	Raison d'tre	Rationale	Duality/dichotomy	Approach	typology
Modernism	Furious construction	Functionalism	Positive- negative	Quantitative	Typology of everywhere
Globalization	Inter-territorial connectivity	Mobility	Connect-disconnect	Digital	Typology of nowhere
Urban morphology	Identical continuity	continuity	Before-after	Relational	Typology of somewhere

Table 1. Trilogy of 21th century's typology

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of all existing forms of a defined function, use, or configuration. So type is a root form, which stemmed from a knowingly study and observation process, reducing all existing forms with a commons subject (Argan 1963). So recognizing 'types' is result of refining, reduction and summarizing definite forms to a root. The root form is not like a structural grid, but internal configuration of a form or a principle which provide possibility of endless formal diversity. According to Argan types must be defined in a hierarchy which these types should have longitudinal and latitudinal relation with each other.

Vidler (1977) seeks the meaning of typology in the context of city as a repertoire for architectural and urban forms. Here, urban fabric can be seen as a whole which it's past and present is embedded in his body. The typological approach which he described as 'third typology' (versus Nature- oriented typology of Laugier and Mechanical typology of Le Corbusier) deals with themes remained on pre-existed types, themes which are common between types and themes resulted by combining these types (Vidler 1977). This approach is neither utopian and nor nostalgic, neither ancient and nor avant-garde. The urban fabric is stack of city's experience, and in this stack we can find fundamental rules of designing spaces and buildings. By choosing forms (basically their types) from the past, although the forms are disconnected from their temporal period, but still bring their social and political meanings form past to present. So we can see the continuity of urban form during temporal changes.

Calquhoun (1969) extracted the innovative capacity of 'type' in design process. He argues that every act of design deals with a pre-assumptions and there is no way to see our pure intuition at the beginning of design process. So using types will not bind our hands to design, but just makes us to start faster. Because the respond to each design problem can be found in a definite type and any other methods, tools and applications (like all quantitative analytic tools, interpretive and intuitional ecstasy, and problem solving diagrams) can only lead us to a framework which shows us the way how to pass the process, and no final

forms can be gained from this methods, tools and applications. Here, using a typological hierarchical repertoire can bring us at the first step of designing absolute final form.

Moneo (1978) excavated the notion of type and defined type as 'a concept which describes a group of objects characterized by the same formal structure'. As he argues type is not a spatial diagram of an average of a serial list, but based on the possibility of grouping objects by certain inherent structural similarities. The idea of type which 'ostensibly rules out individuality at the end has to return to its origins in a single work'. Moneo expressed that types are not only tools for describing architecture, but architecture is always produced though types. The architecture can be produces through types because types are open to the process of change. The type can be thought as the frame within which change can be operated. So type is not a frozen mechanism but in can deny the past and looking to future.

All these can be seen as viewpoint extremely rooted in the words of Quatremere as defined "type" versus "model"

"the model understood as a part of the practical execution of art is an object which should be imitated for what it is the "Type" on the other hand is something in relation to which different people may conceive works of art having no obvious resemblance to each other. All is exact and defined in the model; in the "type" everything is more or less vague. The imitation of "types" therefore has nothing about it which defies the operation of sentiment and intelligence." (Chr 1788 in Argan 1963)

Quatremere see type as a vague and neutral entity that brings only an idea of a form and do not dictate a form. So type always transfers a content of past projects but this content do not affect on design process of new building. So all these buildings are refined of their formal qualities in a type and designer can create a new building free from historical indicators. According to this review, the notion of type is fundamentally value, and time free, but the reduction process of existing building to root types let values and temporal character to be embedded in type. Table 2 will give a clue about this character of the concept, 'type'. As an outcome for this conceptual review, key

Main definition	Quatremere : The idea to conceive design without dictating any definite form, as a vague and neutral entity which can be repeated in many forms but let diverse forms exist		
Author	**Notion of type**	**Procedural aspect**	**Conceptual explanation**
Argan	Result of reducing many existing form to a root type	Refining. Reducing and summarizing forms with degined function, use of configuration	internal configuration of a form or a principle which provide possibility of endless formal diversity
Vidler	A body which embed past and present of urban fabric	find fundamental rules of designing spaces and buildings, in the stack of urban experience, By choosing forms (basically their types) from the past, which is disconnected from their temporal period, but still bring their social and political meanings form past to present	Timeless and value free (neither utopian and nor nostalgic, neither ancient and nor avant-garde)
Calqohoun	A pre-assumption for intuition in any act of design	Responding to diverse design problems, by its diversity	A cell for typological hierarchical repertoire which can bring us at the first step of designing absolute final form.
Moneo	A concept of form which describes group of forms with similar inherent structure	A tool which opens up the process of change in architecture	The type can be thought as the frame within which change can be operated

Table 2. Summary of mid 20th definitions, explanations and concepts for type

points that introduce the notion of type can be summarized which any` practical action deriving from morphological thoughts should be founded upon them

Consideration of 'type' as a vague and neutral entity that brings only an idea of a form but not dictating it

The process of reducing existing form to a root configuration of a type

Embedded historical content within the type and the ability of type to be free from historical contents.

The commitment of developing hierarchy of types which have longitudinal and latitudinal relations with each other

The ability of types to be used independently of in relation or combination with each other Using a contextual repertoire of types as a beginning stage of design process

Morphological concepts let us be free from any substantive value, so any urban form can be subject of reducing process of sample forms. So any kind of forms, belonging to any temporal period, and any context, can be reduced to a definite type.

Conclusion

Referring to the notion of type as the essence of formal elements of urban fabric the solution of the problem of being is seeing urban morphology free from values apathy to historical substances. According to this, form can be seen regardless of functional, conceptual and historical substance. This can

be done by reductive process and abstraction of all contemporary forms (contemporary forms, here, means all forms existing in urban fabric, whether historical forms, their modifications or new forms). Any individual type, no matter what is the historic period it belongs to, and no matter what is the function it serves, can be used again and again in many new derivations. So, such repertoire of types can be a fundament for using, mixing, making hybrids, modifying, and updating forms for new needs. In this way we have a line of continuity which starts from the beginning of our history, save its continuity through modernism and globalization and do not escape from any period.

Such a process will lead us a knowlege for a a framework which include a method for selecting forms exist in all urban fabrics to develop prescriptive norms for all situations. So this method should choose forms with many possible configurative patterns and diversity of morphological hierarchy; patterns remain from past, or modifications of old patterns. Also all other forms with any kind of contrast with formal preferences embedded urban design and architectural theories, have capacities for further development of cities. But using this capacities need to modify the forms for real needs. It seems this is similar to the absolute meaning of reading the city expressed by morphologists (Nessbit 1996). Nevertheless, the main question here is how to mix and combine different types. Is there any theoretical indication for such a thing or just simple practical rationale will give us a chance to do this? Combining different qualities with different fundamental bases and concepts will make a designer to use normative approach as a meta theory. But using this approach for urban changes relying on urban morphology needs more researchs and deep scrutiny.

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