

Urban Types and Transformation of the City

Mohammed Qasim Abdul Ghafoor Al Ani

(Dr Mohammed Qasim Abdul Ghafoor Al Ani, Al Nahrain University, College of Engineering, Architecture Department, Baghdad, Iraq, PhD Consulting Architect & Urban Designer, mohammedkassim66@yahoo.com, 00964 7901 398763)

1 ABSTRACT

This research deals with the subject of Urban Types, for what it represents, as an element dealing with the conscious and the unconscious, in the process of thinking of the city future, in order to build a continuous civilization. The urban types were established historical cities in the middle age in the Christian civilization in Europe land, and in the middle age of Islamic civilization in Arabic land. To determine important urban design intervention, which take part in development plans of cities, and make there to conserve the basic types which established on its.

The continuity process is the main concern of the research, and it will not be achieved without taking the Urban Transformation, as well as studying their effects on the historical city centers, where the interest in the process of continuity will come to its peak.

Therefore the research aim is to mention the transformation meaning of the Type and Typology concepts; and clarify specific definitions for each of them; which considered challenge due to the conception transformation for them and their wide uses in the other fields. So, the research aims to examine type and typology importance in architecture and urban design of the city.

The research procedure has dealing with the past & present experiments of historical cities in the fields of architecture & urban planning, represented by the historical city center through the age. So it takes many study case of cities like (Rome, Paris, Baghdad, Damascus) to study their architecture and urban types, before and after urban development plans to determine useful or affect factors, with four different city types there are some types are more useful from others in the developing design of the city. These developing designs are decided by theory of type or by providing new types to meet the needs of the community. focusing on the important conclusion about continuity types or urban transformation happened on it, to determine which types could have the ability to be adapted with these changing and transformation, and which one haven't this ability. So the research choose these historical cities with different types from different places in the continuous civilizations.

The research explain how cities transform by introducing the idea of urban morphology through an examination of more than a century of transformations in downtown of experimental cities including (vitality, alienation livability, and un belonging). Considered the main aim of the research to reach the conclusions of city future, so we can have a clear vision of the coming future, what is the future of the historical center of the cities, in terms of its policies, and the development projects?

Furthermore, the research is looking for the transformation of urban types, and which one can be adapted of twenty one century requirements. To make the process of the continuation of civilization sail strong, safe and sound, through urban academy and practical institute.

2 INTRODUCTION – WE SHAPE OUR BUILDINGS AND THAN OUR BUILDINGS SHAPE US (CHURCHILL)

Urban environment reflect in architecture and urban design for the way in which buildings are formed by the elements and gather with neighbors. This indicates a problem in the urban environment today by losing much of its characters and their basic components that maintain the cohesion and harmony bound thereby to further disintegration, ruptures and fragmentation, these components include (human, spatial dimensions, timing dimensions), which generally represent the basis for establishing and achieving the concept of belonging of the urban environment, and research on the concept of the built environment and the factors affecting them and their basic components with an indication of what we are suffering from the problem of erasure, removal and insertion, and others that carry implicit notions of separation of spatial and temporal for the general context of the total, this separation in the built environment today marks the beginning of the disintegration of the urban fabric in, and go to separate the building solo on the overall context of the existing in, and thus the embodiment of the phenomenon of alienation of civilization and cultural heritage, which represents the most prominent manifestations of fragmentation in configurations major decay of urban spaces, and the



appearance of duplication between the (old and new, heritage and modernity, past and future, natural and artificial), which was reflected in the duplication of personal humanity. Therefore, the environment can be divided into two parts (Hillier, 1996, p.89):

2.1 Natural environment

Represent data that surround the human being and has no income in its presence, which vary from region to region depending on the data component.

2.2 Man-made environment

The physical material products made by human being in order to adapt laws to serve the purposes of natural rights and the achievement of its objectives, and work to achieve the protection and safety and the establishment of social relations in the modern sophisticated societies.

Any ruptures or discontinuity between the human and the natural environment will lead to create of urban environment does not meet the requirements of the psychological, social and even health, and the emergence of a number of problems like incoherence, the lack of identity and personal characteristics of the built environment. The confusion of psychological disturbance and alienation because of lack specific solutions to the development of environment construction.

Urban design of the city is a prior thought behind design process; which could got from Forms; sketches or images and even verbally; and all summarizes through the concepts of Type and Typology in Architecture by its time transformations. So how do cities transform over time? And why do some cities change for the better while others deteriorate? In articulating new ways of viewing urban areas and how they develop over time?

3 THE CITY SHOULD BE A LIVABLE PLACES

A city is the characteristic physical and social unit of civilization, with it possesses size, density, grain, outline and pattern. The people who live in it shape these properties and are shaped by them. The old cities usually were roughly circular or rectangular in outline, with a sharp boundary commonly marked by a wall. Such is the medieval cities in Europe and Arab land.

Every city has its intimate inner pattern: the streets, squares and other openings that make buildings accessible and livable. In ancient cities and those of traditional European cities and in the Arab land today the pattern is highly irregular (organic fabric). Buildings or high-walled private gardens are dominant: the public way is simply the land left over. This complex composed mass may be perforated occasionally by design larger open spaces for gatherings, exchange or ceremonials.

The city is the most explicit index of power relationships. Walls, squares and streets are not only meant to support the functioning of the city, but they also form an extensive governmental instrument. Without proposing a cause-and-effect relationship between form and politics, the intention here is to trace the political origin of quintessential city projects within the history of the modern city. The aim is to test the political instrumentality of architectural types and reflective forms. For this reason, instead of focusing on the city at large, the focus will be on paradigmatic architectural archetypes. The category of archetype that will be advocated here will not be the way Carl G Jung defined it, as a universal content less form, nor as innate pattern of behavior. The category of archetype is advanced here as an alternative to the idea of type. If type traditionally indicates the idea that regulates the development of a group of forms (and for this reason is irreducible to any particular form), and contribute to make the city as livable place. Archetype offers the possibility of addressing a found singular form as a definition for a possible group of forms. In architecture, an archetype is thus a paradigmatic form through which it is possible to illuminate a particular critical passage in the development of the city. (Aureli, 2011)

4 TRADITIONAL CITIES AND MODERN CITIES

Christopher Alexander put in his studies compare the structure of the city of traditional and modern cities through the concept (structure inclusive), as shows the urban fabric of cities, the traditional integrated holistic result of cumulative growth and gradual compared to modern cities, and confirmed (Alexander) in a book (The Nature of Order-2001) the importance of the positive space in the structure of the urban fabric through the continuity of urban space and the surfaces of buildings constant that defines the space, he define positive space: that the space gets defined surfaces surrounding it and its association with direct building and

confirmed the ability of the city to rebuild and repair itself, detect city (urban pattern) has a dynamic of its own, and the goal of urban designer in the search for the city in the mechanical support and develop itself constantly (Salingaros, 2002, p4). And so a city had several models:

4.1 Natural Models

Since cities were founded in these things, it is hardly surprising that cities ever since have been permeated by them or their equivalents. As for their physical design, (Broadbent, 1990, p5), cities and part of cities, have grown in tow types:

- Many towns owe their foundation and underlying plan to specific event, a 'big-bang' origin. Such
 towns were the result of a self-conscious design decision and existed as concepts before
 materializing in fact.
- Type of beginning has no such precise definition. For such towns, it is no more profitable to pin down the moment of birth than to define that of the culture to which they belong. These 'steady-state' settlements seem to have grown organically with that culture and even where we can be fairly clear about the period of their beginnings. (Gosling, 1984, p25). As with the many medieval towns of Europe and traditional Arabic-Islamic cities which sprang up during the population expansion of the twelfth and thirteenth centuries.

The first is described by Alexander (1964) as a natural way in which people simply start buildings, as they still do in the shanty towns of the emerging world. There is the artificial way in which a master plan is prepared; streets laid out, squares and urban blocks on to which buildings are then placed according to some planners' sense of order.

This contrast will recur many times in the book. So wills another contrast: between formality and informality. The "natural" city tends towards informality, not mention an apparent disorder whilst the planners will want their conscious decisions to show. Most planners aim for regularities of a kind which shoe that human minds have been at work; but some aim for a self-conscious irregularity of the kind we call Picturesque (Broadbent, 1990, p5). Natural Cities express the needs of the same set of design decisions over an extended period of time, and take in its message multiple variables, and a special system in the format might suggest chaos, but it carries the spirit of the system (Gosling, 1984, p27).

4.2 Utopian Ideal Models

In this, it contrast sharply with another powerful tradition -the utopian or ideal- in which town design is closely allied to the design of society itself. And whereas the organic town can exist only in fact, as the physical result of a multitude of small forces and actions, the ideal town can exist only in theory, as one designer's formulation of possible complete solution to the design problem 'town', Such as utopian ideas of Bacon, Fourier, Le Corbusier, Wright and Howard. (Gosling, 1984, p32)

So the research see that idealists architects - including (Aldo Rossi) – searching for permanent fixed formal types by trying to re-study and research in the concept of Typology and Ideals with the same sense, inspired by the early idealists, such as Plato, Descartes and others.

4.3 Models Derived from Arts & Sciences

This model given the complexity and intractability of urban problems, it is not surprising that designers have found it helpful to borrow ides from other fields in order to gain fresh insight. These references have taken two forms; analogy and translation, which together have constituted an important further source of urban design theory. These theories derived from (walking city in archigram's projects, mathematical theory of Alexander, psychological studies in Gestalt theory, psychoanalyses studies of Piaget, anthropological studies like Defensible space of Oscar Newman and Territorial Behavior of Jane Jacobs). (Gosling, 1984, p40)

Alexander discussed the structure of the urban fabric of the city through the analysis of urban structure of cities through a wide range of studies. And discussed in his article (A City Is Not A Tree) the difference between the natural cities and modern cities which are designed according to the ideas of specific criteria, did not grow naturally, point the importance of not analyze the cities according to their forms as far as research on the basic principles in the organization and the importance of testing those abstract relationships also.

Having thus defined his terms, Alexander goes on to analyze a number of city plans in tree' semi-lattice terms, including Abercrombie's Greater London, Tange's Tokyo, Soleri's Mesa City, Le Corbusier's Chandigarh, Costa's Brazilia, and so on taking as the most extreme example of a tree-like plan that described by Hilbersheimer in the Nature of Cities (1964). And in the second part of his paper, Alexander goes on to show that whenever a city thought out by planners it is bound to have a tree-like structure. National cities grow over time but they are the most appropriate containers for the complex, semi-lattice forms of our complex social relationships. (Broadbent, 1990, p145)

With this concept Alexander submit (A city is not a tree), where he distinguished between the different structures of the cities into two groups:

- Semi-lattice forms: includes traditional areas of organic-oriented design and grow over time. Seems that the physical fabric of urban in any traditional Arabic city or any other traditionally European city came like a spontaneous planning a network of winding streets and roads graduated from expanding to the narrower end of the col-de-sac roads, and the entry of other factors in the production of the city like (social, cultural, religious and economic).
- Lattice forms: which is mostly newly designed cities. (Broadbent, 1990, p.143) that modern cities affected by the modern growth of new types and functions, and by searching for positive space and confirm the centrality of urban growth through the five essential components in the structure of the urban fabric; (buildings, the axes of pedestrians movement, open spaces "parks", the streets of movement, parking) by dealing with the basic elements in the structure of the urban fabric of the city as a dynamic overlapping stages, and its emphasis on physical factors and neutralize other factors.

Alexander in the definition of the structure of the urban fabric by defining axes of infantry, as the axes of pedestrian links to know the urban fabric, while the adoption of the principle modern cities with career progression in zoning and in the relations between the parts of the city and the isolation of the various events led to the fragmentation of the fabric of the city. The research also stressed the idea of the urban center that overlap the events for the gradient space as shown in the holistic integration of traditional city centers (the adoption of the principle of deduction), while the modern city built according to topical parts shall be the sum of all parts of the local entity and has no special distinctive (adopting the principle of induction) (Alexander, 1987, p93).

In this system, the news rack, the traffic light and sidewalk are all fixed parts of the system; product, as it were, of design, whilst the people, their money, the newspaper and the impulses which drive the traffic light are all things over which the designer has much less control. So to start with two categories; the fixed parts of his system and the changing parts, each part can be numbered. So clearly a city which is zoned, into working, residential and service areas forms a tree in Alexander's sense whilst a mélange of houses, shops and so on of the kind which Jane Jacobs describes is, in his terms a semi-lattice. (Broadbent, 1990, p144)

5 THE ORIGIN OF EVERY THINGS WITH DYNAMIC NOT WITH CONSTANT

All the strength of the Stability and changing are essential for the sustainability of any society, the decline in the power of the Stability may lead to a decline of culture, but the lack of change or decline may lead to death or the end of that society.

Since the Stability and change the status of all living systems, including the system of the city, so we find that many of the thinkers adapted constant for many centuries ago, while dynamic anomaly and a rare exception, and even the mid-eighteenth century emerge the idea of dynamic - especially living ones - take place gradually to the stable constant, especially after the detection James Watt to use steam power, then the Einstein theory of relativity, put forward the idea of relative movement and constancy.

Heraclitus adapted Changing and says: "Without change there is nothing" because in his opinion the stability is death and lack of, and he belief, this change must happen by a certain act. If things were static and fixed on one case does not change, the human couldn't originated the idea of causality, because this idea is the result of what occurs to change things. What ever-one thing we do know with our senses, changing is immediately transformed after the event?

So Emerged theories put forward (Genius Loci of Space) as spirit of the place, the Romanian idea with existence of the spirit of all the assets of independent and serve as a spirit Guardian and specify the nature of



these things, and what it wanted to be, in essence fixed things (Schulz, 1980, p6), If this essence constant, how can discrimination "spirit of place" in the cities of Britain in place of the difference between ancient and modern cities, or Genius Loci of Rome (Fig.4). And highlights the important question is: If the change is inevitable, how can we find the balance that preserves the survival of the system?

6 URBAN TYPES REPRESENT CONSTANT IN THE CITY DISCIPLINE

As Vitruvius, the type is trying to standardize the changing, and may be done by quantitative approximation. The type is mentality attempt; try to find a common objective vision of the objects or the relations among them, to get the kind of understanding, control and prediction.

"Aldo Rossi" Said: "The fixed type arises from necessary, is linked to the mind and feelings and values of a social iconic, and linked to the community and human innate." Chomsky called this mental ability the term Competence and defined as: "a set of mental rules, one can by the results make an unspecified number of sentences." With this ability we can produce results for the specific language. While "Carl Jung" defined by that represents the "mental forms cannot explain its presence, which seems to form a primitive, innate, or a tendency instinctive, as generated by the human is always the tendency towards the formation of these representations." It is a "factors governing the elements of a mental or psychological specific developments are described as types, but know the effect produced by such as the concept of religion, guess and likely to constitute the dominant structure of the same in general, and perhaps compare the crystals are not visible in the liquid as prior factors" (Jung, 1981, pp. 86-100).

Therefore Type represents constant in thought, it is preceding forms. And the image of this type is conceptual thought, which is termed (Archetype), shows "the internal structure of the form, which is the principle has the potential to generate infinity different forms." From this sense, we find the conceptual Archetype network or neutrons, through its ability to (willingness, tendency, respectively), which starts from the moment given the evolution of the human mind. "Type does not present so much an image of something to be copied or imitated exactly as the idea of an element which should itself serve as a rule for the model..." (De Quincy, 1998, P. 618(.

6.1 Autonomy of the City

The City is case of (Institution Form), this would be through the formation of any selection of the appropriate Shape, and this does not mean that, the chosen form is linked to the images, forms reflect Types in the first, and second images. In other words, the image is brought through the selection of an appropriate type, this type on the level of conscious, not at the level of physical verification. Type does not require re-use the old within the particular level attributes, but it helps in understanding the Old, with this perspective the type had the possible interaction and generate forms which had the prospects appear.

Rossi was interested in how research is produced architecture, how it works and then gradually building to create the city. The establishment of the city means rational foundations for the birth of a city over time, so look for analysis of the concept of style (or the intellectual ideals), as Plato and Quatremere. Any timeless elements that give the city the archaeological dimensions and urban types are the physical objects that make up the city through time. So type had a range of intellectual relations that remain fixed behind a set of physical models (Broadbent, 1990, pp.181-187). After these steps are detected on the laws that produce these types, then the lines in recent research on the laws that combine these types to form the baseline to the image of the city and the urban sectors.

6.2 Type in the urban design of the Neo Rationalism

Rationalists work on the new abstract geometric architecture since the eighteenth century in France such as: Laugier, Ledoux, and Boullee (Fig.3). Most of the neo-rationalists they belong to the group (Tendenza) affected by the ideas of Marx. Continuation of the develop rules and principles addressed in the architecture, Are treated with it at the level of relations, as abstract that are connected by these elements, on the level of (Types), which count their existence previously to the presence of architecture or any other historical period, and these types interact with the functions and tasks that arise in the building at any stage to form the overall system, but keep the relationship between type and any model is a random relationship depends on the designer intuition. There are some of the proposals of the most prominent theorists' current new rationality about the relationship between architecture and types: (Broadbent, 1990, p157)

6.2.1 Manfredo Tafuri (Ideology and Utopia) - 1976

For Tafuri, the very existence of multi-nationals makes socially responsible planning impossible. And whilst in previous centuries, architects and other visionaries had imagined Utopias; Capitalism has destroyed the very concept. If they cannot even conceive of Utopias, They have no hope of achieving anything like them. Nor will them ever again whilst Capitalism retains its grip on human affairs. (Broadbent, 1990, p158)

6.2.2 Aldo Rossi (The architecture of the city) - 1966

Focused in its arguments to deal with the facts as urban facts objects list is working on the composition of the city over time. It highlights the facts on the products of the city, buildings and urban spaces. So he focused on the Types as descriptive elements that make up the city and grow it over time, defined them like constant of relational despite changes in specific examples of buildings of heading to read the facts within the architectural methods reveal implicit infrastructure within buildings (Broadbent, 1990, p.325).

6.2.3 The Krier Brothers (Architecture and Urbanism) - 1977

Rob Krier located his studies in urban design to look at the types of the urban spaces, which has represented the intellectual relations which make Essential form, and join its. Essential Pure forms in the formation of interference types create for the design of the building at the beginning of the formal types of presence within the Urban Context and autonomic architecture, and components of the architectural details. Naturally enough whilst most internal space is rectangular, he finds examples which match his three major Urban Types: square, circular and triangular with equivalent combining and distortions. (Broadbent, 1990, p328)

Either Leo Krier believes that the basis on which the lesson can be inspired from the basic types of the archetypes lies in the understanding and analysis of urban components which are streets, squares and different configurations. A good city is made of streets and squares and squares provide natural settings for people to meet. But the square also provides the "choice location of all things public". It is, in other words, the proper location for monumental buildings. (Broadbent, 1990, p333)

6.2.4 Antonio Vidler (The Third Typology) - 2000

Vidler Submit a group of urban design, which calls for a return to the morphology of the traditional city's development, deduction types of space and processors in the traditional urban structure. The Third Typology of the city consider as the main source of proposals for urban design, The first Typology depend on function, and The second Typology depend on machine, the third came to return to the morphology of the city and the promise of types that are derived from design trends in the work of neo rationalist of the earliest models to morphological design (Vidler, 2000, p292).

"Columns, houses, and urban spaces, while linked in an unbreakable chain of continuity, refer only to their own nature as architectural elements, and their geometries are neither naturalistic nor technical but essentially architectural" (Vidler, 2000, P291). The third revolve in Architecture led to emerge the importance of the Type and Typology Concepts in practice; for discussing great cases in architecture like first architecture origin.

Although the bid difference between the rationalism and empiricism; they agreed that the type is the origin in first architecture; and it's extrude all the architectural splendor of luxury. The Type Theory used in understands and analysis all architectural and urban design projects.

6.3 Urban types and the form of the city

Type and Typology are effective tools in the process of analysis form of the city, as well as a tool classification and tabulation of history and understood by the gradient historical, and make it in the form of successive types, draw accurately the characteristics and features of the times its own; it is also the classification and tabulation types of city planning, which can't be counted as a result the emergence of new types in every age since the analysis the city and the extent of its success depending on the typical practice, and upon them if they are drawing the attribute and the general character to its; to solve all problems in the city planning. The planning of the city is located within several types depending on the shape of space and formal composition such as:



6.3.1 Centralized Type

A central organization is stable, concentrated composition that consists of a number of secondary spaces grouped around a large, dominant, central space. Such as the circular type in Baghdad rounded city (Fig.1).

6.3.2 <u>Linear Type</u>

A liner organization consists essentially of a series of spaces. These spaces can either be directly related to one another or be linked through a separate and distinct linear space. (Ching, 1996, p198) An example of this type proposed by Soria de Mata (linear city), and Leon Krier (Stuttgart-Leinfelden). (Krier, 1979, P.166)

6.3.3 Radial Type

A radial organization of space combines elements of both centralized and linear organizations. It consists of a dominant central space from which a number of linear organizations extend in a radial manner. Whereas a centralized is an introverted scheme that focuses inward on its central space, a radial organization is an extroverted plan that reaches out to its context (Ching, 1996, p208). The Re-planning of Paris by Haussmann (Fig.3), and re-planning of Damascus by Ecoshar (Fig.2), examples of this type.

6.3.4 Clustered Type

A clustered organization relies on physical proximity to relate its spaces to one another. It often consists of repetitive, cellular spaces that have similar functions and share a common visual trait such as shape orientation. A clustered organization can also accept within its composition spaces that are dissimilar in size, form, and function, but related to one another by proximity or visual ordering device such as symmetry or an axis. Because its pattern dose not originates from a grid geometrical concept, the form of a clustered organization is flexible and can accept growth and changing readily without affecting its character (Ching, 1996, p214). This type is evident in the traditional environment in the old city of Baghdad (Fig.1), Damascus and other traditional Arabic cities (Fig.2), as well as the city of ancient Rome (Fig.4), Paris and other traditional European cities (Fig.3), which is known as the traditional fabric.

6.3.5 Grid Type

A grid organization consists of forms and spaces whose positions in space and relationships with one another are regulated by three-dimensional grid pattern or field (Ching, 1996, p220). For example, New York City, new districts of greater Baghdad plans (Fig.1).

In order to analysis the form of city, the research need to analysis of the following open space types, usually associated with city development:

- Forecort: an open space between the public sidewalk and the main entrance of the building.
- Walkway: an exterior public pedestrian way at street level, usually providing connection through the block.
- Urban garden: a landscaped open space, usually of intimate scale, located and oriented to provide maximum sunlight during midday.
- Plaza: an animated gathering place with landscape features flanking a public street.
- Courtyard: a landscaped open space, located in the centre of a single or consolidated block with no direct street frontage.
- Street: path or axis for vehicles, cars, bicycles, pedestrians, etc.

The archetype of the closed monumental courtyard clearly separated from the city but fully accessible by the community of workers that inhabited each superblock introduced a type of space that is neither public nor private (Aureli, 2011). The urban archetype of the isolated block can be interpreted as the product of an urban ethos in which the growth of the city requires a certain openness of the city space.

7 TRANSFORMATION REPRESENTS CHANGING IN THE CITY DISCIPLINE

The process of urban transformation in the context of cities changes in the modern economy and society, and it's deriving from the post industrialization of the urban economy and from the modifications deriving from the processes of the knowledge, information and new technology society, as well as from the new social

forms of consumption and social relationship make the transformations of European cities a topical issue. Urban transformation is a habitual process in the evolution of cities. It is based on a constant tension in the relations between the cities' physical and social elements. The changes in social and economic processes always involve an almost permanent urban need to update or modernize or simply to transform cities. (Maria, 2007)

We live today in a conflicted time of both accelerated change and business-as-usual, a time of both transformation and stagnation. Those who want to change the conceptual direction of architecture and forge a larger cultural change. Of course it would be silly, after so much twentieth-century evidence to the contrary, to think that architects could change society. They are relatively powerless compared to politicians, developers, journalists, and businessmen. They can only tinker with ecological and population problems set by others. They do, however, have one power that no other profession enjoys: they have some control of the architectural language and the messages sent. A single building can celebrate a better world or signify a change in direction. It has the power to engage the imagination and symbolize the basic truths of the universe. Man is not the measure of all things - the emergent cosmos is. We are beginning to know some of her predispositions, but the question is: can we build a shared culture on them (Jencks, 1997, p21).

Transformation is a positive option in the face of changes in urban and regional structures. Transformation processes are essential to the city's existence and comprise part of urbanism itself. The physical, architecture and urban planning dimensions, and social, economic and cultural dimensions, are always connected in a transversal way. And we should point out that this is more of a process than a structure. Therefore the situation of going from one initial position to another - which is the outcome of a transformation process - generates a certain transitory position. This characteristic is essential at the conceptual level of the more theoretical reflections on the subject. But it does not modify either the characteristic of the requirement, of the processes of urban transformation in study case cities, or the almost deliberate or conscious sense of modifying the urban environment to introduce factors of a new urban vitality. (Maria, 2007)

Nevertheless the issue of urban policies should not be reduced to the most dramatic aspects of urban issues. It is necessary to return to the reflection that the conditions of the urban environment are a key to the competitiveness of the cities themselves. And this brings us to recall the planning aspects which constitute basic factors in the attractiveness of cities. This dimension is a key to cities in particular - since they depend, to a greater degree than large cities, on their own characteristics, conditions and elements of potential transformation. (Maria, 2007)

8 NEW URBAN TYPES AND CHARACTERISTICS OF THE CITIES IN THE TWENTY ONE CENTURY

Le Corbusier write: "If we eliminate from our hearts and mind all dead concepts in regard to house and look at the question from a critical and objective point of view, we shall arrive at the 'House Machine', the mass production house, healthy (and morally so too) and beautiful in the same way that the working tools and instruments which accompany our existence are beautiful." (Frampton, 1980, P. 153 (

These new ideas were emerged in the end of twentieth century was attempt a short and brief outline of a political history of the modern city, and the way its ethos, made of urban management on the one hand and conflict on the other, was embodied and represented by the use of certain architectural forms.

While the changes of the city in the twenty one century can be thought of as the evolution of urban types, its realization can only happen within a political 'state of exceptions', in which the exemplarity of specific and singular forms plays a leading role in resetting the urban condition.

So new types emerge in the contemporary city: like Entering mega structure and taller buildings to small contexts of historical fabric, Emerge new disciplines with information revolution of twenty one century like (digital city, cybernetic, cyborg, etc). As a result of significant changes which began to appear in some of the literature different expressions and new words such as: (Networked territories, Electronic Spaces, Post modern hyper – Space, Cyberspace, Virtual space, Virtual Communities, New social Space, Electronic agora, Net world). These terms show how the relationship between Information & Communication Technology (ICT) and their effects in space, city and the community.

With Cyberspace we built non-geographic land in electronic - information networks without distance limitations, and time plays a central role here instead of the distance which can influence the world in Real



Time. But the gap here is the explanation for the mechanism of behavioral change of the city parts within a type of network, and then to influence of city system and regional system. This helped the emergence of new concepts for future cities affected by the massive developments in modern science.

8.1 Intelligent City

"All this plastic machinery is realized in marble with the rigor that we have learnt to apply in the machine. The impression is of naked, polished steel" (Frampton, 1980, P. 153 (. The idea of the Intelligent City depend on identify the idea of housing and smart buildings in the type, which calls to mind the relationship of telecommunication systems and computerized urban network management, but under the guise of a more comprehensive perspective of thinking. It looks smart cities and closely related to the emergence of new relationships based on the flow of physical and metaphysical exchanges condensate for telecommunication systems in resolving the central problems of access to the best means to improve the urban environment.

The telecommunication rule depend on dissolution of the need for physicist rapprochement between people, services, and this makes it easier to imagine the beginning of the dissolution of cities and the formation of a new life status of the house. But other anti rule of telecommunication networks that increase the central urban centers control flow of information and thereby increase the dominance of global cities not as largest cities, but as the Smartest. It is clear that intelligent cities be node within the telecommunication network which fellow multinational companies and provide a new political tool for urban management and strengthen the urban face of cities and support the economic interdependence between local and global levels (Graham & Marvin, 1996, P 383). The application of these ideas emerge in Silicon Valley in America, and the European Union countries, and Southeast Asia countries.

8.2 Globalization instead of local culture

The cultural sector as a factor in the development conditions for the transformation of society. Today the world are witnessing the phase of historical changing, described in a aspects of the emergence of the information revolution that will take physical place in the maintained frame by the existing cities. There is no doubt that the power to influence the ancient urban types would be great effect and leave their signals on the urban morphological system of the city.

These urban policy models and criteria to improve the factors of cities' attractiveness are a base or framework for the processes of urban transformation, which can be detailed; so the research going to do this in the following points, based on the local and global conditions of cities, and based on their reflections online

We couldn't understand the city parts and their behavioral changes in full partial contexts unless the city is considering node within the integrated network. This network contain several cities together constitute the Global City Region. The characteristics of global cities and territories different from the characteristics of individual cities in (economic, social, cultural and political) without being beyond the concepts of behavioral changes in terms of public order as a part of the city or sub-system of a larger system (salingaros, 2008).

The idea of the Global Village puts cities in the relationship joint between local and global levels, where the information disturbed boundaries between it and became the look of both the two together (Both / And) interpreted the entities are not monolithic in seeing what is universal and what is local and this so-called interaction scale. In order to treated with the global cities system in the interpretation of their behavior within the levels of economic, social, cultural and political relations with the type of the information network to gain access to understanding the behavioral changes to these parts in the level of space / time, and its effects on urban structure, in particular the experience of cities that were raised the idea of world city.

In this new type the Factors and dimensions in the transformation of cities are (Maria, 2007):

- The changes in the modern economy and in the social model linked to it, as well as the regional system, which places the urban centers in a new network tension, are at the base of the process which the processes of urban transformation originate.
- Cultural and social transformations resulting from the impact across society of the so-called "weightless" economy arising from the internationalization or globalization process. Technological transformations, of systems of production and distribution and the knowledge economies. As well as the new uses and techniques of communication.

Social transformations and in economic relations deriving from the changes in role of every individual and of social groups and networks, resulting from the impact of the new financial flows of globalization (On markets, on industries) but above all on the relationship between global and local, Including the basic aspect in all this of democracy and liberties.

8.3 New metropolitan cities

Global cities known today as a base of integrated infrastructure that is assist transformation toward high density urban networks which contain group of hubs, Spokes and Tunnel Effects which connect urban economies together in real time and reshape the production of border space / time, including and between (Graham & Marvin, 1996, p384).

As result of the economic and social developments in the era of information revolution is the reorganization of cities, so that they are both integrated by grouping the units that operate as nodes in global networks. Dematteis focuses on the emergence of Planetary Metropolitan System, cities does not show equal within these broad changes. Batten was named these cities as Network City. The complex interactions between these cities as places of constant and intensive transition between networks (telecommunications, Multinational Corporation's network, the flow of the center, etc.) form of urban life and urban development (Graham & Marvin, 1996, P.71).

9 FOUR DIFFERENT TYPES OF CITIES

The political form of the modern city will be defined by addressing four archetypes (Rome, Paris, Baghdad, and Damascus). The sequence of these four archetypes attempts to synthetically describe the emergence of modern urban types that embodied specific power relationships within the ancient types of the historical city, especially those related to entering new urban types such as Information & Communication Technology, social relationships, the rise of economic accumulation and management as a response to particular conflicts in the city.

The research counters the current millstone of evolutionary and empirical development projects on the city that portrays urban space as an evolutionary and self-organizing organism. Against this idea, the city emerges as a locus of a permanent political conflict of which architectural types are one of the most extreme and radical manifestations (like genius loci of Rome) (Fig.4).

	City form types						Open space types			
	Clustered Type	Grid Type	Circular Type	Linear Type	Radial Type	forecourt	walkway	urban garden	plaza	Courtyard
Baghdad	*	*				*				*
Damascus	*				*		*	*		
Paris			*		*		*	*		*
Rome	*				*		*		*	*

Table 1: Table of comparative between four cities incloding types and transformation of the city (Author, 2012).

Transformations of cities' urban systems, the work arising from the study and types the description summarized in the specific case studies. Where the issues which are considered key to the transformation process are:

- The emerge stage which established Urban types.
- The growth stage when types conserve with its characters.
- Changes in the nuclear character of cities by another broad or diffuse dimension.
- New social and demographic systems transform the use of the urban space.
- Less rigid cities in less hierarchical societies.
- Technological innovations which are key to the type changes in forms of productivity.





- Urban transformation, from this period of "renewal" to urban regeneration.
- Transformations in diversification and restructuring of urban forms.

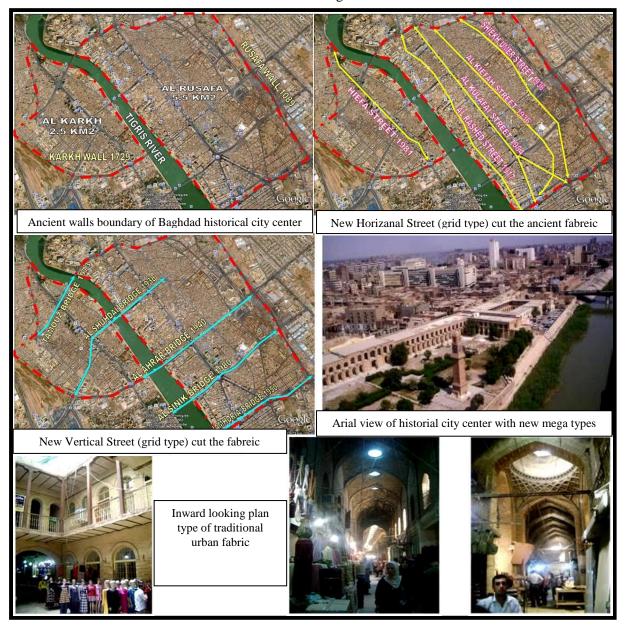


Fig. 1: Transformation of Baghdad city center (Author, 2010)

10 CONCLUSION AND URBAN SOLUTIONS TO SOLVE THE TRANSFORMATION OF THE CITY

- The types of Utopian city Failed to submit solutions that assumed the future of cities, because it was based on expectations of real-time variables which not proved on the reality, not based on what can be considered as constants of the natural system.
- Stay away from human nature (Right Innate) as a result of modern technology creates totally alien environment to the sense of human culture, while the traditional city has maintained to achieve the humanitarian and technical requirements but without the crushing human rights.
- Transformation of residential urban fabric: Regeneration of areas and neighborhoods which are in crisis or depressed; Activities in social or public housing as an instrument of integration and urban cohesion; Integrated neighborhood plans in all their social, economic and town planning aspects, with citizens' participation; and the historic centers, with policies of rehabilitation that are complementary to these plans. All of these are needed to adopte in the city in Twenty one century.

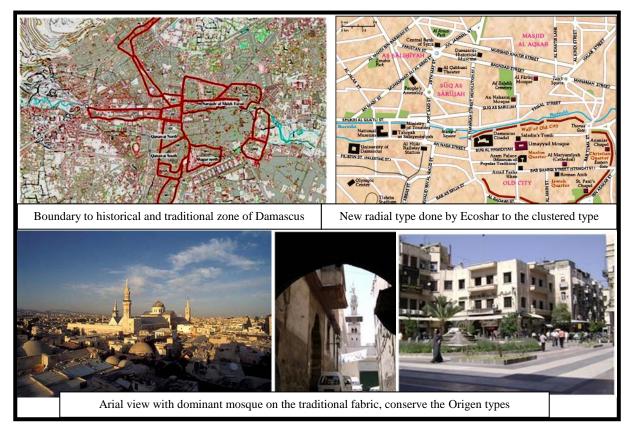


Fig. 2: Transformation of Damascus city center (Inernet, 2012) (Author, 2008)

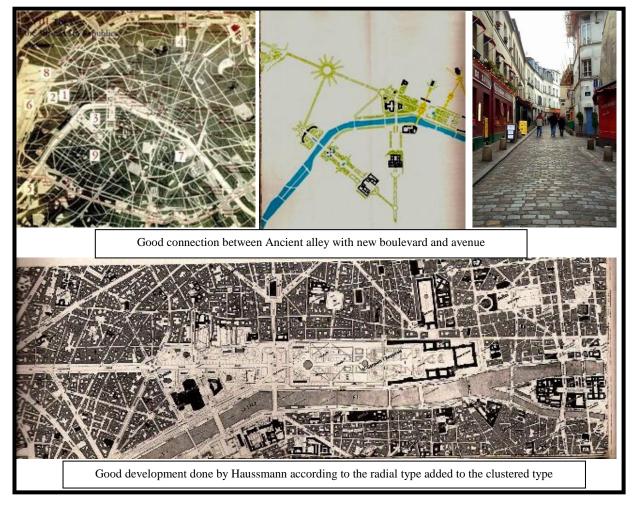


Fig. 3: Transformation of Paris citry center (Bacon, 1978, pp.192-193) (Author, 2010)

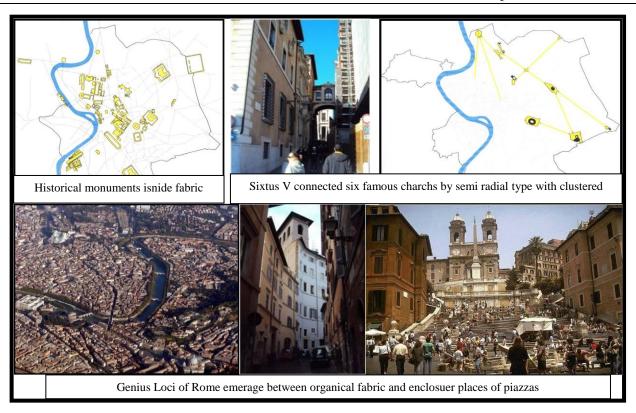


Fig. 4: Transformation of Rome city center (Bacon, 1978, pp.86-87) (Author, 2010)

- The traditional Islamic city works in the general framework as a single unit connected with the status of one center returning to the main roads, but it is also divided into smaller groups "neighborhood unit" and this division to achieve (humanitarian purposes, security, practical) this confirm the reference to the flexibility of this system in adapting the future transformation of the city, which reflected in the proposals of Christopher Alexander A city is not a tree, Oscar Newman Defensible space, and Jane Jacobs Behavior territory.
- Urban renovation processes combine with expansion new types and requirements for, urban spaces.
 It is characterized by the overall transformation of wide spaces, not just in specific activities, of an urban area. Generally, this relates to activities in old cities. Renovation, like urban improvement, is linked to the culture of the 19th-century urban types, and they are different in the scale and scope of the transformation project.
- Human is the scale of the city in the ancient architectural movements and intellectual trends, turned out to be (vehicles, sciences, atom and thus the universe) are the scale of the city in the new direction of the twenty one-century. This led to many problems at different types of the city level, and therefore the man who lives there. So the research determines respect the human scale and human relations in building the future cities.
- The changing and transformation is the characteristic of the livable city systems evolutionary, so city
 need to adapt Transformation of the urban structure; waterfronts and different types of urban ports;
 Road accesses and axes of regional connection; Renewable energies; Large scale urban public
 spaces; Green zones and urban parks, the elements of sustainable urban mobility, and especially new
 forms of urban transport.
- The transformation of the traditional street and alleys from cluster type to the radial type (like Paris historical city center developing master plan) more useful than grid iron type (like Baghdad historical city center developing master plan).
- Put forward the concept of zoning of the contemporary city, as one of the most prominent reasons which have led to increased social isolation and an imbalance in the performances of urban space, contrary to what is known by the traditional city.

- Nature presence to give the modern man, human technology, the rapid changes and variables emergency, take specific moments to possess his tired breath of the life problems and complexities of social life associated with the types of automation progress, industrial and racing technology, which led to the disruption of balance in order to make integration between matter and spirit.
- The urban fabric of the traditional city which was built according types with main components appear in unison as a single indivisible parts, where the building linking the two actions in the architecture, the first represents the building itself and the second is to make the building part of each context. As contrast with types of contemporary urban experience of the (fragmentation, disintegration, disharmony) phenomenon caused by the slogan of modernity and modernization, and thus no longer architecture reflects the collective project through which the expression of collective cooperation and rationality in the urban design development, but to rely on the (relative, partial, individual, competition).
- The necessary perspective for transformation of cities to adapt the new demands for uses and activities, the process of post-industrialization and of new tertiary activities. Key processes for the current new economy deriving from competitivenes typess, while the traditional city shown as cooporativeness types, but also from the internal demands of its urban systems.

Finally, we find out how to interpret essential aspects of "life and place" by evaluating the transformation of types in these cities. The research has a unique understanding of cities and how they work. So it offers clear vision to the future of inventive new solutions to familiar urban problems.

11 REFERENCES

Aureli, Pier Vittorio; City as Political from Four Archetypes of Urban Transformation, 2011

Alexander, Christopher; Anew Theory of Urban Design; Oxford University Press; N.Y., USA, 1987.

Bacon, Edmund: Design of Cities: Thomas and Hudson, London, 1978.

Broadbent, Geoffrey; Emerging Concepts in Urban Space Design; Van Nostrand Reinhold, London, 1990

Ching, Francis, P., K.: Architecture, Form, Space & Order: John Wiley & Sons, INC, Canada, 1996.

De Quincy, Quatremére: Type: Encyclopédie Méthodique, Architecture, vol.3, pt. II Paris, 1825. Introduction and English trans.: Vidler, Anthony, Oppositions Reader, New York: Princeton Architectural Press, 1998.

Frampton, Kenneth: Modern Architecture- a critical history, New York and Toronto: Oxford University Press, 1980.

Graham. S., and Marvin. S.,; Telecommunications and the city Electronic space- urban place; London and New York, Routledge, 1996.

Gosling, D., Maitland B.: Concepts of Urban Design; St Martin's press, New York, 1984.

Hiller, Bill: Space in the Machine- A configurationally Theory of Architecture; Cambridge University Press, 1996.

Jencks, Charles; The Architecture of the Jumping Universe; Academy edition, London, 1997.

Jung, Carl; The Archetype and the Collective Unconscious, trans. By R. F.C. HULL, 2nd edition, 1981, London.

Krier, Rob, foreward by colin Rowe; Urban Space; Academy Edition, London, 1979.

Maria, Josep; Transformations of Intermediate Cities; Lleida (Spain)-L'H, 12 November 2007

Salingaros, Nikos A; Peer to Peer Urbanism; Architecture Review, 2008.

Schulz- Norbreg, Christian; Genius Loci- Toward a Phenomenology in Architecture; Rizzole International publications Inc, USA, 1980.

Vidler, Anthony; The Third Topology- in Architecture Theory Since 1968: edit Hays Michael, Colombia Books of Architecture, The MIT Press, London, 2000



