

# City Discovered or Invented? A Dialogue between Geographer and Architect

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## 1 ABSTRACT

Change is one of the most stable characteristics of the city. Planners are expected to recognize and explore the nature of the change. Recent urban transformation is different because simply up-scaling of prior city models is particularly inappropriate given effects of globalization and massive restructuring and in fact this process leads to new form of the city. This urban shift consists of both step-by-step refinement and re-definition of the entire model of the city. The first issue addressed is about the nature and effects of driving forces that shape urban form. One version is to conceptualize these forces as processes containing the assumption that forces shaping urban structure are independent and that the role of planner is to 'discover' them and seek ways to alter basic processes through various means. A second version, on the other hand, is that cities are not only the spatial effect of self-organizing social systems, but they are also the result of planned interventions. History teaches us that relatively small-scale development is able to change direction and development of the city. In this kind of understanding, the role of planner is to 'invent' new city as a creative response to the needs interpreted by the designer.

## 2 INTRODUCTION

One of the more interesting facets of the discourse about cities and regions is that the participants in the discourse come from many different, sometimes argumentative, backgrounds. The most visible of these clashes arising from different discourses is that between the modernists and the post-modernists. Modernists believe in structural meta-narratives (e.g., Christaller, Marx, and any of the empirical 'social scientists' of the 1960s and 1970s (perhaps the dominant figures are Chorley and Haggett and the British quantitative school). Post-modernists criticize the simplistic assumptions, argue for individual interpretations and basically say that the contemporary city/region/megalopolis is unknowable. The 'communicative turn' in planning around the mid-1980s seems to currently favor the post-modernists, although there is a growing frustration with endless chatter.

Another (artificial) divide (since all forms of generating knowledge are assumed legitimate) is between the empirical and the normative. This difference is close to, but not exactly equivalent, to the difference between deductive and inductive methods. Empiricists rely on evidence-based research to form knowledge and judgements about objects, including cities and regions. Normative thinkers rely on accumulated, often internalized (derived from either deductive and/or inductive methods) to speculate about what could be. The difference is based partially on time-past (subject to empirical research) and time-future (not subject to empirical research).

The result of this Derridian state of affairs is that when we discuss urban matters (be it growth, change, form, fabric, flows, social behavior, economy or many other aspects of 'urbanity') we cannot get an agreement even on the level of diagnosis. We describe reality using different measures and axiologies. We understand reality in different way being imprisoned in our methodology and points of reference. Exposing these differences through a structured dialogue seems a fruitful thing to do.

This particular 'dialogue' (not quite Platonic, but it could and maybe should be) is between a geographer (not the field of geography) and an architect (not the field of architecture). It is a first attempt to expose differences in meanings. To a large degree, this is an experimental paper, to see if such dialogues reveal points of agreement, points of disagreement, etc.

The paper is organized as follows. The next section is a brief (and mostly undocumented) discussion of 'urban' geography, with emphasis on content and method. The view from architecture follows. The final part of the paper is a diagrammatic vision of the similarities and differences between the two views.

## 3 THE VIEW FROM GEOGRAPHY: FOCUS ON SYSTEMIC PROCESSES

The study of geography is concerned with the **concept of space**. It is normally (and artificially) broken down into two sub-fields – physical and human geography. Subfields of the latter are attributed by an adjective

such as 'economic', 'social', 'political' and 'urban' although these descriptors are sometimes combined. Only recently have scholars like Alberti attempted a new synthesis of physical and human approaches for the specific built environment called 'urban'. Geography, like many disciplines, has witnessed a number of paradigm shifts – from the historic/cultural to the quantitative/economic to the qualitative/action. A review of 'urban geography' texts reveals these distinctions (space is too limited to provide a comprehensive overview). The last major paradigm shift occurred in the early 1970s – the period between David Harvey's monumental works *Explanation in Geography* (1969) and *Social Justice and the City* (1973).

Urban geography generally distinguishes between 'inter-urban' and 'intra-urban'. Inter-urban geography is concerned with the pattern of cities or regions across space. Intra-urban geography is concerned with the internal dynamics and patterns of particular cities or regions. In both endeavors, geographers seek to understand dynamics and processes as they occur over space and/or are influenced by spatial considerations. The method remains 'scientific' as opposed to 'action' in the desire to generate usable and generalizable knowledge. The distinction between 'inter' and 'intra' is important because different dynamics and processes operate at each scale. Thus, what may seem to be a plausible theory at the 'inter' scale may or may not be relevant at the 'intra' scale. Simply put, scale matters! Newer research has focused on the attribute of multiscale and how internal dynamics have properties and manifestations across scales. This is more than jargon laced concepts such as glocalization or trans-scalar governance; it is a systems view of human activity. It is not an overstatement to argue that only a handful of scholars have entered into this labyrinth.

### 3.1 Inter-Urban Geography

Among the key theorists and concepts here are Christaller & Losch (central place systems), Hagerstrand (diffusion studies), Sassen (world cities), Isard (regional science), Myrdal (development and trade studies), Wilson (transportation studies), Castells (globalization and the 'space of flows'), and Harvey (role of dominant modes of production). As Braudel has argued, the 'world view' has boundaries and the focus of inter-urban geography is how points are located throughout the world space. At this scale, the focus is on discovering underlying theoretical structures that contain processes that 'explain' the resulting spatial patterns. Most of the times the processes are highly simplified (abstracted) and carried out or analytically executed within simplified environments. Thus, Christaller for example developed his (most often cited) model on 'isolated planes' with even transport costs. The processes are characteristics of goods and services, transportation costs, and assumed 'economic' rationality of consumers.

Beginning with Harvey, the explanatory structures changed. A new wave of geographers focused on social issues and global forces. Capitalism and its look-alikes were the forces that both created inequalities, social injustice, and exploitation of the masses. Some geographers looked at the causes of this shift. The forces were varied: Castells focused on the role of information technology in economic restructuring and urban development; Scott and other colleagues from 'the LA School' focused on economic sectors – particularly defense and science – and their role in urban development – urban development now focused at the metropolitan scale rather than the urban scale; Sassen and the world cities groups focused on advanced producer services, the rise of global business districts, and increased segregation.

### 3.2 Intra-Urban Geography

Intra-urban geography is concerned the internal dynamics and patterns. Models created through the 1950s assumed a closed, monocentric manifestation. Three models dominated this discourse: Burgess and Park's concentric zone model that resulted from applying ecological models to human situations; Hoyt's sectoral model that resulted from processes of economic competition for the best lands; and Harris and Ullman's multiple nuclei model that resulted from historic accident and perhaps a more uneven natural or physical landscape. The major empirical findings from that era are that economic status was distributed sectorally, family and income status was distributed concentrically, and ethnic status distributed among multiple nuclei. The intra-urban geography field was dominated during the 1960s with transportation studies whose purpose was to provide data to allow civil engineers to construct transport systems aimed at moving workers efficiently from the suburbs to the major center in the morning and from the city to the suburbs in the evening. Senior collected a number of stories from this era. Moreover, it was during this period that systems theory first appeared, exemplified by Bourne's *Internal Structure of the City*.



The major difference between 'then' and 'now' is that the city has become the metropolitan. Metropolitan areas are the new unit that matters economically, politically, ecologically, and symbolically. Geographers' consideration of site and situation has two consequences; it has forced observers to change their perspectives from analysis of government that focused on simple 'zoned' 'regulated' or 'incentivized' land use decisions organized by a simple top down entities, where people voted with their feet (Tiebout), to consideration of more complex planning environments; and that the processes from inter-urban geography eventually LAND in certain places. One of the seeming prevailing truths about change in cities and regions is that new forces generally seek new ground (e.g., Thompson's famous dictum: growth creates form, form limits growth).

### 3.3 Understanding vs. Planning

There has always been a synergistic relationship between 'urban geography' and 'urban planning' – some even calling urban geography the 'science' of urban planning (assuming that planning needed a scientific basis). This theory/praxis nexus provides a clue as to how a geographer might propose evaluations and/or suggest policies for improvements of how the 'city' works (better). The mindset (or bias) of the geographer is on the underlying rules or principles that make up and organize (even if loosely) the 'urban agglomeration'. So, the economic geographer brings economic rationality, the social geographer brings group identity and roles and customs, and the political geographer bring power relationships and 'political processes' to bear.

A geographer invokes some external criteria (more often than not progressive in intent). Two examples illustrate this perspective. First, a geographer concerned with income distribution would first describe it; s/he would then suggest some process variables that could be altered in such a way that it could be altered. Second, a geographer concerned with livability or quality of life would place emphasis on defining and measuring the concept. Having discovered that it is either perceptions of trans-national employees or density based attributes, the geographer would seek to see how this 'varied' across space. Specific suggestions for improving the result (hospital beds per capita) could then be formulated (more hospital beds or reduce density). They would see both sides of the coin.

## 4 THE VIEW FROM ARCHITECTURE: FOCUS ON TRANSFORMATION

The word 'architect' has two meanings. First, architect is a person who designs buildings and advices in their construction. This meaning follows the origin of the word *architect*, which comes from Greek *architektōn* (αρχιτεκτονική) = master builder (from *archi-* chief, master + *tektōn* builder, carpenter). The extended meaning of the word 'architect' describes the ability to design any sytem or activity (i.e. 'architecture of computer system'). In the other words 'architect' is a person who designs and guides a plan or undertaking (i.e. 'an architect of National Healthcare System'). In this paper I will refer to this second, extended meaning of the word 'architect' which is synonyme of the word 'designer'.

From both etymology and meaning it is clear that architecture is concerned with the **concept of change**. Herbert Simon in *The Science of Design: Creating the Artificial* (1969) explains that '*everyone designs who devises courses of action aimed at changing existing situation into preferred ones*'. In this way I understand the point of view of architect (designer).

Time is a very important factor in the process of transformation; the focal point of the change lies in the future. The future should be conceptualised and imagined mediating between creativity and economics.

Architecture/design affects space, but space is not the kernel of its activity. The core of the design activity is 'human being' – be it individual or wide society. 'Urban' or 'spatial' design gives the spatial framework for the civilization; it reflects the society with its values and organization. In this terms design of urban form is fundamentally a cultural activity. Jacqueline Beaujeu-Garnier and Georges Chabot (both geographers!) described cities exactly in this way.

Design of the cities was broken (or was shared?) between politics and physical change. Hippodamus of Miletus embedded into physical form what Aristotle designed in political terms. Both referred to the society and its values. For millennia this cooperation became a standard. Theoretical investigation of design from Vitruvius, through Vasari, Alberti, Palladio, Viollet-le-Duc to Wren focused on the best form, physical structure, layout of streets and fabric. The first shift came with industrial revolution. The 19<sup>th</sup> century and first half of the 20<sup>th</sup> century brought more innovation in design, especially concerning urban form, than almost 5 thousand years of previous urban development. Design incorporated politics and concepts of the

organization of the society itself. From Ruskin and Haussmann, Soria y Mata, Garnier and Howard to Park, Le Corbusier, Wright, Lynch, George, Mumford, Jacobs, Lefebvre and Hall to name only a few among many who presented kind of 'integrated theory of designing urban form' consisted of social goals to be achieved and physical structure relevant to them. Their aim was to change society using design as a tool. The newest upgrade of this trend incorporates theories coming from semiotics and communication theory, mathematics and physics (i.e. Alexander, Dioxiadis, Batty). The shift includes also the change of scale – understanding of wide context and its relationship with the city is evident. Complexity is the slogan of the day.

In *Design and Truth* Robert Grudin perceives '*design itself (as) a medium of social interactions*'. Shaping urban form influences social relations and inactions in a very specific way. Urban actors do not realise directly this influence and they cannot easily avoid its influence. This is why question of understaning the way cities are being created (shaped, invented) is important. Design is not a description, design is a social/cultural experiment.

#### 4.1 Urban dimension of design

Fundamental question here is if cities are both the object and the result of design? Who basically 'makes' the cities?

The first urban explosion, convincingly described by Mumford (1961), happened 5 thousand years ago. City appeared in its full and comprehensive form. There were no 'pre-cities' or 'prêt-à-porter' components from which cities might be composed. The first cities were not an up-scaling Neolithic villages, they had different concept of spatial order and organization. With no any doubt they were designed. They reflected both practical needs and cultural context of the society, they used innovative means and solutions, and they were focus on change. The concept of the city as a form has been 'invented' – this is a spatial framework of civilization of the half of 3<sup>rd</sup> millennia BC. From this very first moment design is integrally associated with the cities. Each civilization produced and still is producing its own concept of the city but this concept is imagined, conceptualised and designed, not simply 'put together' by separate activities of people and institutions.

For centennia architect was the leading professional 'responsible' for the physical form of the cities. His ability to conceptualize non-existing spatial form responding to the existing needs was extended into to more complex structures. Kings and social revolutionists, generals and companies, churches and international organizations were on the contrary responsible for the 'social design' of the cities – an idea in what way society should perform. Their combined effort produced ceremonial road of Babylon, *insulae*-pattern of a Greek city, Roman military camp, medieval towns based on German urban law, and monumental Rome imagined by Sixtus V. Industrial revolution brought other professions to the 'design team' – concept of garden city or ciudad linear was produced by people not being involved in physical design before. Yet, architects still were involved both in the spatial solutions and a new social concepts (i.e. modernistic city). All these concepts, no matter from where the author(s) originated, aimed at changing social behavior. For example recently implemented all over Europe policies excluding cars from the city centres are changing behaviour of the people and institutions and as a consequence – set of values or their hierarchy (i.e. health ahead freedom).

Like urban geography, fragmented into inter-urban and intra-urban, describes external and internal relations of the cities, design applies to both scales. Concepts of transportation, flows, connections, infrastructure influences not only structure of particular city but also interactions between different settlements. For example city of Łódź (central Poland) was established as a response on the vision how to increase trade with Russia in the 19<sup>th</sup> century and it has changed inter-urban relation of the country (now it is the second biggest city of Poland). Also (designed) rail network changed hierarchy and importance of the cities in 19<sup>th</sup> century (both in Europe and in America). Protecting castles on the borders in medieval Europe created new spatial flows and connections that then affected spatial order of the regions and kingdoms. Modern activities can play the same role re-shaping wide spatial structures: location of European Commission or European Parliament influenced trans-European flows and as a consequence – spatial structure. This can be also said about important stock markets or huge leisure parks attracting people from all over continent.



## 4.2 Understanding for planning. Intervention vs. planning.

Designers' primary responsibility is to respond to the social needs in order to improve quality of life. Society is and object of intervention, physical, spatial form is only a tool. Its main focus is on future performance of the social interaction. This applies to the small scale (how people use the building, if they feel comfortable, whether the building meets their expectation, etc.), urban scale (how people and institutions 'use' the city, move about the city, feel in the city, etc.) and beyond-urban scale (how people and institutions perform within region, country, etc.). Scale does not matter – the object of design is a human, not physical space.

*'It was from one, Mrs Pew (one of the owner of 'Usonian'), that I learned the true secret of Mr. Wright's genius and success. She described how at first she hated the house. She felt that Mr. Wright had not listened to her requirements but merely built what he wanted. She was, at the end of her second year living in it, ready to sell it and move on – at great financial sacrifice. She told me that she decided that she 'would give the house another year without struggling with it' before she made up her mind. In that year, a transformation took place. She discovered that 'Mr. Wright had not built a house for who I was – but for the person that I could become. It turned out that Mr. Wright had listened well and understood me very deeply' (Grudin, 2010).*

The story about Mrs Pew and her attitude to the Wright's house reflects very well the main feature of design and its focus on change and re-arrange interactions. It concentrates on understanding but not past processes and forces but those which may come. In the other words design has to anticipate future driving forces. This doesn't mean that design ignores existing processes; it only means that design assumes that the future is not an extrapolation of the present and that design itself has an ability to influence the future. In this sense there is not contradictory in understanding and planning. On the contrary – only deep understanding of ongoing processes allows imagining the future state.

## 5 SIMILARITIES AND DIFFERENCES INSTEAD OF CONCLUSIONS

We can describe the way geographer and designer perceive 'urban' reality (Fig. 1). Geographer analyses process in order to imagine the 'big picture', to build model of the structure being studied. Thus the picture is a result of the ongoing processes. Designer is going completely opposite. Starting from 'big picture' – the concept of the future structure – s/he tries to influence processes. This is to say that geographer build his model bottom-up and designer top-down. Yet both approaches have advantages and disadvantages.

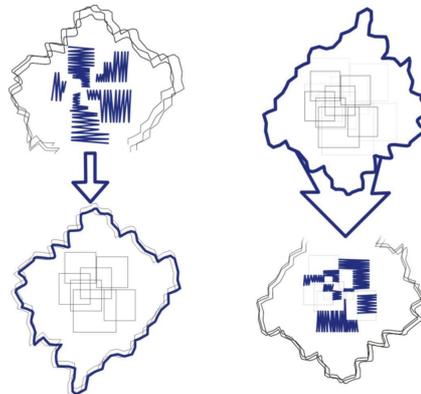


Fig 1. Geographer builds the idea about the urban form from analysing the processes (left), architect from the concept of the entire form influences process by design (right).

Clear difference is also the time reference. Geographer studies **past and present**, designer is focused on **the future**.

The next difference is the goal. Geographer wants **to know**, architect wants **to act**. These are of course primary goals as either geographer can suggest an action or architect needs to understand the process but their focus is in different spheres. Final result of geographer's activity is a **description** while the designer delivers a **project**.

Geographers claim that they are concerned with the concept space, but they are rather concerned with the concept of placing variety of phenomena in the space, their description of the space involves the physical features and location these phenomena in the space. In fact their focus is on the processes not on space itself. Their way of perceive reality is abstract, conceptual and as a consequence their attitude to transformation is

by changing indicators or measures. **Geographers try to change (softly) the space by influencing people and through them economy.**

On the contrary, designers beginning from society (responding to social needs) re-shape directly physical space. In fact, they are far more concerned with the concept of space but the space itself is not the essence of their work. Humans and their future performance are the essence of his work. Having this aim defined as a base designers transform deeply the physical space. In the other words designers perceive space as a tool of transformation, as a component needed to respond humans' needs. Their perception of the space is 'real', practical, material. So is their attitude to change – by changing physical appearance of real world. **Architects try to change people (greatly) by influencing space.**

Maybe this seems like a paradox but it is evident that both geographers and designers mix declared goals and available tools.

Goals and tools affect the debate. The way of description affects the understanding and undertakings. At the beginning we should agree that nobody is totally right and nobody is ultimately wrong.

