
The Emergence of Cities, in Between the Urban Morphological Studies, the Design Poetic Achievements and the Ethnometodological Social Surveys

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Abstract

The morphological studies about the transformations of cities have been made in the last fifty years following different «morphological schools» according to countries, cultures and theories.

We will present our own theoretical and practical view points, based upon a socio-physical dimension of architectural design following architectural and planning ideas by Spiro Kostoff, Alberto Magnaghi, Mikhail Bakhtin, Paul Ricoeur, Bill Hillier, Rainer E. Zimmermann, and others, in the sense that, in between the design poetic prefigurative act, the morphological configurative studies of cities and the anthropological refigurative surveys of the users, specific emergent powers develop in the making of the cities, in a socio-physical and space-time structural chronotopic manner.

Instate of a confrontation in between the prefigurative poetic views of architects and planners with the configurative outputs of the morphological studies or with the refigurative analyses of the social behavioral and cognitive social sciences, their dialogical interplays will help the three different spatial viewpoints to observe the city

as a common study case. We will analyze some study cases in different countries that have been studied in recent PhD dissertations in architecture or that they are now investigated in this way.

This chronotopic and dialogical holistic perspective opens new ways to a more refined human engagement, where the local to global confrontations can achieve in a positive emergence not always predicted, neither by the morphological studies nor by the ethnometodological social survey.

Chapter One, Some Theoretical Considerations

The first consideration, is shown in diagrams I, that summarizes the hermeneutic theoretical framework developed by Paul Ricoeur.

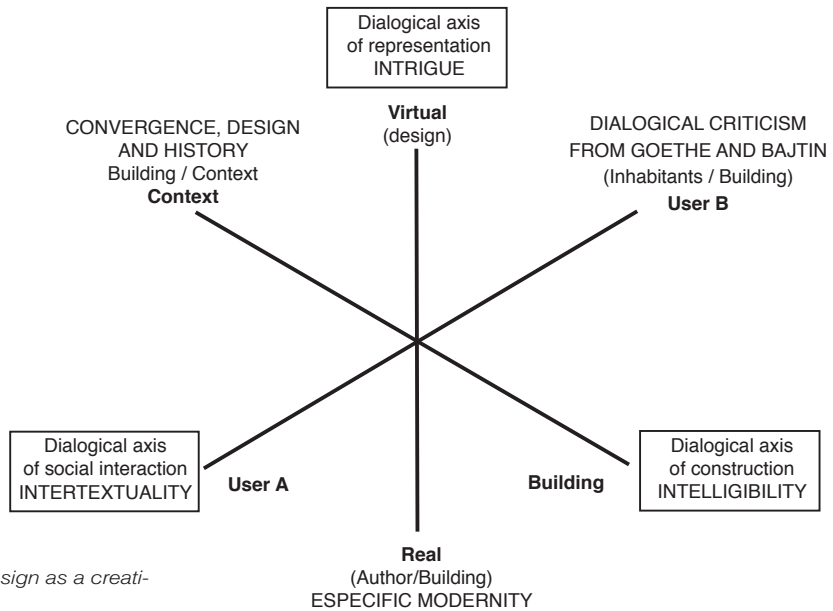


Diagram I. *Design as a creative chronotop.*

The second consideration describes the embriogenic cognitive developmental framework by G. Gottlieb, diagrams II to IV where the interplay between dawn-top relationships and Top-down relationships expresses the psycho-social-physical kernel of the design act of the designers.



«Natural» orders indifferent to cultural and social historical environments, but open to experimentation.

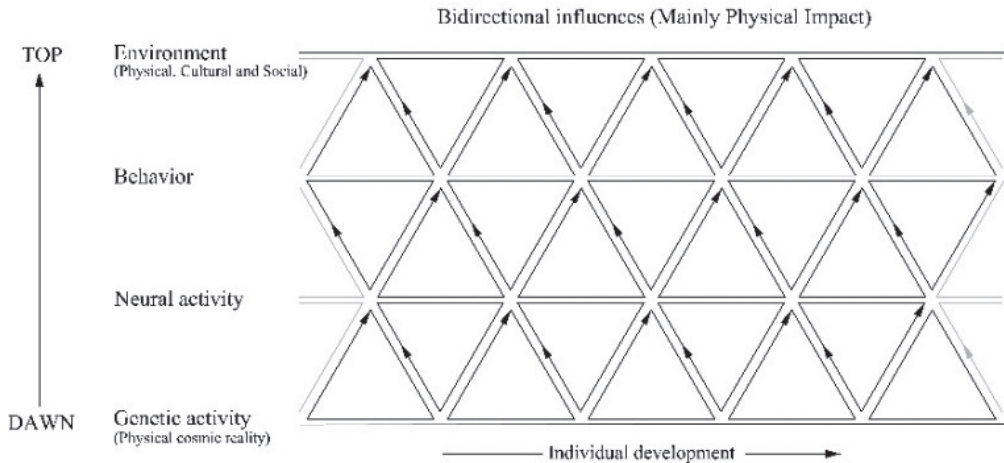


Diagram II. *Biogenetic Natural Theoretical Trends. Unidirectional influences (Mainly Physical Impact).*

Trends B



P. Eisenman, Social Housing, Berlin, 1985.
 "Social" codes (In this case the Berlin Plan in the red cross) that command design processes.



Ch. Alexander's Eishin campus, largely completed in 1990.
 The Patterns , by themselves, have limited spatial life.

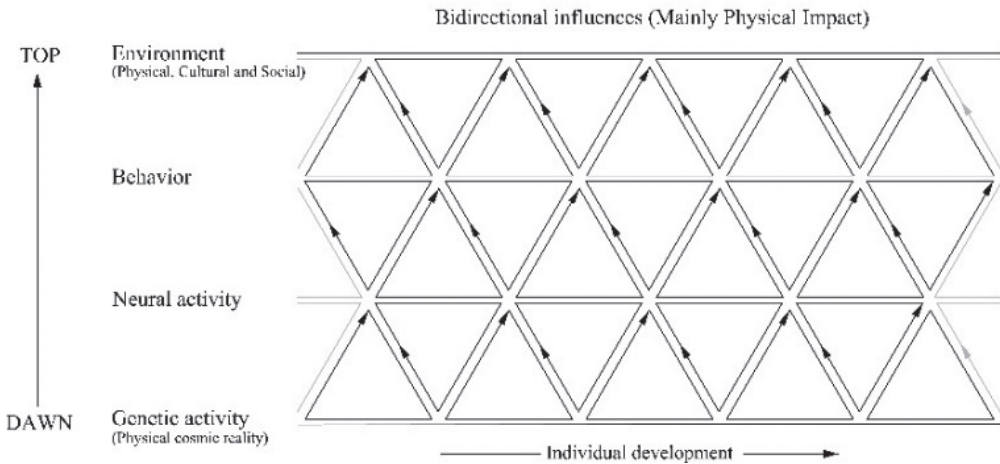
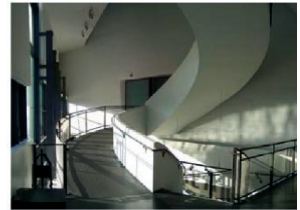


Diagram III. Sociogenetic Theoretical Trends. Unidirectional influences (Mainly Social Interactions).

Trends C



F. Gehry, Vuitton Center, Paris, 2015.



S. Holl, Kiasma, Helsinki, 1998.

Crossing geography and social history of the places where buildings belong.

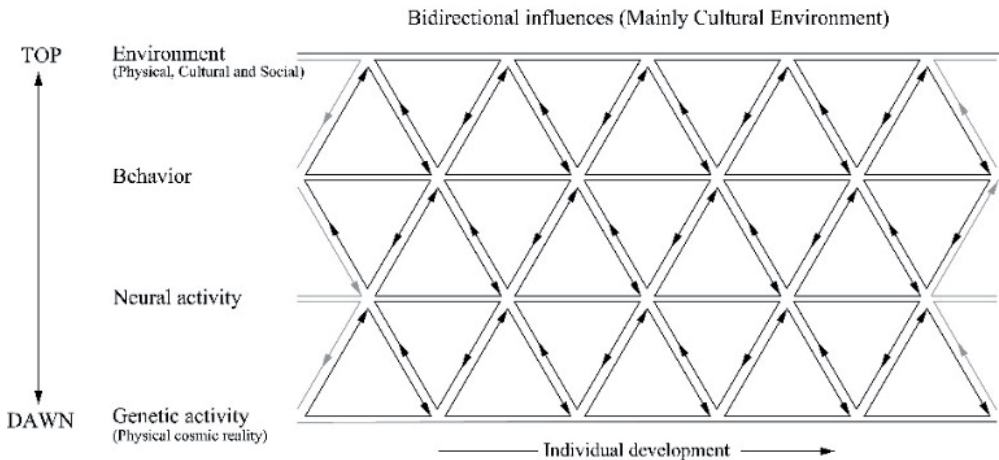


Diagram IV. *Topogenetic Trends. Bidirectional influences (Mainly Cultural Environment).*

The third consideration is the replication of all these theoretical frameworks in the neurological analysis by Professor K. Friston where the interplay inside the brain between top down and dawn-top are clearly stated.

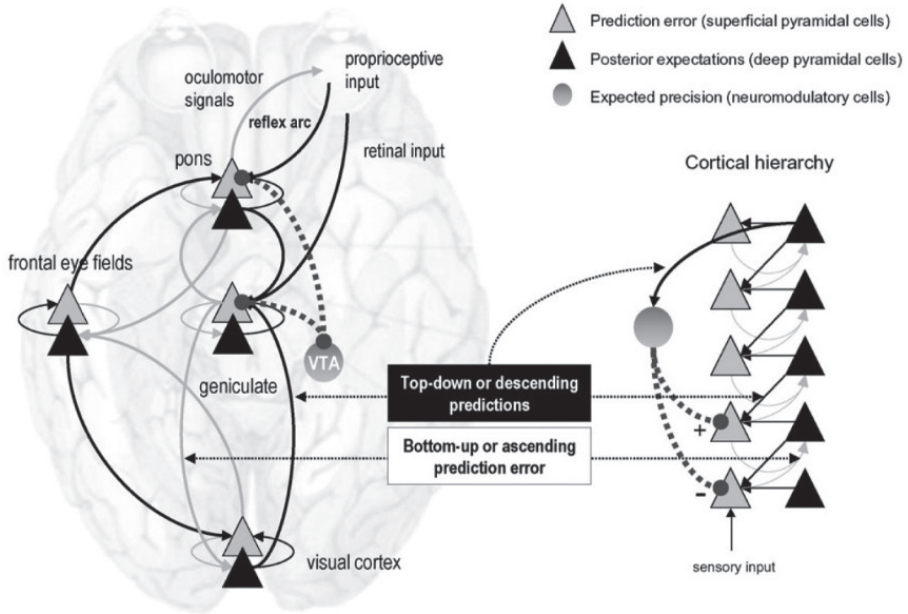


Diagram V. Neurological fundamental feedback between senses and simulation.

Finally diagrams VI and VII show the construction the city models by children, where the cognitive distributive knowledge is identified, and where the topological bidirectional influences of the embriogenetic model by Gottlieb work.

Diagram VI. Children model of cities: dialogic and monologic structures



Dialogic cities

Subjects		Objects	
S1		O1	<i>Physical and social space and time are interrelated chronotopically.</i>
S2		O2	<i>Norm forms for objects are interdependent of the subject's norms.</i>
S3		O3	<i>Objects and subjects configure a context.</i>
<p>Points of view and "voices" interrelated.</p> <p><i>There is a configuration between subjects and objects.</i></p>			

Monologic cities

Subjects		Objects	
S1		O1	<i>Physical and social space and time, and social space and time, only related at the individual level. The objects' relation and the subjects' relations do not correlate.</i>
S2		O2	<i>Norm forms for objects are independent from norms for subjects.</i>
S3		O3	<i>Objects and subjects are context free.</i>
<p>Points of view and "voices" are interdependent of each other.</p> <p><i>There is no configuration between subjects and objects.</i></p>			

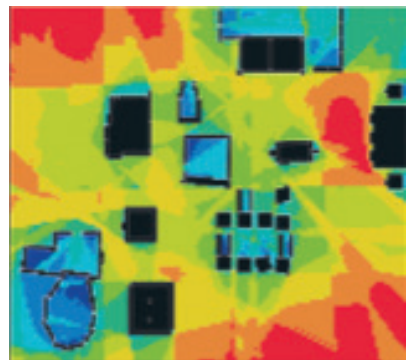
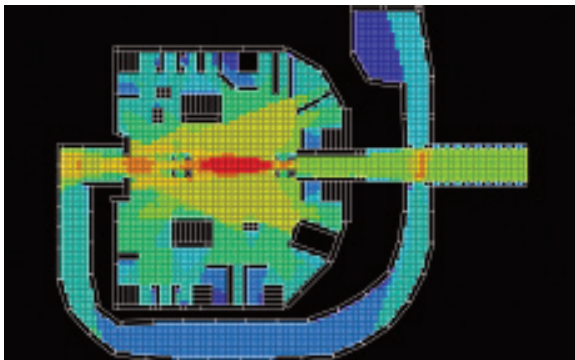


Diagram VII. Children model of cities: dialogic and monologic structural analysis.

Chapter Two, The Emergence of Cities and the New Holistic Environmental and Developmental Paradim

Alan Penn in a recent lecture in Barcelona stated:

«**Architecture: the exosomatic in cognition, culture and design education:** This paper reviews what has been learned through 'space syntax' research about the relationship between the morphology of the environment, human behavior and social use. From this background it reflects on the role of computation in research and design, and the implication of this for the education of architects. It argues, rather than thinking that the mind must be extended beyond the body, that the built environment takes on structure through design that in turn is learnable and learned by human minds. It proposes that architecture may offer an important mechanism through which social forms and cultures 'get inside people's heads', and so transmit from generation to generation».

According with this statement, the diagram VIII bellow summarizes the definition by M. Bakhtin of the chronotopic and dialogical nature of the human architectural culture, defined by Alan Penn, inside the theoretical networks defined in chapter one above. Now we can analyze the three cognitive spatial human processes shown in this diagram.

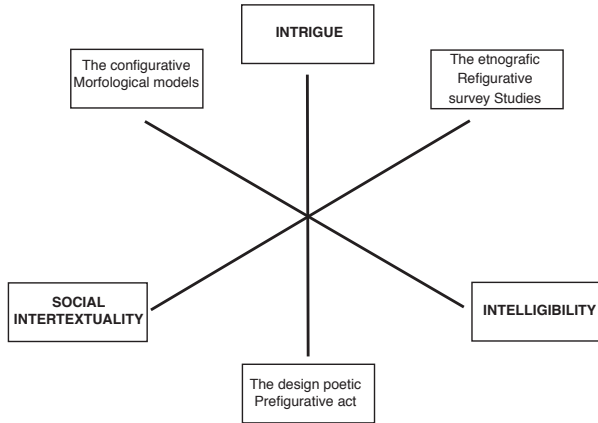


Diagram VIII. *The Chronotopic nature of human architectural culture.*

The Intelligibility axis can be analysed by the configurative morphological methods such as Space Syntax, morphological methods from Italy, England, France, etc., Just look to a very simplified example in diagrams IX, X according to the distinction by W. Braunfels between in episcopal/imperial city and a republican city. Of course a lot of historical morphogenesis are needed in order to understand the meanings of these situations.



Diagram IX. *Republican city of Florence according to W. Braunfels.*



Diagram X. Episcopal/Imperial city of Halberstadt according to W. Braunfels.

The intertextuality axis is shown in the work in Barcelona in relation to the Urban renewal in the old town where ethnographic surveys conform the morphological changes with the behavior of the users, where a final equilibrium between the old and the new result in a equilibrated situation, as Bill Hillier announced.

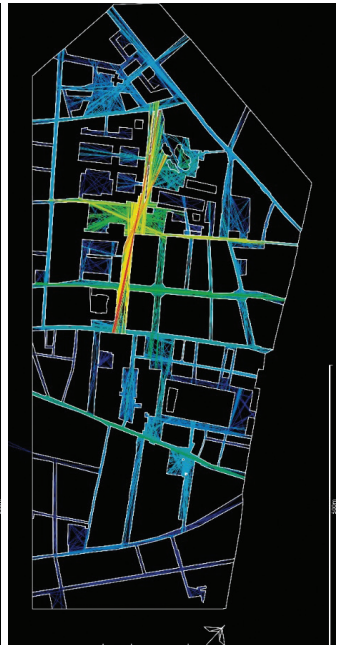
Diagram XI. Ethnographical surveys confirm the need for the horizontal red lines by the users that the proposal by Lluís Clotet destroyed. This is a good combination between morphological (Space Syntax), and ethnographical city simulations.



Barcelona, El Raval, Real original situation, previous to 1980.



Urban proposal by Lluís Clotet, 1981.



Barcelona, El Raval, Actual present situation, 2018.

The Intrigue axis made of the poetic abilities of the designer is represented by the diagrams XII and XIII by Peter Zumthor and Juha Leiviskä, where the equilibrium between the two previous axes is shown.

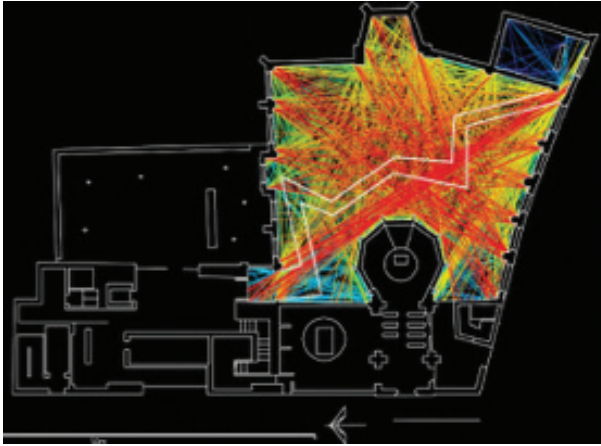


Diagram XII. Space Syntax analyses of the Kolumba's Museum where people are walking in the spaces with the maximum visibility, designed by Peter Zumthor in a poetic manner.

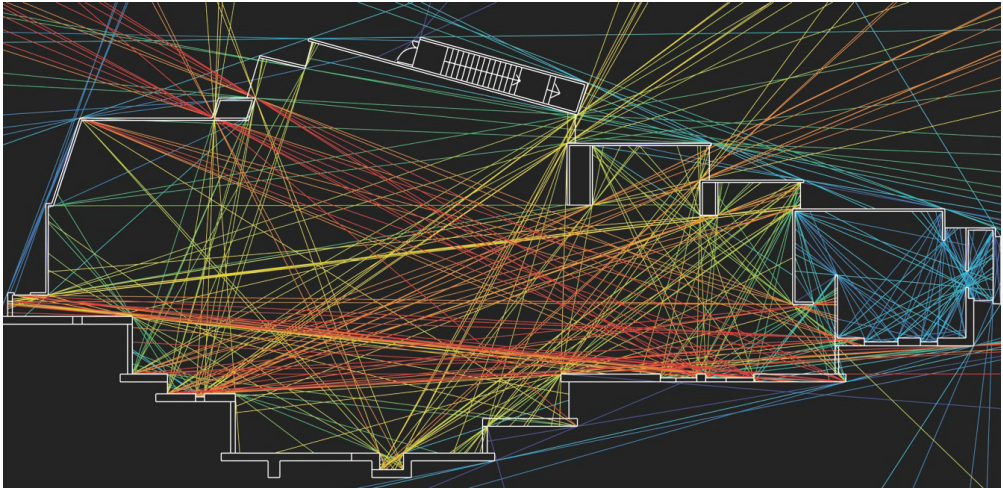


Diagram XIII. Space Syntax analyses of the church of Männistö by Juha Leiviskä, in Kuopio, Finland (1986-1992). The red diagonal line coincides with the unique step in between the altar and people looking at the ceremony designed by Leiviskä. A nice feedback between experiential and virtual poetic interrelations.

Conclusion

We think that there is a possibility of a synchronic correlation between the three axes of the diagram X. When one axis disappears the other two are disconnected and architecture enters in a monological regime with cultural degeneration, where designers cannot make prefigurative links between configurative systems and refigurative social needs

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