The Awaquening Architectonic Human Experience: on the Search of the Heterochronic, Configurative and Intersubjective Knowledge of Architecture and Planning

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Aristotle claimed about the «incredible power of place», and he analyzed this power thanks to the architectonic practical wisdom, shared by architects, educators and legislators (Bodéüs, 1982).

Forty years ago in my first book, *Architecture as Place*, I started a long way on the search of this strange power of placeness defined by Plato as: «a spurious reason that cannot be detected neither by senses nor by exact reason» (Muntañola, 1973/2004).

The accelerated development of research in natural, social or cognitive sciences confirms today the truth of these pre-scientific hypotheses. Hundreds of books and works have uncovered, step by step, the specific knowledge of that «architectonic wisdom», throughout different disciplinary views. Some of these views are the following:

A. The negative and interactive relationship between the environment and the living organisms uncovered by Jean Piaget and others (Piaget J. , 1980)

B. The heterochronic third developmental power of life, besides the genetic heritage and the survival of

species defined by McNamara (McKinney & McNamara, 1991) and Langer (Langer, Rivera, Schlesinger, & Wakeley, 2003) and all the ecological essential environmental studies from the last fifty years.

C. The dialogical and chronotopic nature of the human culture and human communication (Bakhtin, The Dialogic Imagination. Four Essays by M.M. Bakhtin, 1981; Hutchins, 2006; Sisto, 2015)

D. The psychosocial historical origin of geometry stated by E. Husserl and uncovered by derrida (Husserl, 1962).

E. The configurative human structure of cities according to Bill Hillier (1996; 2014).

F. The hermeneutic and phenomenological role of architects analyzed by Paul Ricoeur, and others (Ricoeur, 1985; 1986; Kaufmann, 1995; Giedion, 1975) partially developed today by Pallasma and S Holl (Pallasmaa, Holl, & Puente, 2006; Robinson & Pallasmaa, 2015; Pallasmaa, Mallgrave, Robinson, & Gallese, 2015).

G. The linguistic dimensions of space defined by Ch. Alexander, B. Hillier and D. Seamon by looking to a set of intersubjective spatial and temporal rules (Alexander, Ishikawa, & Silverstein, 1977; Hillier & Hanson, 1984; Seamon, 2008).

H. The mathematical and logical models related with the first cognitive stages of children minds (Piaget, Henriques, & Ascher, 2013; Zimmermann & Hofkirchner, 2009).

I. The intersubjective constitutive component of the human distributive spatial-anthropological knowledge

by E.T. Hall (1959; 1966), E. Hutchins (2006) and others, Gärdenfors (2007), Rapoport (2008), Gallagher (De Jaeger, Di Paolo, & Gallagher, 2010), etc.

J. The intersubjective meaning of architecture as art analyzed, among others by the members of the Wanburg Institute, as L. Ettlinguer or E. Gombrich, and by S. Kostof, S. Giedion, M. Saura, etc.

K. Finally the huge work by my friend Lewis Mumford and all his friends like Bruno Zevi, in urban planning, who followed the traces of Patrick Geddes that today have been developed by Alberto Magnaghi and followers: Marcelo Zárate, Raffaele Paloscia, Maurizio Carta, etc.

The list can be longer, but it is enough to understand what I want to point out, that is: the heterochronic, intersubjective and configurative power of architecture and planning.

With some exceptions: J. Gehl (2013), L. Lerup (2001), F. Gehry (2003), J. Pallasmaa & S. Holl (2006), A. Magnaghi (2011), etc. architects and planners have observed all these interdisciplinary scientific accelerated developments passively, often skeptically and sometimes cynically, as if all of these cultural innovations where out of their interests and even contrary to design creativity and planning quality. I have summarized this reactionary position in my last book *Achitecture and Modernity: Suicide or Reactivation* (2016).

Of course the *spourious* reason of architecture defined by Plato is not easy to analyze and changes from place to place, so it is difficult to find a global knowledge of it. However there are no excuses for the lack of dialogue between architecture and planning practices and theories and the social, natural and exact sciences innovations.

Any simple analyses of the relationships between physical architectural forms and the social behavior happening in them show immediately their configurative and intersubjective dimensions where education, legislation and architecture are permanently interrelated.

For instance, when the heterochronic biological development of an embryo in a specific bird specie changes, the «nests» of this same specie change accordingly, because the size, the number and the rate of growth of the babies-birds will be bigger or smaller before or after was expected. These are the heterochronic dimensions that designers should take into consideration. Of course they can be taken into consideration by intuition and by experience (as all the birds do), but all the scientific human disciplines listed above should help these experiences and intuitions to develop. Our civilization depends upon that.

Just look to the two, and only two configurative architectural structures built by children at two years of age (Diagram I and Diagram II). It is easy to recognize on them the two origins of the poetic power of men: the peripatetic social ritual, and the social identity of subjects, or recognition, defined by Aristotle. One year later, children can built empty places (Diagram III) where everybody is sleeping. Inside and outside topological qualities of place and before and after qualities of time are uncovered, as well as that buildings have no legs and bodies have no chimneys, as in the precedent developmental stages (see diagram IV).

Later on in diagrams V and VI you can see the models of cities built by children, their intersubjective, configurative and heterochronic qualities and their topological dimensions measured by the computer (Space Syntax).

So designers forecast «nests» with or without the computer, and these nests supports specific kinds of

civilization, and designers should feel responsibly for that. As M. Bakhtin pointed out:

> «The highest architectonic principle of the actual world of the performed act (f.e. to design) is the concrete and architectonically valid or operative contraposition of I and the Other» (Bakhtin, 1993).

Then design is a chronotopic and creative activity that can be analyzed and «framed» in order to uncover the «architectonic wisdom» involved on it. No divine, mysterious or ignored power can be claimed in relation to this heterochronic, intersubjective and configurative knowledge, enlightened by the works by Ch. Alexander, J. Gehl, B. Hillier and all the experts quoted here. As a consequence, both architectural and urban education is a priority. But in reality, it's not so (see diagram VII).

In conclusion we can say that the architectonic wisdom is both scientific, artistic and political (Muntañola, 2009) it can be called «exosomatic» (Penn, 2015) or in other way, but it should be incorporated in our cultures. We need HUMAN NESTS to live in. When in 1939 Lewis Mumford defined the bases for a new social planning (see diagram VIII), he was looking to a better future. A better future where design will be able to correlate the three basic dimensions of the architectonic wisdom in unique qualified designed environments. The last texts written by Mikhail Bakhtin some months before he died in 1973 pointed out to the same direction: towards a creative chronotopic design (see diagram IX) (Muntañola, 2016):

> «As we have already said, there is a sharp and categorical boundary line between the actual world as source of representation and the world represented in the work. We must never forget this, we must never confuse – as has been done up to now and as is still often done – the represented world with the

world outside the text (naïve realism); nor must we confuse the author-creator of a work with the author as a human being (naïve biographism); nor confuse the listener or reader of multiple and varied periods (…)» (Bakhtin, 1981, pág. 253).

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Diagram I. The space-time in the early childhood (2 – 3 years)
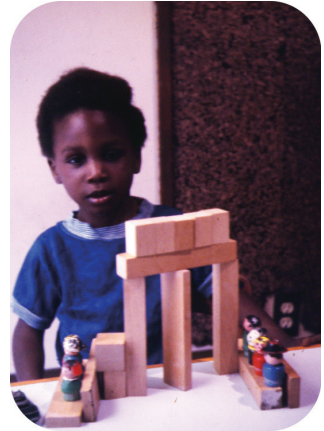
«Architecture without empty spaces when the body and the place are hardly differentiated»

Diagram II. The space-time in the childhood (3 – 5 years).

«Architecture when inside and outside of empty space starts to develop, and people sleep ...»

Diagram III. Drawings (2 – 3 years)

House's legs

door

Window

The water where the house is above
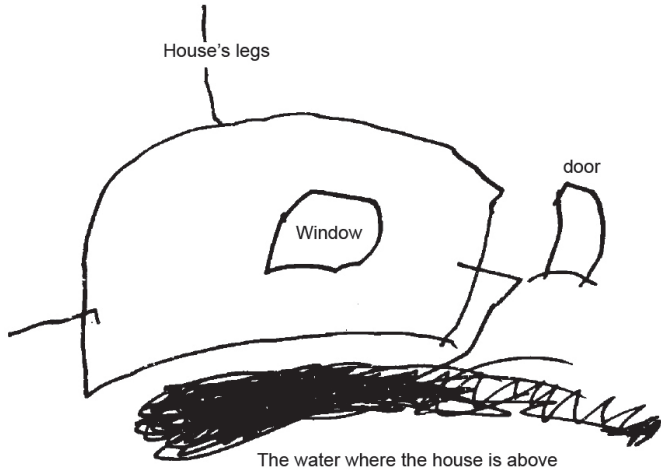
«Body and Place are not differentiated»

Diagram IV. Drawings (3 – 5 years)

father's room

Mother's room

door

bathroom

bed

door

bunk beds for four
children

A door knob to exit

and another to enter

bed sheet
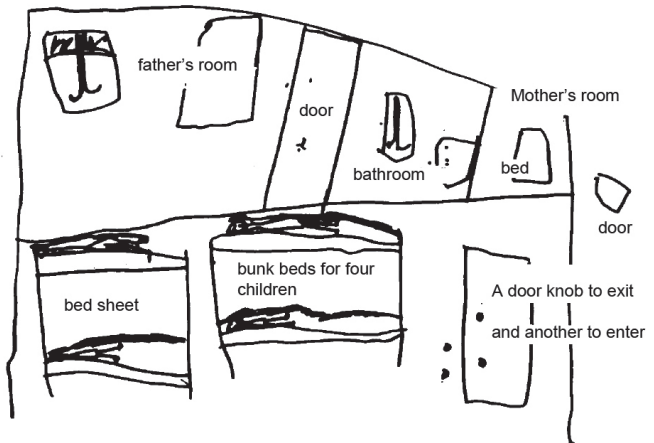
«Body and Place start to differentiate»

Diagram V. Monological City
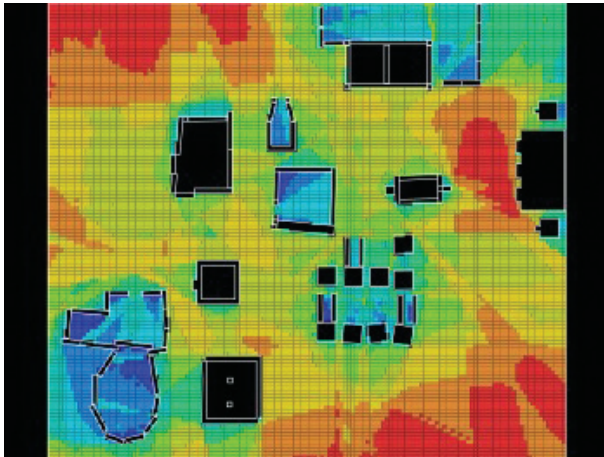
«Social Intersubjectivity remains out of the city (red color)»

Diagram VI. Dialogical City

«Social Intersubjectivity exists inside physical forms (red color)»

Diagram VII. Urban planning theories and education

Plans	Urban Planners	Schools and Pedagogies

Edinburg
Civic Tower ← *Patrick Geddes (1932 +)* → *University of Montpellier*

University of Bombay
R. Tagore (1941 +)
«Out Look Tower» *M. Montessori (1952 +)*
Montpellier Gardens *J. Dewey (1952 +)*
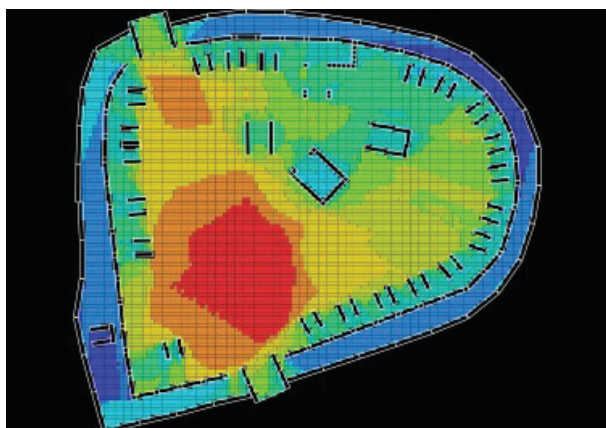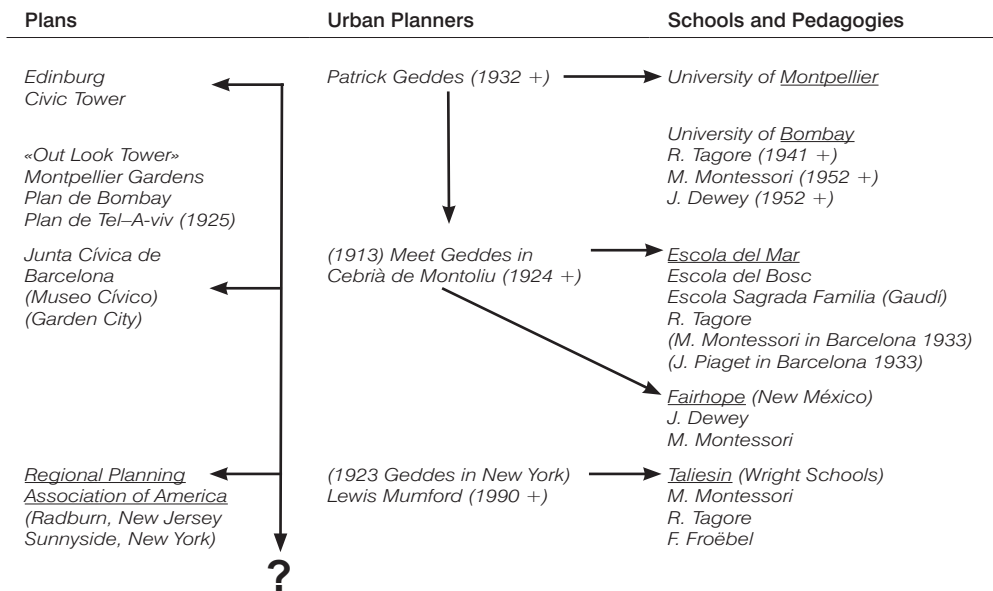*Plan de Bombay*
Plan de Tel–A-viv (1925)

Junta Cívica de *(1913) Meet Geddes in* → *Escola del Mar*
Barcelona *Cebrià de Montoliu (1924 +)* *Escola del Bosc*
(Museo Cívico) *Escola Sagrada Familia (Gaudí)*
(Garden City) *R. Tagore*
(M. Montessori in Barcelona 1933)
(J. Piaget in Barcelona 1933)

Fairhope (New México)
J. Dewey
M. Montessori

Regional Planning ← *(1923 Geddes in New York)* → *Taliesin (Wright Schools)*
Association of America *Lewis Mumford (1990 +)* *M. Montessori*
(Radburn, New Jersey *R. Tagore*
Sunnyside, New York) *F. Froëbel*

?

Diagram VIII. The social basis of a new urban order by Lewis Mumford (1938)

1. Architecture as a symbol
2. Principles that structure the modern life: the economy
3. The role of hygiene
4. The extension of youth
5. Bipolar domesticity
6. The death of the monument
7. Flexibility and regeneration
8. The museum's mission
9. The undifferentiated background
10. Individualization and socialization
11. From a money-based economy to an economy based on life
12. Moderns houses provided by the communities
13. The school as a core of the community
14. The social concept of the city
15. Contrapuntal organization
16. Principles of urban order

Diagram IX. The Creative Chronotope

PHYSICAL
(Bill Hillier)
Configurative Power of Places

Global to Local   **Cosmological**   **Local to Local**
Creative Psycho-Social Power   Social Interaction
AUTHOR – CULTURE   USER – USER

Historical - Social
SOCIAL
(Christopher Alexander)   **Local to Global**   **Mental - Cultural**
Inter-subjective Power of Places   Communicative Power   **MENTAL**
                                   OBJECT – CONTEXT   (Jan Gehl)
                                                                  Heterochronic Power of Places