Transcription of “Human Dimension” from Lynch to our days. Meaning, history and theories, models, tools, representations and perspectives

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If we managed one day to create an ideal environment, we will overcome all the conflicts that split us up. Verne

Introduction

After several failures of urban planning resulting from a partial utopian vision of reality, today we are ready to face some great issues of contemporary cities, such as the socio-architectural ones, that is isolation and identity loss of urban outskirts or gradual desertification of historical centres. Nowadays, theories, models and tools have developed enough to evaluate and analyse the relationship between man and his vital environment.

Relationships, identity, little communicative worlds of micro-communities, perceptive filters, cognitive maps, behavioural automatisms, emotional shades and much more can't be neglected any longer.

Today, we need to start again analysing places and micro-places with the tools of social and cognitive sciences in order to plan an urban change taking into account not only the needs and wishes of small communities (Lucien Kroll, 1999), but also more objective and measurable biotic factors (perceptions, emotions, behaviours, etc).

The Gestalt theory, Hall and his proxemics and Lynch with the first experiments on “cognitive maps”, have taught us that we inhabitants are main characters, inseparable from our “settings”, from our “vital scenes”

The philosopher Aldo Masullo, referring to Heidegger, warns us that “the environment can't be seen only as a spatial reality and human being only as a part of it, that is the one as the container and the other as the contents, but as aspects of a single dynamic reality.”

This holistic approach must be used by the “analyst drawer”\(^1\), that is the “designer”, the one who is used to managing the complexity and who will necessarily face the analysis and management of dynamic data, outlining new meta-projects after transcribing into signifiers the “human dimension” hidden among stones. The analyst will deal with a correct transcription, in the meaning of a “representation of the signs of a specific language by means of the signs of an alphabet that doesn't belong to it” in a new ethic dimension of our Design which will show new “golden codes”, dynamic, variable, biotic and inevitably not absolute or universal, belonging to contemporary humanity that lives, suffers and rejoices, but still too much in the “shade” of the stones of its city.

\(^1\) Taken from the introduction by R. de Rubertis and others “La città rimossa” (2002).
History, theories, models, tools

We can’t deal with the “transcription” of the Human dimension without referring to the processes which led to it and gave it a sense.

The transcription into signs of the relationships existing between the man-actor and his environment is only the final stage, the main layout for the evaluation of the data and a part of a meta-project process.


Since the 50s all disciplines dealing with the analysis of the perceptive-cognitive-affective-emotive and behavioural dimension of urban places, aiming at redesigning the same spaces or designing new ones, had a common denominator beyond any ideological difference.

In 1912 in Germany the Gestaltpsycologie laid the foundations for the understanding of perception and its laws and can be considered as the common denominator for all the disciplines dealing with social-cognitive and behavioural issues.

With Lynch and his work “L’immagine della città”(1960), influenced by Gestalt theories, we discover a new shape of the city, an image that can be mapped as it is impressed in the “memory” of its inhabitants.

From the visual dimension to the kinaesthetic, thermic and olfactory one and then Hall with his “Dimensione nascosta”(1966) is among the first who help us understand how much the knowledge of the multidimensionality of spaces and its appropriate use in planning can improve the life of men soothing some aspects like aggressiveness.

But among the different theories in the field of human, social and cognitive sciences, human ethology and specifically urban ethology gives us the most refined analysis tools.

Human ethology of Lorenz and Eibl-Feldt, that is Urban Ethology makes reference today also to recent theories with evolutionist background (see the “Savannah Theory” and the “Prospect and Refuge Theory”) and to computer science, thanks to the work of prof. Karl Grammer, anthropologist, expert of computers and director of the Institute for Urban Ethology L. Boltzmann in Wien.
Urban ethology is a “punctual” science in the meaning that it studies and analyses in a “small scale” perception and behaviour through direct observation, while communication and emotions through movies and software, desires and habits through interviews or introspections, both in outdoor and indoor spaces. The observation of behaviours, a basic methodology for ethology, can be carried out using a simple note book or a palm computer called PSION, especially designed and realized to record behavioural modules linked to a fixed alpha numeric code.

After analysing and comparing results, using the statistics program SPSS, it is possible to go back to the initial questions and draw the final conclusions relative to each single research. Praat software can be used to analyse and note down sounds, that is verbal communication, thus obtaining the graphs with durations and frequencies. With Anvil, it is possible to note down and analyse non verbal communication and all the possible combinations. Finally, the matrices are obtained to compare numerical data given by more than one operator; this calculation is called “reliability”. Another interesting software, designed by professor Karl Grammer, is E-Motion which elaborates and classifies emotions through the movements of the filmed actors.

Examples of “Transcription” of the “human dimension”

The “Survey” is here meant as “analysis of a systemic objective reality, whether material or immaterial, made up of variable or constant components, whose data are gathered, processed, evaluated and represented through the use of reference models. It is a Representation which almost always needs a sign transcription process from one language into another, especially when it is concerned with signs belonging to immaterial and symbolic dimensions of the space. The following images are examples of how man and his life have been represented in relation to a particular environment. Indices, icons, symbolic images, diagrams, schemes, and other attempts to convey the results of analyses carried out from different points of view, with different approaches which have tried and are still trying to make the
“human dimension in relation to its vital space” readable. Nowadays, an attempt should be made to unify and organize these representation codes.

Plan taken from: “Burano, un metodo di osservazione per valutare la qualità della vita urbana” (middle 70s). From the magazine «L’Architettura, Cronache e Storia», n°250-251, anno 1976

Icons and symbols for the Behaviours representation in an urban place. Revision of the early 90s made by prof. V. Andriello taken from Lynch
Emotional map of Huddersfield made by Christian Nold using wireless devices worn by volunteers, able to detect the skin galvanic answer. Published in 2009

Histogram of an analysis of behavioural modules classified first on the basis of an ethogram; coloured stripes show the duration. It is taken from a study on Pompeii carried out in a seminar on the Ethologic Survey held by S. A. Pozzi during the course of Architecture Survey held by prof O. Zerlenga. The graphic has been realized by a group of students.
Remarks and Perspectives

Some brain mapping strategies or “neuroimaging” are massively used today to investigate and measure the answers to external stimuli of different nature and are employed for both diagnostic aims and commercial goals in Neuromarketing (see the spin-off BrainSigns of Università La Sapienza).

We wonder which are the ethical principles of these experiments which investigate a delicate aspect of our relations with the environment. If such investigations are carried out for a commercial goal I don’t understand the reason why they can’t be employed also to analyse the citizens-users of an urban environment with a strong ethical perspective.

The results, compared with data obtained from direct behavioural analysis made on a sociological and cultural scale, can contribute to solve social pathologies, such as violence or isolation in urban spaces by defusing the automatisms hidden like traps in the forest of the socio-behavioural dimension of a city.

We hereby possess today sensitive perceptive maps, which not only can be put on the paper in the manner of Lynch, but also “quantitatively” known, by mapping brain responses to certain stimuli.
If we have a inner configuration deriving from elaboration processes of stimuli-signals coming from complex activators which are expression of an external configuration (visual, auditory or implying other senses) made up of shapes, sounds or other, we can assume that changing this external configuration also the inner one can be modified.

This is only a hypothesis but it can be validated through brain imaging tools like fMRI, the more recent SQUID which allows the mapping of weak electromagnetic fields and the new Italian discoveries about “mirror neurons”.

An “analyst drawer” must not be a neuro-phisiologist, but he will learn how to face this new complexity, accepting the challenge of an interdisciplinary knowledge and working out transcription codes of a universal language which still keeps the beauty, the poetry and the talent of the Italian Design.

References
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