Contours of the City

Interdisciplinary Perspectives on the Study of the Urban Space

Edited by
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Mapping Cities: the Bologna Self-Mapping Project[1]

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The aim of this essay is to discuss maps, as a concept, and their evolution, which is contemporarily cognitive, cultural and perceptual. Today, such transformations are particularly relevant to maps of cities and urban spaces. Mapping represents a universally shared global experience, belonging, in everyday life, to the vast domain of popular culture (from Google Maps, to GPS and GIS use in sports, holidays etc.). As a consequence, the very concept of the map has changed. In this essay we shall attempt to describe how it has changed, introducing the notion of place and situated experience in relation to mapping transformations. On the basis of these considerations, we will then present the results of the initial stage of *Self-Mapping*, a winning research project in the *ISA Topic* 2010 competition sponsored by the Institute of Advanced Studies of the University of Bologna.

The *Self-Mapping* Research Project

The *Self-Mapping* project was developed from an interdisciplinary perspective. It draws on a form of analysis from social sciences, particularly ethnography, starting from the observation of the actual practices and experiences of city life. The project aims to promote an innovative "bottom-up" concept of urban landscape marketing/understanding, an approach that stems from the significance indicated by its users, the people who live there.

In recent decades, interest in the study of city and urban spaces has, from

a variety of angles (humanities, social sciences, urban and land-use planning, as well as the biological, environmental, and engineering perspectives), gradually expanded and multiplied. There are several reasons for this increasing interest. Obviously, the "problem of the city" is one of humanity's most significant problems, an issue central to our coexistence, and perhaps even for the development and survival of the human species and the world itself. Little more than two years ago, the United Nations stated that "the majority of the human population now lives in cities"[2], an attestation long anticipated by planners and anthropologists. One of the best known urban planning researchers, Mike Davis, argues that, if seen as ecological systems and in terms of exchange with the outside environment (water, waste, transport, logistics and food distribution), the metropolis or megalopolis, and in general all major cities, are characterized by a high degree of complexity, much higher, for example, than that of a rainforest[3].

Certainly, such a comparison would almost certainly fail to convince biologists or botanists, but the metaphor is valid here as an effective way of emphasizing the extreme degree of irreducible systemic complexity of cities. Another striking metaphor is proposed by the great anthropologist Lévi-Strauss. In an interview a few years ago[4], Lévi-Strauss pointed out how the city, when seen from the point of view of an alien doctor, could appear as a sort of metastasis or calcification, a large malignant invader, an evil from the earth (the human species). Beyond its paradoxical and seemingly apocalyptic nature, this vision is undoubtedly effective in showing how cities can be seen as formations and layers: products, a condensation of the practicalities of human life.

Mapping Today

There are two specific reasons behind the development and articulation of the *Self-Mapping* project. On one hand, there is the expansion and diffusion of mapping (either for scientific and commercial purposes, or for social uses and marketing), not only of urban spaces, but of the territory in general. Today, the production, processing and making of maps, is omnipresent and breaks through the boundaries of traditional disciplines. In fact, in recent

[2] See *State of the World's Cities, 2012/2013: Prosperity of Cities*, New York: Routledge, 2013. Http://sustainabledevelopment.un.org/content/documents/745habitat.pdf.
[3] See M. Davis, *Planet of Slums*, London: Verso, 2006, pp. 26 and 135.
[4] C. Lévi-Strauss, "L'uomo malattia del pianeta terra. Gli uomini visti da un'ameba", *La Repubblica*, 10 marzo 2000, trad. di Elisabetta Horvat.

years, it has become a veritable social, cultural and, indeed, pervasive practice that springs not only from commercial necessity but has also taken on, so to speak, the aspects of a wider grassroots practice. Just think of Google, Google Maps and Google Earth, or the spread of devices such as smartphones. Note also the passage of GIS and GPS technology from the professional arena (geographers, geologists, archaeologists, military, engineers and researchers) to the consumer market, where it is used by bikers, tourists, mountaineers, hikers and boat owners. None of this should be considered as secondary to the overall scope of the research project. This is particularly the case in the social sciences which deal with the behaviour of this strange "species of monkeys", as someone once said, that has the occasional habit of dressing itself, dropping bombs and using cell-phones to project their utterances.

But there is more, which leads us to the second point regarding the specific motivations of the *Self-Mapping* project, regarding which we outline our assumptions and initial results. Bruno Latour, in his studies on the relationship between technology, science, and social behaviour[5], insists on the importance that even the social sciences attribute to the extraordinary and widespread phenomenon of "visualization". For some time, thanks to the Internet, computers and imaging technologies/devices, it seemed that social and cultural phenomena/behaviour had been struck by a transformation which (perhaps obvious and predictable to other areas of scientific research) was, for the human sciences, both a breakthrough and an innovation, as well as a challenge. Once, the use of display devices (besides the use of tables, graphs, diagrams and, not surprisingly, the same maps that have always been the heritage of the humanities and social sciences) was essentially confined to physics and natural sciences. These days, just consider the use of video and photographs in disciplines such as history, anthropology and law, aimed at re-building significant or even dramatic moments of a given phenomenon, historical process or event. According to Latour, the technologies of visualization and, in particular, the Internet, interconnected computers and any device enabled for "geolocation", represent an even bigger turning point.

For some time now, we have been able to visualize the exchange of real-time messages, texts or *tweets*, during major historical events such as political protests: this is both an opportunity for the researcher, and an open question regarding democracy, given that the same mapping can easily be acqui-

[5] See, among others, "Where are the Missing Masses?", in E. Bijkere J. Law (ed.), *Shaping Technology/Building Society*, Cambridge (Mass.): MIT Press, 1992, pp. 225-258.

red and used by the police. In recent years we have been able to "show" and share our movements in a given urban area or territory, even through open-source platforms.

Given these insights and theoretical premises, it was decided to initiate the project in Bologna. The latter was deemed the ideal city in which to apply specific methods, with the idea that it would act as a pilot for a wider research project. The ultimate goal was to build a model and research format which, once developed and tested, could be used in other urban situations and contexts. The project also aimed to provide materials and tools for institutions and public administrators that a) take into account new ways of studying and mapping the territory, not just to analyse but also to provide practical, innovative tools with which to make territorial planning decisions and b) to provide content that takes into consideration different ways of promoting that territory.

Ethno-semiotic mappings: methods and results

The *Self-Mapping* project was initially launched through the development, distribution and analysis of 150 questionnaires about the routes and places that people living in Bologna believe to be personally meaningful and relevant. The questionnaires asked a number of personal/demographic questions (age, profession, where they lived and so on), and requested participants to name at least 5 places in Bologna that they deemed significant in combination with as many keywords.
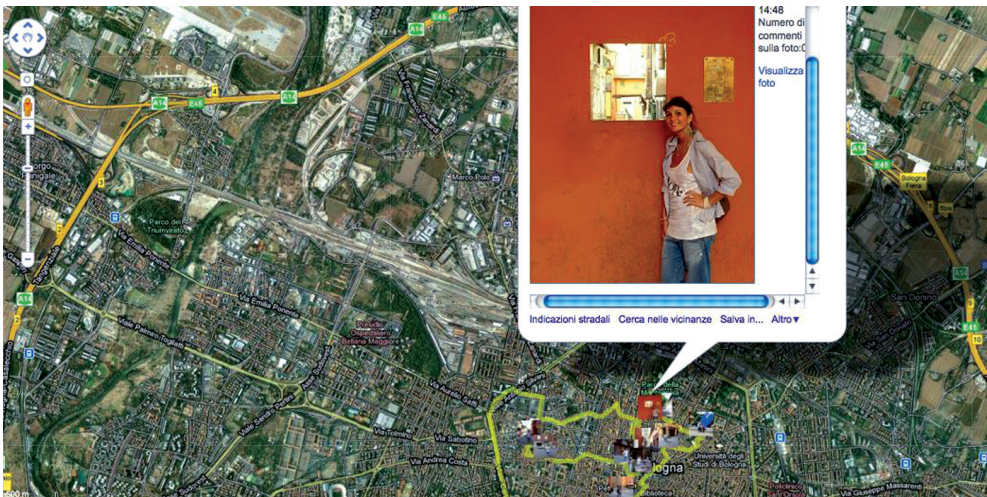
From a methodological point of view, it was not considered necessary to use a statistically significant sample of the population. We used instead the "snowball" method, which is applied in *Social network analysis* (SNA) research theory; it is also known as the *Actor-Network Theory* (ANT), according to which in any given group or social gathering the basic components are not individuals but networks, that is, relationships between actors. In practice, from the methodological viewpoint, one needs to have access to these networks, which are real social entities produced by the relationships that actors have with each other. This method identifies certain people as potentially "interesting" and relevant for the research project, and asks them to indicate, in turn, other people who might be relevant, for reasons of association, affinity, etc. This approach allows us to have non-arbitrary access to networks of people who, for example, move within a given territory. We decided to continue utilizing this type of method in order to conduct research that would uncover, explore and trace emerging styles, behaviours, and habits, instead of examining a pre-established sample of individuals. Hence a metaphor came up during a meeting with the coordinator: the concept of "urban oceanography". In our case, the "buoys" we need to follow individual behaviour and movement (and therefore the "flows" and "currents" of movement in the city) require more in-depth processing via analysis that is more precise and broader in scope.

The questionnaires acted almost as bait, aiming beyond the collection of information and data on the people who participated in the research, beyond their preferences and styles of "use" of the city, to get closer to them in order to explore, in a second phase, their actual urban explorations.

There is a third theoretical-methodological element, however, which we see as central to this research project, a factor which lends it its innovative nature: the use of ethno-semiotic methodology[6]. This method intersects participant observation ethnography with the analysis of the constructs, processes and systems of signification typical of semiotics. It utilizes "discursive objects" such as questionnaires, as well as "practices seen as text" such as the behaviour of people in a given urban space. The use of this method (which gives the research a specific profile) seemed particularly innovative precisely because of its parallel use not only with the above-mentioned methodology, but also with geo-referencing technology and mapping, allowing us to trace the paths of the people who were our guides in this analysis of urban spaces.

[6] See, among others, Francesco Marsciani, *Tracciati di etnosemiotica*, Milano: Franco Angeli, 2007; Maurizio Del Ninno, *Etnosemiotica. Questioni di metodo*, Roma: Meltemi, 2007.

Expected results

Soon after the distribution of questionnaires the actual urban exploration
phase began, with the mapping of certain citizens' routes using GPS devices.
We accompanied them in their urban "explorations", conducting interviews,
and taking video footage and photographs. The routes of some 30 people were
"mapped" in Bologna (data is available in a public Dropbox folder[7]) in a va-
riety of ways; in the form of Google-readable maps, audio interviews and
photographs of places that individuals saw as relevant to their urban routes.
It is important to remember that these people suggested their own inner-city
routes. Subsequently, we began to process the questionnaires, maps, inter-
views and audio-visual material, also providing for ethno-semiotic analysis
of the collected data.

We first analysed routes that seemed particularly relevant in terms of the
originality of the subjects' choices.

What emerged from this analytic phase (not yet completed) was a kind of
provisional typology of urban pathways. As to the expected results, both the
questionnaires and the elements that emerge from the paths traced by GPS
instruments tend to show moments of significant differentiation. For exam-
ple, we expected the majority of participants to show us, either in their que-
stionnaires or in their meanderings, places that were typical and standard
with respect to the stereotypes and reputation of the city. This almost never
occurred, and, when it did, it was reported and represented in a way that ad-
ded interesting elements to the analysis.

The key initial question, in order to interest people, was: "where would
you take a friend from out of town?". From the responses to this question it
was possible to sketch a taxonomy of "urban pathways", and therefore rou-
tes logically considered to be the "most significant" because they open up
possibilities that are categorically inter-defined. In particular, the routes were
arranged in a two-pronged approach to "urban re-conceptualization", not ne-
cessarily dependent on the scale or the traditional categories of urban plan-
ning.

It could be said that in some cases the discursive organization of the ex-
plorations depended on "thematic" structuring of the city (on specific types
of space distributed throughout the city; in one example the mapping fol-
lowed a thematic path concerning certain types of shops, such as vintage
clothing shops) or on a "pathway strategy" dictated by a categorical appro-
ach (e.g. the association of distant points in the city, the division of the city

[7] For further information see: www.etnosemiotica.net.

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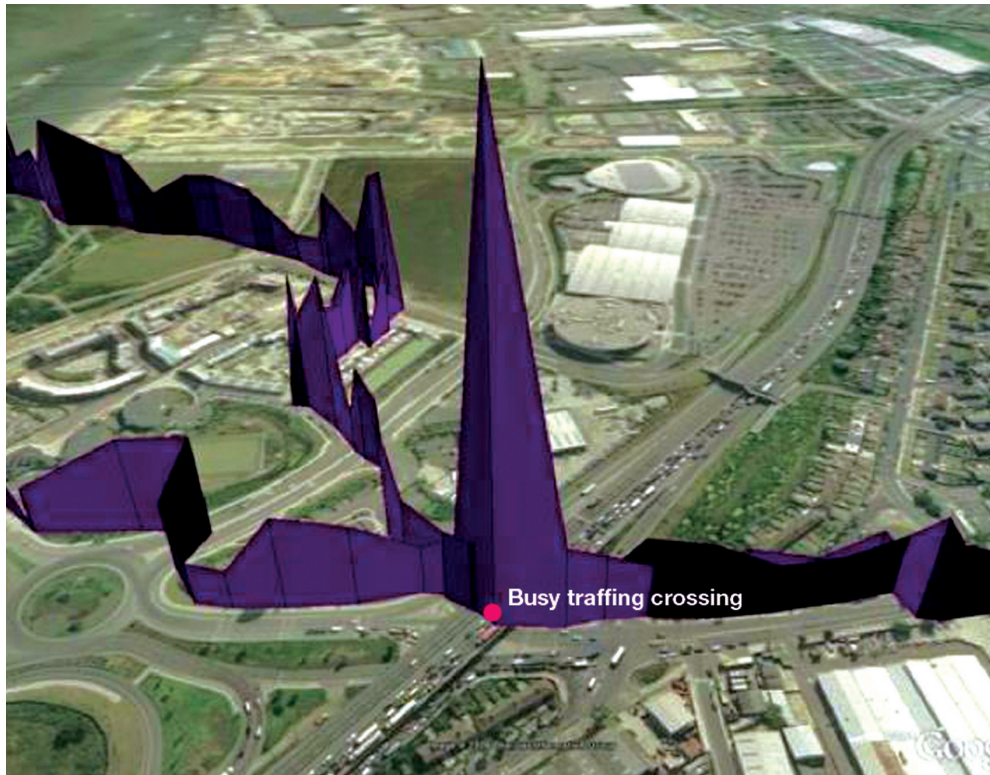
2. An example of Emotional mapping[8].

into zones, as in the case of a trip from San Michele in Bosco to the city centre). In other cases, a route that marked the identity of particular zones prevailed, as alluded to by the neighbourhood definition (e.g. the San Donnino and Pilastro areas).

We should add that the actual explorations of the city concord with the results of the questionnaire, but indicate a different methodological approach from the point of view of social research and the perception of the city. The method that we experimented and continue to test is a hybrid between those traditionally adopted by social sciences and the most recent participatory process experiments based on so-called "community engagement".

Rather than individuals from a random sample, the explorers we consulted who accompanied us through the city streets should be seen as facilitators in a process (in this case, analysis) of territorial re-appropriation. In

[8] Source: Christian Nold, *Emotional Cartography - Technologies of the Self*, New York: A5 Offset Litho, 2006.
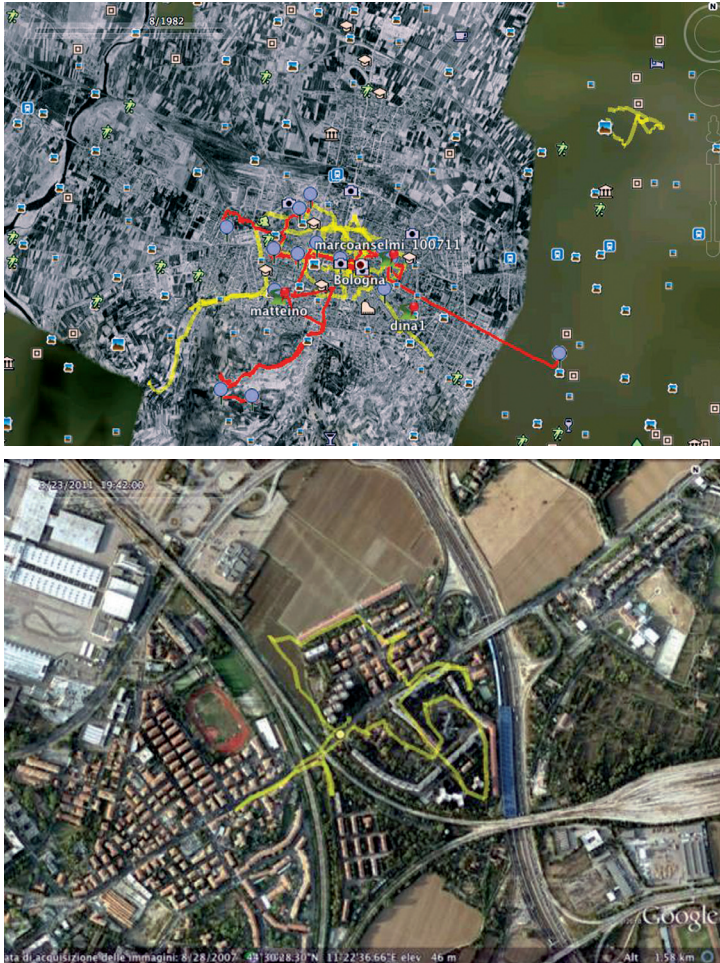
3-4. Traced paths of participants in the Self-Mapping *project in Bologna.*

light of this approach, the discussion regarding associated ID stereotypes of various areas of Bologna was not addressed directly, but evolved from the process of engagement with the citizens (otherwise known as the empowerment process) and therefore from the experiential re-appropriation of urban spaces.