Chapter 1
The Rising of the Ubiquitous City:
Global Networks, Locative Media and Surveillance Technologies[1]

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ABSTRACT

In this chapter, the authors investigate how the shift to a completely urban global world intertwined by ubiquitous and mobile ICTs changes the ontological meaning of space, and how the use of these technologies challenges the social and political construction of territories and the cultural appropriation of places. The authors' approach to this conceptual debate will focus on what they consider to be more direct and tangible implications of this augmentation of urban life. Three types of manifestations will represent the core of the discussions presented here, both through theoretical approaches and analytical descriptions of some examples: surveillance artifacts which permeate daily life and allow a hypothetical total control of space; locative media that gives us the freedom of spatial mobility and the possibility of creating and recreating places; and the global networks of signs, values and ideologies, which break down the social and political boundaries of territories.

INTRODUCTION

"I've always been very careful never to predict anything that had not already happened". (Marshall McLuhan, 1970: 172).

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The idea that ICTs have been dramatically changing many aspects of contemporary society is no longer new. The influence of such technologies on our daily activities, and on the ways we perceive and use space, has attracted the interest of a wide variety of researchers from different backgrounds,

and this has also in turn increased the inter- and multi-disciplinarity of studies about space, in particular urban space, and in different scales.

Recent references to the city predominantly relate the constant and rapid development of ICTs to the re-definition of notions of space, territory, place, time, mediation, presence, and immersion – virtual, physical and real. According to Moss and Townsend (2000: 31), "information systems are permitting new combinations of people, equipment, and places; as a result, there is a dramatic change in the spatial organization of activities within cities and large metropolitan regions".

It seems to be common sense, after more than three decades of speculation and studies about the intensification of communication through the use of increasingly sophisticated ICTs, that we have exponentially augmented our ability to interact and expand our personal and collective boundaries to a global scale – where Marshall McLuhan's known idea of a *global village* immediately comes to mind. As McLuhan puts it, "whenever a new technology develops, it creates a new environment for the whole culture, and that environment is totally invisible" (2003: 141). By demonstrating a concern to social appropriation of such new devices, he adds that "it is the environment that changes people, not the technology" (2003: 226).

The intangible relations between physical space and what Manovich (2002) calls dataspace contribute to the existence of what can be called augmented reality, and analogously, augmented city. Or, in other words,

'Contemporary augmentation of our immediate reality, differing from such experiences in the past (based on the fact that religion, magic, metaphysics and art have always provided means for augmenting the immediate material worlds of our existence), does not depend on specific and deliberate individual or collective beliefs. Augmentation takes place everywhere and anytime, regardless of our knowledge of what is indeed happening'. (Duarte and Firmino, 2009: 545-6)

This expansion of our ability to communicate has been compared to unlimited extensions of our own bodies and boundaries. It brings new perspectives to the perception and conceptual definition of space, to what are the political, physical and cultural boundaries that define a territory – or what are the strategies to break down these boundaries – and, to the subjective appropriation of portions of the space, called places. This shift in the perceptions of space deals, at the same time, with an urban world existing at a global scale and a fragmented world of mobile and mutant places and territories with no permanent relation with their position.

We argue that three kinds of technological applications can be used to discuss the contemporary meanings of space, territory and place in a world intertwined by ICTs. Firstly, if the background for this discussion is a world where anyplace, anywhere, is potentially connected to one another, we depart from a dependence of space upon *global networks* of services, signs and infrastructure to understand these global-local spatial relations. Second, and similarly, any kind of interaction (material or immaterial) in this real time global world is based on the use, interpretation and appropriation of signs, and *surveillance technologies* have been increasingly used to codify and mediate these signified spatial interactions. Third, as cultural attachments are still important to define individuals and groups, *mobile and locative media* have a dual relationship with global and local scales, as they rely on global networks of infrastructures and signs to exist and operate at the same time they empower the emergence of local manifestations, enriching spatial idiosyncrasies and allowing the valorization of place-based values.

Before entering in the discussion of these three kinds of technological developments or appropriations (which works as the basis for the three parts of this book), it is essential to bring about the idea that serves as a conceptual ground for any other discussion presented here, which are the notions of urban world and urbanized world.