Chapter XIX
The Neogeography
of Virtual Cities:
Digital Mirrors into a Recursive World

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ABSTRACT

Digital cities are moving well beyond their original conceptions as entities representing the way computers and communications are hard wired into the fabric of the city itself or as being embodied in software so the real city might be manipulated in silico for professional purposes. As cities have become more “computable,” capable of manipulation through their digital content, large areas of social life are migrating to the web, becoming online so-to-speak. Here, we focus on the virtual city in software, presenting our speculations about how such cities are moving beyond the desktop to the point where they are rapidly becoming the desktop itself. But what emerges is a desktop with a difference, a desktop that is part of the web, characterized by a new generation of interactivity between users located at any time in any place. We first outline the state of the art in virtual city building drawing on the concept of mirror worlds and then comment on the emergence of Web 2.0 and the interactivity that it presumes. We characterize these developments in terms of virtual cities through the virtual world of Second Life, showing how such worlds are moving to the point where serious scientific content and dialogue is characterizing their use often through the metaphor of the city itself.
INTRODUCTION

The idea of the ‘computable city’ is one that stretches back to a time when the convergence of computers and communications first began to make an impact on the way cities functioned. New forms of electronic interaction began to display themselves in the need for wired infrastructures to support everything from smart buildings to new kinds of information industry (Batty, 1997). The notion that the city through its hardware might become ‘intelligent’ is something that has been with us since the 1980s. But during this time a somewhat different prospect has emerged with the city itself and its many functions being encapsulated and articulated in non-physical terms, in virtual space rather than real space. At first the impact of the Internet was largely in terms of cities advertising their services to ‘virtual tourists’ who browsed or shopped the web through simple passive browsing. The early web site Virtual Bologna represented the portal to urban services and information about the Italian town of Bologna which became a favourite example of early commentators on the power of the web.

Virtual Bologna was typical of its time with its iconic representation of the city as a gateway to real urban information but what is now happening is that these many technologies which display and transmit information in somewhat passive terms through the web are beginning to take on new forms of interactivity. Increasingly cities and city-like media are being captured on the web and disseminated not as passive web pages but through virtual worlds where the user enters a digital space that is in many ways akin to a real space and engages in interactions which mirror what happens in real space. Virtual cities are being built and inhabited using systems such as Second Life, with millions of users making rapid decisions thus shifting these virtual realities minute by minute into new manifestations of digital urban form.

The concept of the ‘computable city’ is still alive and well in the city itself as more and more computable devices exists within our physical environment. We have not quite reached the stage where such devices are embedded into themselves but all this is becoming routine. It is in terms of what is happening within the computer itself that now marks the cutting edge. The circle has turned completely: computers in cities exist in abundance of course, but it is cities inside computers that now define the digital frontier. This notion of the ‘city inside the computer’ changes rather remarkably our vision of how one can build virtual cities. Rather than being based on any single real place, they increasingly embody a mix of fiction and reality, digital cities linked together in a virtual urban sprawl, forming part of the ‘metaverse’ so eloquently anticipated by Neil Stephenson and William Gibson, that genre of science fiction writers that based their visions of the near future on ways in which the physical and virtual merge.

VIRTUAL SPACE

There is a never ending debate about whether or not our knowledge of space is hard wired into each of us or whether it is acquired from early childhood through our senses. However insubstantial and invisible space might appear from an analytic perspective, space is somehow everywhere around us. For most of us, space most hovers between ordinary, physical existence and something that is imposed on us. It alternates in our minds between the analysable and the absolutely given (Benedikt, 1996). In terms of our interpretation of it and the resulting all-important sense of location and place that it inspires, it has a profound influence on our perceptions of reality and of course on the digital worlds that we might create based on such perceptions. Indeed space strongly conditions the way we represent a variety of phenomena, the way we present information, the way we act,
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