

Chapter 4

Pervasive Virtual Worlds

Everardo Reyes-García
Monterrey Tech at Toluca, Mexico

ABSTRACT

Digital media have become pervasive. Most of ordinary tasks in everyday life, from leisure to work, are mediated through electronic devices and their respective digital content. The variety of tasks and their integration into computers and portable devices allow us to think about media as a ‘society of media’; a collective of media elements that exchange information and act upon those exchanges. In a society of media, the world is constituted by the hyperspace created by digital media and human uses. Within this context, an interesting role of digital media is that they ‘virtualize’ human senses and capabilities. Historically, the notion of ‘virtuality’ has been associated to seminal media concepts such as virtual worlds, which imply the use of interactive computer graphics imagery (CGI) to perform simulation and immersion. Another concept is virtual reality (VR), which has fostered prominent developments including generated environments, multimodal interaction, 3D modeling, and digital animation.

INTRODUCTION

In this chapter, we aim to study the notion of virtual worlds from a cultural and social standpoint. Our intention is to extend the notion of virtual worlds beyond its classical supports and devices. We claim the pervasiveness of digital media has constructed a world that is mixed, extended and mediated through media. In this world, the society has

developed contemporary processes that produce a virtualization of individuals. Our perspective inspires us to present three projects that were conducted recently. First, an artistic installation named TR • 33 which proposes to users a physical environment that is enhanced with interactive projection and multimedia hand-held devices. The second is an interactive piece of audible and visual figures that reside in a Web environment. This work was called Beatanz. The third is a contemplative artwork that uses dynamic and animated spheres

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as triggering figures to motivate virtualization. The purpose of discussing works from the field of art is mainly to explore innovation sources for media developments. In the last part of this chapter, we advance some conclusions related to virtual worlds. We also introduce a model for studying processes of creation and development in new media, grounded on four elements: information technology, media, art and, society.

DIGITAL MEDIA AND THE SHAPE OF WORLDS

We owe to Canadian theorist Marshall McLuhan one of the most well-known definitions of media: “media are extensions of man” (McLuhan, 1964). The importance of this observation relies in the fact that we humans have created artificial objects and intellectual technologies in order to expand our innate capabilities. In this sense, the car extends our legs; the glasses extend our eyes; the clothes extend our skin; the house extends our body. From this simple identification, we must add that those objects not only extend us, they shape us. The car introduced a new perception of time; glasses a new vision; clothes a new opportunity to adapt or explore other environments; the house a new way to fashion collectivities and cities. But when we talk about media we are dealing with a more abstract issue. Media are composed basically of symbolic content and thus they entail production and interpretation. Media primarily extend our thinking and senses; they are more an intellectual technology. As it could be anticipated, intellectual technologies reflect on the shape of objects, places and ways of being. For example, McLuhan observes behavioral distinctions between oral and written-based communities which have affected the shape of cultures. The first ones cultivate social participation and the latter motivate personal and intersubjective schemes. Both levels of participation are further categorized as ‘hot’ and ‘cold’ media. The TV would be cold –let’s remember

that back on 50’s TV sets were installed on living rooms and watched as family time– while a book would be hot because it allows less participation. In any case, what is interesting to observe is that media are powerful vectors for extending social schemes and introducing different ways of being.

In the contemporary context, where media have become digital and new types of media have emerged, the distinction between hot and cold becomes fuzzy. One medium such as the Web is both participatory and intersubjective. Although this statement can be discussed with further detail, two fundamental properties of digital media (and new media) may be regarded: they are dynamic and ‘zoomable’. First, dynamic because they constantly change and their nature is composed of several other media. They may be arranged, rearranged, remixed in order to represent thinking or senses. Second, they are ‘zoomable’ in respect to their use. When using new technologies or media, we experience a constant passage from interface to content. Because media are nested and mixed, we zoom in or zoom out within a medium, from its surface (the interface) to another (the content of interfaces), and vice versa.

Dynamic and zoomable characteristics of media have become a common performance, an almost imperceptible kind of interaction. People learn to use new media, explore emerging innovations, and enhance one medium with another. For us, the way people aggregate new media and gather extensions of man is a particular mode of constructing communities, societies, environments, cities, and worlds. A fundamental characteristic of these places is that they all support and embody people interactions. In recent years, examples of virtual worlds depict multiuser electronic environments where 3D avatar models explore and act on digital generated spaces. However, virtual worlds may also be associated to other examples such as social networks, which mostly rely on Web and networking technologies, as well as to artistic installations –often located in public spaces– and hand-held devices –multimedia artifacts carried

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