

Presence, Place and the Virtual Spectacle

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ABSTRACT

This paper considers the concept of presence in virtual environments with respect to a Situationist critique of spectacularised urban space. The aim is to explore the concepts of space and place that have become bound up with presence research from an alternative critical viewpoint. The adopted Situationist perspective distinguishes between representations of places and inhabitable spaces, highlighting the problems of designing and inhabiting representational virtual environments. In particular the role of agency is considered in relation to the VR experience suggesting that, from a Situationist perspective, a large proportion of virtual environments cannot help but alienate their users.

Keywords: *presence, place, space, situationists, VR.*

Received 24 January 2005; received in revised form 16 March 2005; accepted 11 April 2005.

1. Introduction

Traditionally, real spaces have been designed and built by architects, urban designers and town planning committees. These spaces are designed to articulate space itself and to make it inhabitable. Most of these spaces have been designed with a purpose in mind, e.g. homes, office spaces, fire stations, art galleries etc. The physical articulation of space is combined with the function of the building in order to enhance the activities that have been planned to take place there. Moreover, older spaces are being redeveloped or reclaimed for different activities and the different needs of the emerging population. Churches become homes, homes become offices, car parks become skate parks. It is this inhabiting, this existing, this performing of activities within these physical spaces that creates meanings and associations for us that transforms these spaces into places.

Indeed the same could be said of virtual spaces. Chat rooms, for example, where the social needs of a community are supported by the structure of the information space. Or even websites, where navigational or functional features may frustrate a user. And of course there is virtual reality. Virtual reality aims at replacing or reproducing reality to

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a certain extent with convincing illusory worlds within which we might feel completely immersed and totally present. Indeed the holy grail of VR would be to design something like the production of some virtual space that might be experienced as indistinguishable from a real space. Apart from the technical difficulty, it is unclear how these types of spaces would be designed, or indeed what this means for theories of space, place and presence that are increasingly discussed within the presence research community. In this paper my aim is to develop a critique of virtual places that attempts to identify what we can and cannot design in virtual representations of real places. I shall start firstly by discussing the concept of presence in general and then explicate Floridi's concepts of forward and backward presence. I shall then move on to a discussion of the production of space and place in relation to both real and virtual environments. Finally, I shall attempt to understand virtual environment design by making a distinction between designing for spaces that might become places and designing representations of places.

2. Presence

While there is a great deal of debate within the 'Presence' community about what presence is and how it occurs in virtual environments (VE), there is no fixed definition of what it is. For example Witmer and Singer propose that:

"Presence is defined as the subjective experience of being in one place or environment, even when one is physically situated in another" (Witmer & Singer, 1994 p. 225).

This is a common conception of what presence is, based around the idea that a person is in some way 'displaced' from one place to another, i.e. from a real world to a virtual world. Similarly Mel Slater states that:

"When you are present your perceptual, vestibular, proprioceptive, and autonomic nervous systems are activated in a way similar to that of real life in similar situations. Even though cognitively you know that you are not in the real life situation, you will tend to behave as if you were, and have similar thoughts (even though you may dismiss those thoughts as fantasy)." (Slater, 2003 p. 2).

These conceptions of presence suggest that virtuality in some way can replace or displace reality. When Slater says:

*“One can be present but not involved. One can be involved but not present”
(Slater, 2003 p. 2).*

We encounter this problem of displacement again. Indeed, it is possible to be present and not involved in something. One can simply be somewhere and observe what is going on. However, being involved but not present is not possible. One has to be present to be involved. Slater uses the example of watching a TV programme to explain this, i.e. being involved in a TV programme but not present in the action. Conveniently, he ignores the fact that whoever is watching the TV has to be present somewhere. That is to say, the observer is sitting on a couch in a room watching TV and is perfectly aware that this is the case. Moreover, being involved in a TV program does not allow you to take part in the action displayed. The viewer is not present to the actors.

From another angle Lombard and Ditton propose that:

*“Presence is defined as the perceptual illusion of non-mediation... an illusion of non-mediation occurs when a person fails to perceive or acknowledge the existence of a medium in his/her communication environment and responds as he/she would if the medium were not there.”
(Lombard & Ditton, 1997 p. 9).*

What Lombard and Ditton propose here, as presence, is really the idea of transparency: i.e. the apparatus of the virtual reality system that produces the VE in someway disappears and we experience only the VE. This, again, is tied to the displacement idea but is much more subtle because it includes the notion of medium. Presence here is defined as experiencing a VE *through* an interactive medium.

John and Eva Waterworth propose yet another conception of presence:

“We see presence as the feeling a conscious organism experiences when immersed in a concrete external world. This feeling must be distinguished from engagement in internally constructed mental worlds, in organisms equipped to construct such inner realities.” (Waterworth & Waterworth, 2003 p.1).

They go on to develop the distinction between presence and absence – Presence being the focus of attention driven by the demands of an external world – absence being the degree to which knowledge and abstraction plays a part in diminishing a sense of presence.

3. Forward and Backward Presence

One particularly interesting take on all of these theories of presence, is that developed by Luciano Floridi. Floridi (2004) considers that the presence community has essentially misunderstood the concept of presence as the ‘epistemic failure’ (EF) to perceive mediating technology. Instead, Floridi offers his model of presence as the successful observation (SO) of some mediated object through levels of abstraction. For example, Floridi suggests that, in our everyday environment our sense of presence comes through the levels of abstraction built into our cognitive/perceptual system. Similarly, our sense of presence in a virtual world or remote location comes from how well our levels of abstraction fit with those provided by the technology we are using to sense the environment. Most VR systems, for example, are based around providing sense information for the visual system as opposed to e.g. haptics. While some may combine both, perhaps even with aural immersion, they very rarely provide full relocation of a person from a local environment to a remote environment.

Developing these ideas, Floridi outlines the ideas of forward and backward presence (Floridi, 2004) Forward presence is about somehow extending one’s range of manipulation from a local space to a remote space or the possibility of being perceivable as a property-bearer in the remote space. That is to say, maintaining agency over long distances or in a virtually displayed environment (e.g. a robot arm on Mars, drilling holes into rocks). Essentially, this is a matter of how well the system supports interaction with or at the remote location. Backward presence is essentially the converse of forward presence. It is the bringing of a remote space to a local one. It is about the display of remote information at the local site i.e. it is about surveillance, or looking at e.g. pictures of Mars taken by a rover and beamed back to earth. Essentially this is about display and requires neither direct manipulation of the remote environment nor any representation of the agent in the remote environment. Full presence would then be the combination of both modalities, although VR technology tends to produce experiences that render each of these forms of presence only in part, perhaps largely favouring backwards presence over forward.

The interesting thing about this is that Floridi immediately connects forward presence with agency, although forward presence may be just a matter of being perceivable remotely. Backward presence for Floridi has no agency and is essentially like what watching television is for most people, namely a passive experience that does not transport the viewer to the site of the action but merely provides a window onto another world.

The great difficulty with presence and VR technology is in trying to understand how well it supports both forward and/or backward presence. For example let us consider a virtual world created as part of the Benogo project (O'Neill et al, 2004; O'Neill & McCall, 2004; McCall et al, 2004a, McCall et al, 2004b; McCall et al, 2004c; Turner et al, 2003).



Fig. 1: Viewpoint Mosaic created for the Benogo project.

This virtual world is made up of photographs of a real place. By using real-time Image Based Rendering (IBR), a representation of that place is created in an HMD. 360 degree real-time head tracking allows for the impression that one is able to look around inside the virtual world. This system is high on backward presence. It brings a remote world to the location of the user in a particularly high fidelity way, creating an environment that appears very realistic. The real-time rendering also allows for motion parallax and occlusion in the virtual world over a very small area, so that depth perception and the closeness of objects is enhanced. However, this is as far as it goes. Beyond a 60cm diameter, the images disappear and there is no element of agency within the world other than the sense of ego motion. Nothing can be touched picked up or moved, there is no interaction with the displayed images. In short, there is no forward presence, the user does not inhabit the virtual space.

4. The production of Space

In 'The Production of Space' (Lefebvre, 1991; Shields, 1988), Henri Lefebvre produces a detailed exploration and analysis of the complex issues of space from a critical Marxist perspective. With the view that:

"Consciousness is produced through the material practices in the conduct of everyday life" (Shields, 1988 p. 2).

Lefebvre highlights the repression of the ludic aspects of existence in favour of rationality and productivity. The key to understanding Lefebvre's critique of the production of space is in understanding his explanation of how this focus on rationality and productivity has resulted in not only the alienation of the ludic but also the alienation and exclusion of the body and its extensions.

Lefebvre sees the body and its extensions as central to the production of space. Moreover he explains that this production of space is, in its natural state, a playful and social activity. He suggests the example of the spider and its web. The spider has no logic or intellect, it cannot understand Cartesian space, and yet it extends itself out into the world by producing a web, full of angles and intricacy. The web is a natural extension of the spider. The web is the space that the spider produces naturally. Continuing in this vein, Lefebvre points out how the social activities of people and their bodies are central to producing natural human spaces. He goes on to elucidate how this naturally produced space has been lost as mankind has evolved and produced new ways of existing that are based on philosophical and scientific positions that exclude the body (particularly Descartes). Lefebvre traces the evolution of produced space from a naturally social body-space, through the development of settlements and cities as images (spaces of representation e.g. the Lascaux caves, sites of artistic expression) and on to images as cities (representations of spaces e.g. the Roman pantheon of the gods, Christian churches). His history of produced space arrives at the production of a fragmented post-modern abstract space where the image of space has all but taken over in the form of the 'spectacular' space that continues to further exclude the body.

Essentially taking a Situationist perspective like Guy Debord (1995), with whom he was closely associated for some time (Hussey, 2002; Knabb, 1981), Lefebvre calls for a realisation of the difficulty of living in this kind of space. By focusing on understanding

how this space is produced and how we live in it, the Situationists make us understand how to reclaim that space by re-appropriation, *détournement* and *dérive*. Ultimately, their aim is to reclaim their own agency in the production of space, freeing themselves from the illusions and spectacle of abstract space. The *dérive*, for example is a technique of aimlessly wandering through cities, experiencing them first hand, free from preconceived notions about social practices. *Détournement*, on the other hand is the Situationist practice of subverting imagery and slogans to make the alienation of the spectacle evident.

5. Virtual spaces and places

As Turner and Turner have pointed out (Turner and Turner, 2003), Virtual environments continue to be spaces where bodies are excluded. Their critique of the lack of contextualisation in virtual environments explores the role of the body in understanding and turning spaces into places. While they do not draw upon Lefebvre's theories of space, they do explore philosophical, psychological and phenomenological studies of place and how a sense of place comes about. Their explication of place, drawing on the likes of Merleaux-Ponty, Heidegger, Relph and Gustavson, arrives at an understanding of place that is very similar to Lefebvre's production of space, in that they also highlight the role of the body and the social as important factors in the existential production of places. What Lefebvre calls space they call place. Where they differ is in the fact that Lefebvre's critique focuses on the *alienation* of the body and its extensions, including social and political aspects of existence, from everyday life. This consideration of *alienation* is not a strong feature in much of the other place literature. However, it is more than relevant to the discussion of space and place in VR.

Like Floridi, Turner and Turner point out the essential visual nature of most virtual environments that tends to exclude the body (i.e. they lack forward presence as agency). Moreover, they realise that most people that use virtual environments are usually researchers, or participants in research experiments who, as a result, spend very little time in them. In short, Turner and Turner point out that people generally visit virtual places, as if they were tourists. Tourism, according to the Situationists is an entirely spectacular affair, which is the result of the separation of the ludic and the productive in everyday life, to form work and leisure activities. Indeed, Turner and Turner discuss the nature of the manipulation of the tourist and tourist sites so that the tourist's gaze:

“Falls upon what the gazer expects to see – untidy aspects of life are tidied away or outlawed.” (Turner and Turner, 2003 p 307).

6. Agency and the Virtual Spectacle

If Floridi's model of presence is right then VR that does not support forward presence (and this appears to be the case with most VR) runs the risk of being essentially spectacular rather than interactive. This being the case it would render most of our virtual spaces as essentially uninhabitable, in a traditional sense, due to the exclusion of the body. A Situationist critique of VR (O'Neill, 2004) then reveals 'the illusion of non-mediation' as the development of new mediating technologies that promote a higher level of fidelity and reality that, while they cannot be distinguished from the mediated experience, continue to alienate the user as the spectator of non-interactive spectacles. The illusion is no longer in just trying to hide the technology, it is in trying to hide the fact that we cannot act in these types of environments that are presented to us as the highest forms of mediation available to us. However, if we cannot inhabit these spaces, our sense of presence is diminished and they cannot in turn become meaningful places to us. We cannot make meaningful attachments to these virtual places as we cannot use them like real spaces. In short, they remain representational.

This state of affairs begs the question; are virtual environments best understood as spaces or as representations of places? As representations they may have meanings for us and may respond better to analysis in this respect. While it is not possible to build emotion into bricks and mortar as such, it is distinctly possible to render representations of places that carry some element of extra feeling or meaning with them. Landscape artists for generations have been attempting to capture something of the sense of a place with their brushwork or photographic skill. This is what distinguishes great works of art from well executed draughtsmanship. Perhaps this type of analysis of illusion is more appropriate for spectacular virtual spaces than a critique of space and place alone.

7. Remediation and Representation

Bolter and Grusin (Bolter & Grusin, 1999) concentrate on the notion of 'remediation' when tackling this issue. They identify two fundamental types of media that they consider to have been derived from older media forms such as painting, photography and film. 'Immediacy' is a feature of media that offers 'being there' type of experiences through high fidelity representations of real worlds or realistic fantasy worlds that hide

its mediating qualities. 'Hypermediacy' is a feature of media that foregrounds the medium itself, resulting in the opposite of immediacy, where mediation is made obvious and an understanding of it is necessary to operate in it.

A fundamental aspect of their critique is the idea that all 'new media' arrive on the scene as unique entities offering unparalleled forms of experience and representation, when they are in fact modifications or reformulations of already existing mediating principles. A feature of this appears to be the primacy of immediacy type technologies in driving media forward as part of a quest for better and more realistic mediation, giving the illusion of non-mediation (Lombard & Ditton, 1997).

An example of this type of media would be a flight simulator that offers a first person perspective of flying a plane. Bolter and Grusin argue that the flight simulator is a 'remediation' of the televisual experience, which in turn is a remediation of cinema or photography that portrays the same scenario. Each successive remediation is considered as an upgrade, a step closer to reality for the viewer, as the medium by which the experience is conveyed is either hidden or systematically removed from the experience, resulting in a unified space of reality and the illusion of non-mediation. 'Telepresence', for example, is the feeling of being immersed in a mediated virtual environment while physically being located somewhere else (Witmer & Singer, 1998) without necessarily being aware of mediation taking place. The flight simulation is experiencing the virtual environment as your 'immediate' surroundings. That is to say that the media represented to you is done so in such a way as to make you believe that you are actually flying a plane.

This idea is also evident in the work of Paul (2003) where she discusses the recombinant possibilities offered by media that result in seamlessly integrated visual images that defy pictorial logic, presenting often-fantastical scenes as if they were reality. Manovich (2001) also discusses this notion of illusionism and the technological progression towards the improved rendering of reality for the viewer from a cinematic perspective. Oliver Grau's book "Virtual art" (Grau, 2003) traces the development of this type of immersive technology back through the renaissance to the frescoes of ancient Rome, where some interiors were painted with representations of outdoor scenes on a grand scale.

8. The spectacular space of VR

Virtual environments have given rise to an interesting and unclear relationship between the dialectics of space, place and the form and content of representation.

Clearly, there is already an existing critique of virtual reality that draws upon notions of representation and remediation. However, it has not as yet been able to delineate the relationship between representing spaces/places in relation to the problems of inhabiting those spaces/places.

Virtual worlds essentially combine rhetorical elements of spatial organization with the logic of the image. They offer the possibility of occupation and inhabitation of technologically localised places. However, more generally they deliver visitation and visualisation of places that, despite attempts, remain remote. It is perhaps obvious, but often overlooked that, as Floridi points out, it is the possibility of agency and 'being observable there' that is key to the production of presence in a remote virtual environment. Similarly, it is the insights of Lefebvre and the Situationists that point out the alienating characteristics of the spectacular space of which virtual environments appear to be the latest manifestation. Essentially, virtual environments are like Lefebvre's 'images as cities' they are totally abstract and representational and as a result alienating to their inhabitants when presented as alternative spatial realities.

If we can see the difficulty in attempting to theorise virtual spaces from the logic of real spaces, in light of VR's representational origins, then perhaps it is possible to develop a hybrid critique that fully explores the unique features that virtual environments do possess. After all, the combination of the representational and the spatial with new technology raises new questions about viewing and inhabiting spaces of all sorts.

9. Discussion

As we move towards becoming designers of these new types of spaces it is important to identify some specific features of this combination and attempt to understand whether we are designing spaces, places or representations with our various versions of this new technology.

To summarize:

- In order for a virtual space to become a place it must be inhabitable and for this to occur 'forward presence' in the form of agency as defined by Floridi is a primary requisite.
- If virtual spaces do not include forward presence in the form of agency, then they are effectively uninhabitable, which renders them mere representations of spaces/places.

- Without the possibility of agency, represented spaces cannot follow the logic of real space and are, as a result, pushed into the realm of the spectacle, as clarified by Lefebvre and the Situationists.
- Underlying the very nature of VR is the aim to produce the 'illusion of non-mediation', promoting the idea that virtual places could be possible replacements for real places when in fact they are not. Indeed, this particular form of spectacular utopia remains unrealized, while the rhetoric remains evident.
- Virtual worlds that do promote agency do not, *a fortiori*, support the full agency of the human body. Therefore, while presence may increase and the experience may seem more realistic, the alienation of spectacular VR remains. Indeed, it takes a firmer hold, hiding itself behind the positive notion of the possibility of interaction that is ultimately diminished.

It might be that, in designing virtual worlds we should be designing spaces to become places like architects do. The problem lies in the fact that we are not designing inhabitable spaces like architects. Virtual worlds, whether seemingly new or based on already existing spaces or places, remain largely representational. This applies to any VR technology that attempts to recreate any space as it can only ever be an interpretation of that space. Therefore we 'spectacularise' them, taking on the role of tourists that visit them fleetingly, not inhabiting them daily.

As technology develops, better presence experiences will be possible and more agency will be supported. However, this does not swing the critique of virtual spaces towards to logic of real space. While the logic of real space becomes more relevant, the notion of spectacular VR can never be fully eroded. Indeed, if a virtual world should ever be built that successfully maintains the illusion of non-mediation allowing full inhabitation and agency, one might argue that the spectacle had taken over entirely as in the film *The Matrix*, where agency in one world is indistinguishable and yet very different from agency in another.

So the question is: are we making representative spaces or places? If we are designing representative spaces, should we not be concerned only with the physical aspects of space that can be measured and represented faithfully, textures, qualities of material etc? Indeed, representations of spaces can, in many respects, be formal and symbolic, as in architectural plans and drawings, showing fixtures, fittings and

measurements etc. In this sense, they need be nothing like reality and may still afford us the opportunity to view or even visit them.

If we are designing representative places should we not be taking into account that our representations are really only snapshots of spaces at specific times of day under specific lighting conditions, perhaps using certain camera effects, or indeed rendering effects in VR, all of which might give the representation extra meaning, perhaps even extra meaning that might not be representative of a particular place i.e. meaning we do not want? Furthermore, we must ultimately be aware that, without agency in the virtual world, the experience of inhabiting that space will always be diminished and therefore remain largely placeless.

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