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CYBERSPACE THROUGH THICK AND THIN: VIRTUAL PLACES AND THE LOCATIONAL WORLD

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ABSTRACT: *Over the last two decades, cyberspace has morphed from a concept in science fiction to an interactive reality experienced on a daily basis by many people throughout the world. While several geographers have considered the many ways in which cyberspace is used and its wide-ranging impacts on various facets of life such as communication, education, and economics, there is very little literature that addresses whether the emergence of cyberspace has affected how people think about geographical space. This paper uses a phenomenological framework to consider the spatial aspects of cyberspace and to examine how people use cyberspace to refine their understanding of geographical space.*

Keywords: *Cyberspace, Place, Virtual reality*

INTRODUCTION

Over the last ten years, a number of authors have examined the growing importance of cyberspace since its introduction to the general public. Of particular interest to geographers have been issues relating to social, cultural, political, and technological uses of cyberspace, and to the Internet's implications for geography (see, e.g., Froehling, 1999; Graham, 1998; Kitchin, 1998; and Wakeford, 1999); a smaller number of geographers have considered more explicitly spatial aspects of cyberspace (see, e.g., Adams, 1998; Batty, 1997; and Taylor, 1997). While some (e.g., Casey, 2001) have referred in passing to the space and place qualities of cyberspace—or specific parts of cyberspace—very few authors have assessed them in depth. In this paper I attempt to add to the body of knowledge concerning these qualities of cyberspace with particular focus on the World Wide Web.

I will address three specific issues in this paper. First, I will discuss space and place as they pertain to virtual reality. Second, I will examine several types of virtual places and how we interact with them. Third, I will discuss three ways that people use web sites to refine their understanding of geographical places. Throughout this paper I use the term "placial," which I use as the adjectival form of "place," just as "spatial" is the adjectival form of "space."

SPACE, PLACE, AND VIRTUAL REALITY

A great deal has been written about space and place, but length limitations prohibit the kind of exhaustive review that would do justice to the literature. For the purposes of this paper, I will refer to a subset of this literature to provide a framework for my discussion.

Following Casey, I assume a fundamental difference between space and place by which space is the abstract container for place, which he describes as "the immediate environment of [the] lived body—an arena of action that is at once physical and historical, social and cultural" (2001, p. 683). This corresponds fairly well with Relph's description, in which he states "space provides the context for places but derives its meaning from particular places" (1976, p. 8).

Just as what we think of as physical reality involves an understanding of both space and place, so does virtual reality. Because virtual reality is a human creation, there is every reason to believe that it is modeled in fundamental ways on human experiences of physical reality. Consequently, virtual reality consists of both space, which provides context, and places, which are meaningful and with which people interact.

Virtual Space

Cyberspace (and specifically, the World Wide Web) exists in two kinds of space: geographical or locational space, and virtual or

nonlocational space. The geographical aspect of cyberspace comprises infrastructure-the arrangement of hosts, servers, cables, and so on that make the Web possible. This is purely physical space; the physical elements that make up the nodes and links of the Internet have positions in geographical space. They can be measured with regard to volume, length, weight, or position. In geographical space, the proximity of two objects is both anchored and measurable.

The nonlocational or virtual aspect of cyberspace comprises the structures of web pages, blogs, and message boards, the means of interaction between users and these structures, and the means of interaction among users. This is nonphysical space. While the HTML code that makes up a web page has physical residence on a server somewhere in geographical space, the on-screen arrangement of elements is virtual. In virtual space, proximity is a function of how web pages are linked together, and does not necessarily reflect the physical closeness of the files containing the code for the pages in question. The code for two pages that are considered proximate does not necessarily reside on the same server, or even in the same country.

Even the language used to describe cyberspace is loaded with spatial and placial metaphors. As Adams (1997) noted, the Internet has rooms, dungeons, and classrooms; websites are built, surfed, and entered. This use of language has become embedded in our understanding of the Internet: we start out at our *home* page, we *visit* other websites, we *go forward* and *back*, the arrangement of pages within a website is called *architecture*, we refer to our movements from one website to another as *navigation*, and we are on occasion warned by some websites that if we click on a link we will be *leaving* their space. In a sense, it is surprising that this language is not based on the act of reading so that we turn pages and open or close websites; instead, the language we use is more representative of the way we inhabit places and move through physical space.

While virtual space and geographical space share a number of similarities, there are also some important differences between them. For example, place making online is somewhat different from place making in the physical world. In both cases, there are considerations of design and use of space. Yet geographical space is three-dimensional and experienced as an ever-expanding continuum while virtual space is two-dimensional and experienced as a hierarchical series of layers. Even when websites represent objects that have three spatial dimensions, they appear on a two-dimensional screen, forcing users to adjust their spatial understanding of the image as they do for images viewed on a television screen. In geographical space, we experience movement from one place to another as something that crosses distance and requires time in proportion to that distance; in virtual space, we experience as movement from one place to another as a jump that seems not to cross any distance and whose time requirements are based on invisible patterns of traffic (e.g., server load).

Virtual Places

Despite the differences between virtual and geographical space, many of the places we construct and experience online mirror those we experience in physical reality. There seems to be a continuum of analogy with websites that are closely modeled on their physical counterparts at one end of the spectrum and websites with no clear physical parallel on the other. One might argue that the more closely a website mimics a geographical place, the more immersive and engaging it is. Yet I believe this is not necessarily the case. I argue that because virtual space is structurally and experientially different from physical space, some types of online places will require—and in fact will produce—new placial experiences. Once they are transferred to cyberspace and are represented by an interface that requires spatial perception, objects and interactions that we do not normally think about in terms of place (e.g., newspapers) become in a sense emplaced: they suddenly take on the qualities of place. Ultimately, it is the interaction with and content of websites, and not how closely they model reality, that makes them thick or, in Relph's (1976) schema, authentic.

Stores, banks, and news sites are probably the kinds of websites that most closely resemble their physical analogues. News sites like the New York Times website or the Boston Globe online are both structurally and functionally similar to their physical analogues. On these sites the actions of browsing the headlines and choosing stories to read are nearly identical to their corresponding actions in the physical world. However, the resemblance between online banking and shopping sites and physical banks and stores is more functional than structural. On websites like these it is possible to do most of what one might do in their physical counterparts, but considerations of efficiency and the structural properties of virtual space (as current technology allows) limit the design of such websites so that we are forced to interact with them through hierarchical levels. They function like the physical places on which they are based, but we navigate them differently.

There are, of course, websites and other

Internet-based forms that provide overt models of physical worlds—but for purposes of entertainment rather than as representations of their own internal architecture. MUDs (multi-user dungeons or domains), for example, have received a great deal of attention in the geographical literature (see, e.g., Adams, 1998; Batty, 1997; and Mitchell, 1995), but they are text-based and thus indirectly evocative of geographical experience. As graphic technology and network capabilities have improved, and as computers with increasingly powerful video cards become more popular, MMORPGs (massively multi-user online role-playing games) have emerged. Prime examples of popular MMORPGs with large user bases include EverQuest (see http://everquest.station.sony.com/), Ultima Online (see http://www.uo.com/), and World of Warcraft (see http://www.worldofwarcraft.com/). In games like these, users design characters and use them to interact with virtual landscapes with properties much like landscapes in the physical world—different kinds of terrain, vegetation, and fauna, through which players must navigate to get to various points of interest. Such games have no immediate geographical or placial analogues, but they are designed so that we navigate their landscapes in more familiar ways than many other Internet- and web-based places allow. While we don't actually walk through them, we manipulate a character the same way we might manipulate a remote-control car. In either case, this is an explicitly geographical mode of thinking.

The MMORPG Second Life (http://secondlife.com/) has generated a literature of its own (e.g., Peck, 2007 and Steins, 2007). Made public in 2003, this virtual world now has over six million accounts (Wikipedia contributors, "Second Life"). Unlike the typical MMORPG, Second Life does not feature quests, experience levels, points, treasure hunts, or many of the other goal-driven problem-solving elements generally associated with role-playing games; it exists almost exclusively as an outlet for socializing and creativity.[1] While Second Life resembles other MMORPGs with regard to its in-world economy, virtual three-dimensional topography, and use of avatars, it is far more immersive than the others, and is one of the few consciously modeled on Neal Stephenson's Metaverse ("Let's Go: Second Life," 2006). It features an extremely detailed avatar creation process (the user can specify even the height of the bridge of her avatar's nose), several levels of communication (from "whispering," where only other users whose avatars are within a given range can "hear," to global instant messaging), and several different modes of travel (avatars can walk, fly, use vehicles, and teleport). In short, Second Life allows its users to engage in activities that range from mundane to prohibitively expensive to physically impossible. Although it is based on the same general principles as other MMORPGs, its function and flexibility reflect a substantially different spirit.

Other online places are *suggestive* of certain aspects of physical places but are otherwise without parallel. Message boards, for example, can be argued to function like coffee shops, with clusters of individuals interacting around tables (in virtual terms, participants posting to threads) and with occasional interlopers dropping by (e.g., posting a message before leaving the web site—or the virtual world—for other obligations elsewhere) and others eavesdropping from other tables (e.g., "lurking"—reading without posting) (see Adams, 1998, p. 96). Yet, as Adams points out, there are very real experiences missing from message boards that exist in coffee shops: "much is lost in the 'translation' from café to virtual café (such as smells of freshly roasted coffee, sounds of spoons clinking on cups and saucers, and steamy windows)" (1998, p. 97). Threads on message boards often do not allow participants to share spatially-based interactions, like leaning closer to another participant to hear better or to indicate more interest. What Adams fails to point out is that there are experiences that take place on message boards that could never take place in physical coffee shops, primarily those that rely on the ready accessibility of information online, such as the ability to post direct links to other places (i.e., other websites) for reference. In addition, because message boards are text-based and threads are accessible for days, weeks, or months rather than hours, participants on message boards have the option of posting in real time or checking in sporadically on an ongoing topic.

Although many online places are modeled on typical human places, the hierarchical and largely text-and-graphic nature of the Internet has led to the emergence (or perhaps construction) of places without direct analogues to those found in geographical space. These kinds of websites require a different perception and create a different experience of place. One of these is the weblog, or blog. In brief, a blog acts like an open journal. Hosts like Blogger, Xanga, and LiveJournal allow users to create personal web pages based on templates that typically include a large section for journal entries ("posts"), personal information (e.g., name, age, location, or interests), and links to blogs created by other account holders (many blog-hosting websites allow users to subscribe to other users' blogs). The content of blogs ranges from absurd observations to personal revelations to serious considerations of current events. While blogs are widely used by the masses for personal pursuits, a number of magazines

and newspapers have begun publishing blogs by paid commentators. These blogs act like regular columns, but readers can comment on them directly, and they can be authored by any number of contributors. MSN's Slate Magazine (http://www.slate.com/) currently features five different blogs, the New York Times website (http://www.nytimes.com/) features about twenty, Time Magazine's website (http://www.time.com/) features nine, and even Weather.com (http://www.weather.com/) features one.

Three things set blogs apart from the typical pen-and-paper journals: first, while individual entries can be hidden from the public and access to blogs can be restricted, by and large, blogs are publicly accessible. Second, blogs invite public consumption and commentary on content in a way that other kinds of journals do not. Finally, many blogs allow users to create structured but informal communities by linking to other users' blogs or by joining blogrings (communities of users with a common interest). In this way, users can belong to multiple communities, expressing as many identities as they wish. In a very real sense, blogs are places that allow people to express their identities while soliciting feedback from others across a range of self-selected communities with which they identify.

Wikis provide even greater opportunities for collaboration among users. The first wiki (WikiWikiWeb[http://c2.com/cgi/wiki?WikiWikiWeb]) appeared in 1995 as a place for people to document the history of programming ideas. The best-known wiki to date, Wikipedia, describes wikis as a form of collaborative technology that allows users to create, modify, and destroy content (see http://en.wikipedia.org/wiki/Wiki). Wikis share a number of characteristics that set them apart from other online places. First, they are consciously and intentionally perpetual works-in-progress. Second, much like message boards, they create communities based on common interests—but their primary goal is often the organized documentation of knowledge; the communities that build up around them are communities with missions.

Social networking websites (e.g., MySpace [http://www.myspace.com/] and Friendster [http://www.friendster.com]) constitute a relatively new phenomenon that is currently very popular. In some regards, social networking sites are similar to blogs: users create profiles that display personal information and photographs, and most of these websites even have built-in blog capabilities. These websites go far beyond being a cross between blogs and photo albums, however; their stated purpose is to bring people into contact with one another. Users of social networking sites search for people they know (or, as is often the case, people they want to know, like musical groups) and add them to their circle of friends. Users also have the option of joining communities of people with like interests, but this is a secondary function of these sites. The creation and maintenance of friend lists is the primary function of social networking sites.

What is particularly interesting about social networking websites is that there is no single type of physical place dedicated to networking in this way. Instead, Friendster and its ilk have done something that might *only* be possible in places built in cyberspace: they have taken an action—in this case, social networking, which typically occurs as a function of events like parties, conferences, or formal dinners—and have created a specific type of place dedicated to it in which people can interact at staggered time intervals without being physically proximate and without the formal pretext of a get-together. It is my contention that places like these cannot have analogues in the physical world because *there is no other existing form of space that can accommodate this kind of place*.[2] A visit to MySpace or Friendster has no precedent. As with visiting a blog, it produces a new kind of experience rooted in its unique form.

This is perhaps the most important lesson we can take from the Internet: as we invent new technologies, we have the potential to invent new kinds of space and new kinds of places, and we adapt accordingly to both. We often seek metaphors and analogues as a means of initially understanding and describing new phenomena, but I believe that, as with comparable forms of technology (e.g., the book, the telephone, etc.), we will ultimately understand these new forms of space and place on their own terms.

THICK AND THIN

In his discussion of place and "the geographical self," Edward Casey talks about thick and thin places. He does not specify the *qualities* that make a place thick or thin, although he describes the thinning-out of places as a process that makes them "increasingly uniform and unable to engage our concernful absorption" (2001, p. 685). Taking Casey's general statement as a guide, I assume that thick places are distinguishable if not unique, and people are able to engage meaningfully with them. Thin places, by contrast are less distinctive and lack the structures by which people relate to them in meaningful ways.

Although Casey avoids clear definitions of thickness and thinness, he describes thinned-out places as:

> ...those in which the densely enmeshed infrastructures of the kind Heidegger discerns are missing. Not only do such places not *contain* strictly, as on Aristotle's model; they do not even *hold*, lacking the rigor and substance of thickly lived places.... Their very surface is perforated, open to continual reshaping and reconnecting with other surfaces. Think of the way in which...items on the Web melt away into each other as we switch channels or surf at leisure. In such circumstances, there is a notable *lability of place* that corresponds to a fickle self who seeks to be entertained... (2001, pp. 684-685)

This amounts to a wholesale dismissal of the Internet as a viable form of space, and of websites as holding the potential for authenticity. I argue that such a dismissal carelessly ignores both the ways in which people interact with the Internet and the investment that the self is capable of making in such places. If the virtual world reflects the structures and interactions of the physical world, then it will contain analogues to both thinned-out suburban strip-mall wastelands *and* to thickly lived places like coffeehouses or living rooms.

I would like to extend the concepts of thickness and thinness to the virtual world. Following Casey's model, thick websites should display a certain depth and distinctiveness of content that thin websites should not. Furthermore, interactions between the owner of the site and the site's visitors, or interactions among visitors to the site, should have the power to change the site, especially with regard to content. Thin websites, by contrast, might involve automated interaction with databases, facelessness and a preference for general contacts, shallowness of content, and a failure of user interaction to affect the design or content of the website. With interaction at a minimum, websites with these qualities create little for users to grasp onto as meaningful.

Do thick and thin places exist on the Internet, based on these criteria? I argue that they do, and that examples of both abound on the Internet. Most message boards fall into the former category; they are places with engaging content, built on invested interaction among users. Examples include places like the William Gibson message board (http://www.williamgibsonboard.com/6/ubb.x), where a core body of users participates regularly by creating and responding to a wide array of topics. Some of the posters to this message board have been around since December of 2002 and have thousands of posts to their credit. Second Life is one of the most thickly lived places on the Internet—it is so thickly lived, in fact, that major universities have begun using it to create virtual classrooms, and political organizations have used it to engage in virtual riots (Wikipedia contributors, "Second Life"). If this tendency to habitually return to a website for social interaction, indeed for community, is not clear evidence of "concernful absorption," then such a thing must not exist online at all.

Many corporate websites fall into the latter category. Most of them provide superficial content describing the company, job openings, a mission statement (usually vague), and basic product and service descriptions. In the case of retail establishments, they may allow people to order products online via credit card—but ultimately, all this interaction is automated, and rarely is there a means of direct contact other than generalized email addresses. The Starbucks website (http://www.starbucks.com/) is a good example: the bulk of the content revolves around goods and services, public relations, job opportunities, and store location. People do not linger long on websites like these without good reason.

Finally, there are online places that fall between these categories, most notably search engines (e.g., Google [http://www.google.com/]). Interaction with search engines is automated, but based purely on user specifications. A user enters a term of particular interest to her and uses the results to find thick websites. In that sense, search engines function like public transportation, allowing users to choose destinations and providing a means of traveling to them.

In the end, it is the experience of place that matters, and not theoretical wrangling. We must ask the question, *are places in the virtual world capable of producing the kinds of meaningful experiences of places in the physical world?* If the answer to that question is yes, then we must admit that the virtuality of online experience is less important than the experience itself. And if the experiences we have of online places differ from those we have of geographical places, it is a result of the differences between physical space and virtual space and how places are constructed within them. That is, our virtual experiences are every bit as real, and potentially every bit as meaningful as our physical experiences. It is not that virtual places are by necessity thin, but that they are different kinds of places whose qualitative potential is only slowly being understood.[3]

While the sensory experiences that we have online are not the same as those in the locational world and might be considered qualitatively less rich than our physical-world sensory experiences, our emotional experiences in cyberspace should not be dismissed. Cyberspace demands a level of active interpretation that the physical world does not; in spite of this—or perhaps because of it—the potential

exists for interactions that are just as meaningful and that have just as much impact as those of our physical-world lives. Further, that high level of active interpretation brings with it a certain social and emotional investment in online experience. While "LOL" may seem like a pale representation of a hearty laugh to the person who sees it displayed in an instant message, the mirth of the person who typed it is no less real. Given the relative youth of the Internet and the World Wide Web in particular, and given the speed with which these new territories have become embedded in daily life, it should be no surprise that we are only just learning how to interact within them.

If thickness can be defined as a measure of social and emotional investment in a place, then cyberspace has the same potential for thickness as any of the physical places that we care about. Ultimately, the thinness perceived by Casey is perhaps more a reflection of their efforts to model the physical world with limited technologies than of any intrinsic shallowness. It is not that the Internet caters to or "correlates with a self of infinite distractibility" (Casey, 2001, p. 685), but that virtual places, for all that they are modeled on places to which we are accustomed, are experientially different.

FROM NONLOCATIONAL TO GEOGRAPHICAL

In *City of Bits*, William Mitchell (1995) speculates on the use of information technologies in existing structures. He discusses how design will (and presumably, has already begun to) change to incorporate the delivery of information to workspaces, home spaces, and other venues. His discussion highlights the increasing ubiquity of information delivery through networks across virtual spaces to physical places in ever smaller and more integrated forms. Yet Mitchell's focus on the *structural and design aspects* of the expansion of the virtual into everyday life presents only *part* of the picture. Another aspect of this expansion concerns the use of virtual realities by people to refine their understanding of specific places.

There seem to be three distinct ways in which cyberspace can be used to refine our understanding of place. The first is what Brunn and Cottle call "cyberboosterism," which they define as "the selling of places electronically" (1997, p. 240). Although Brunn and Cottle concentrate on cyberboosterism by small states, I would argue that websites promoting restaurants, historical sites, and tourist attractions also fall into this category. The information provided by websites like these takes the form of generalizations about the place—in the case of states it might include a list of sub-state divisions, major cities, governmental structure, and historical facts. Restaurant websites might include directions, hours of operation, menus, and contact information. Websites for historical sites and tourist attractions might focus on what makes these geographical places unique in historical, geographical, or cultural terms. Websites engaged in cyberboosterism are impersonal, based on a one-way broadcast of information, operating similarly to television newscasts. In terms of network topology (Adams, 1998), cyberboosterist websites can be considered examples of cybercasting, which is has a radial/one-way structure. Their aim is place-promotion, often for educational or economic reasons.

The second I will call cybernationalism. Websites of this type provide information about nationalist or regionalist issues for the purpose of gaining support for a political cause. Jackson and Purcell (1997) discuss this use of cyberspace in their paper on websites representing territories formerly belonging to Yugoslavia. Other examples include websites dedicated to Tibetan independence (e.g., Tibet Online [http://www.tibet.org/]), the Zapatista movement in Chiapas, Mexico (e.g., Zapatista Revolution [http://www.zapatistarevolution.com/]; see Froehling, 1999), Pan-Africanism (e.g., Pan-African [http://www.panafrican.info/]), and Native American sovereignty (e.g., Midwest Treaty Network [http://www.treatyland.com/]). The stated goal of these websites is to educate, and implicit in this is a desire to solicit support for the movements they represent. As in the case of cyberboosterism, cybernationalist websites provide "factual" information and operate as a one-way radial structure. Their aim is to promote causes associated with places, primarily for political reasons.

The third is a budding movement dubbed "neogeography." A substantially more recent and less widespread phenomenon than the other two, it has received little attention elsewhere. Neogeography involves the combination of online mapping software like Google Maps with the narrative function of blogs. Platial (http://www.platial.com) is the prime example of this kind of website. On Platial, users locate places that have personal significance, give them reference tags (e.g., "love" or "concerts"), and tell the story that makes the location meaningful to them. Other users can comment on these annotated locations, adding their own stories. Users can also create personal maps based on places that they and other users have pinpointed, and multiple users can come together to

add places to "open" theme-based maps. Platial's website states that its intended purpose is to "connect people, neighborhoods, cities, and countries through a citizen-driven common context that goes beyond geopolitical boundaries" (Platial.com). In contrast to cyberboosterism and cybernationalism, neo-geography operates on a personal level and actively seeks to unite individuals in an interactive way, rather than to broadcast information. In Adams' (1998) terms, Platial can be described as having a two-way radial structure similar to that of bulletin board systems.

DISCUSSION

Ten years ago, when the paperback edition of *City of Bits* was published, William Mitchell documented a number of predictions about the future of the Internet. A number of these predictions have since either been realized or are well on their way. Yet for all that cyberspace and its constituent virtual places have developed during that time, it has yet to become the holistic, cohesive alternate reality envisaged by writers like William Gibson (1984) and Neal Stephenson (1992). The look and feel of websites have not changed much over the last decade, though they have become more sophisticated as website design has gone professional. The relative stability of cyberspace is crucial at this juncture because it allows younger generations who are being raised alongside it to absorb an understanding of its spatial and placial qualities. This kind of understanding is especially important to as information technologies grow smaller and are embedded more deeply within physical places. Furthermore, the growing ubiquity of the Internet on a cross-cultural level has implications for globalization—hence it is especially important to understand how cyberspace can be used to influence and refine our understanding of geographical places. Finally, it is important to understand that because of these factors, cyberspace is not simply a thinned-out haven for a fickle self, but a *different kind of space* containing places that have as much potential for significance as any thick geographical place.

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ENDNOTES

[1] The "What Is Second Life?" section of the Second Life website (http://secondlife.com/whatis/ and its subordinate pages) provides an extensive overview of the game and includes an entire subsection devoted to the ability of players ("Residents") to create (and potentially sell) objects within the game world.

[2] One reviewer suggested that bars provide a real-world spatial and placial analogue for social networking websites. While a lot of social networking does take place in bars, it also happens at a number of different kinds of events that do not have the same kind of distinct place identity. Furthermore, neither bars nor the events at which social networking takes place have the same yearbook-like repository function of social networking websites.

[3] It should be noted that, just as with any thickly lived place, the potential for abuse—including stalking, identity theft, and other threats to personal security—is high on the Internet. Ironically, it is the Internet's lauded ability to reduce the impact of physical geography that makes it especially dangerous in this regard. While a broader examination of this complex set of issues is beyond the scope of this paper, they cannot be ignored. Future research should address this directly.

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