Digital Cartographies:
From Metageography to Locality in Online Navigation

By Eric Gordon
Assistant Professor of New Media
Emerson College
Eric_Gordon@emerson.edu

When Internet technology entered into popular culture in the 1990s, the virtual dominated the discourse with talk of cyber-worlds, fragmented communities and disembodied individuals. Today, location and social connection define the parameters of the media. What some call Web 2.0 is a platform defined by an "architecture of participation," where users create and distribute content within social networks (O'Reilly, 2005). This new orientation has redirected network activity away from early predictions of virtual isolation and towards a social connectivity that is decidedly located and contextual. If the early web (Web 1.0?) was about giving everyone access to information, Web 2.0 is about giving everyone access to each other. This change in network perspective that has arisen with the prominence of social software applications like Blogger, Myspace and Facebook, has focused user attention away from anonymous and placeless network activity to identified and located activity. In this essay, I examine changes in the popular understanding of digital space and digital subjectivity. I begin with a discussion of the metaphor of mapping in postmodernism and cyberspace and I suggest that such metaphors, premised on the conceptual distinction between real and virtual, have given way to the localized and embodied mapping of Web 2.0. Technical, industrial and cultural changes in digital culture over the past several years have created a distinct digital social space wherein the virtual world is anchored by the growing and persistent visibility and parallel commodification of everyday life.

Ways of Seeing Virtual Space

The initial rhetoric of the dot-com industry was instilled with an excitement about a new economy that defied traditional geographical limitations, where businesses could decentralize and experience unbridled growth in electronic networks. Even though much of this speculation turned out to be misguided, in that the dot-com industry was heavily reliant on geographical proximity and traditional communications networks (Zook, 2005), the dominant rhetoric of the new media (and its corresponding industries) was one of de-spatialization, de-territorialization, and dis-embodiment. In Nicholas Negroponte's influential book *Being Digital*, he wrote:

> If I really could look out the electronic window of my living room in Boston and see the Alps, hear the cowbells, and smell the (digital) manure in summer, in a way I am very much in Switzerland. If instead of going to work by driving my atoms into town, I log into my office and do my work electronically, exactly where is my workplace (1995: 165)?

Negroponte's assumption that atoms were distinct from bits in the emerging digital society was responsive to how new technologies were positioning themselves in popular discourse. Spatial metaphors were commonly used to describe where one's bits could "go" when online: information super*highway*, web*site*, chat *room*, internet *café*, etc. They would seem to create a world entirely to themselves – liberated from the tedious behaviors of atoms. There was little indication that these spaces could ever assimilate with the physical world.

This rhetoric of the sovereign world of bits predated the world-wide-web. Well before Tim Berners-Lee put the first webpage together in August of 1991, virtual activity was seen as enticingly separate from physical space. For example, the Minitel, circa 1982, was a network of computers in France whose sole purpose was to give online access to the phone directory. An accidental outcome of this system was the online message board.

Designed to support the phone directory, these message boards quickly become the most popular aspect of the system. Erotic message boards (*messageries roses*) accounted for the majority of traffic – activity quite distinct from the real world networks the system was intended to enable. In the United States, message boards were one of the first features of the popular Internet. They came into wide use in the early 1990s as the Internet became available in universities. While email was the most popular feature of this new network, chat rooms called multi-user dungeons (MUDs) were immediately popular. These text-based forums began primarily as fantasy game spaces, where users in the tradition of Dungeons and Dragons would assume alternate identities, gather treasure and slay monsters. Before too long, many of these spaces became MOOs (or multi-user dungeons, object oriented). In these enhanced spaces, users could graphically represent themselves with avatars and alter the spatial layout of the world by creating new rooms and decorating them with digital objects. While MUDs and MOOs held on to their gaming origins, increasingly, they were used for socializing around special topics – everything from dog ownership to sex fetishes (Rheingold, 1993).

For more than a decade before the web, computer networks were used to cultivate communities and generate alternate worlds. So it is no surprise that the dominant discourse in the commercialization of the web would focus so heavily on social connection through spatial abstraction. It was commonly perceived amongst users that network interactions were divergent, and in many cases better, than real world interactions. Mitchell Kapor, founder of the Internet activist group, Electronic Frontier Foundation (EFF), characterized digital community in the early 1990s as a separate, utopian social structure: "Life in cyberspace is often conducted in primitive, frontier conditions, but it is a life which, at its

best, is more egalitarian than elitist, and more decentralized than hierarchical." Kapor argued for a Jeffersonian information policy to accommodate what he defined as the distinct characteristics of "life" in cyberspace, "founded on the primacy of individual liberty" (1993). For Kapor, online communities fashioned a distinct form of community orientation – a nostalgic alternative to the real world that might teach us about how communities *should* work.

But not everyone celebrated this parallel world of bits. Mark Nunes, writing in 1995, declared that, "in its current figuration, the 'net does more than network the globe: it creates a metaphorical world in which we conduct our lives." Therefore, "the conceptual model of a cybernetic 'space,' does not augment the world; it abandons the world for one which can be fully realized and fully encompassed – a world of transparency and immediacy" (1995: 314, 316). For Nunes, it doesn't matter how people organize themselves in cyberspace, the problem is that it is happening apart from the physical world. It is a *virtual* reality. Howard Rheingold summarized these divergent views as follows: "One way to see VR is as a magical window onto other worlds…Another way to see VR is to recognize that in the closing decades of the twentieth century, reality is disappearing behind a screen" (1991: 19).

As a response to the threat and the promise of the parallel virtual world, the concept of the map emerged as a dominant metaphor – a metaphor that would find considerable support in theories of postmodernism. Jean Baudrillard's description of simulation was especially relevant. In reference to a Borges' story about a map so realistic that it covered its corresponding territory, Baudrillard writes: "The territory no longer precedes the map, nor survives it. Henceforth, it is the map that precedes the territory" (1998: 166). The

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map, or the simulation of the territory, for Baudrillard, is more important than the territory itself. When subjects engage with spaces, they engage only with its simulation; and the real eventually loses all distinction. As popular discussions on virtual environments increased throughout the mid-1990s, Baudrillard's totalizing axiom seemed to harness the anxieties associated with the new technology. At the time it appeared inevitable that the culture would wholly abandon the sour foil of reality for the fantasy dreamscape of the virtual. It seemed unavoidable, at least until the final days of the dot-com boom, that architecting our virtual world would be the most important public works project in which we could engage. Mapping that disembodied space, the one Baudrillard decried as a colonizing force on the culture's weakening sense of the 'real' world, was important in everything from fiction to business plans.

In *Neuromancer*, William Gibson describes cyberspace as a "matrix" – an immersive information-scape that exists parallel to the real world wherein users leave their bodies behind to navigate the jarring data terrain (1984). In this version of virtual reality, cyberspace is all map – a virtual space with no necessary correlation to the physical world. If it influences the territory at all, it is only from involuntary seepage or lack of security. This scenario is rehearsed in several motion pictures from the 1990s, including *Strange Days* (1995), *Johnny Mneumonic* (1995), *The Matrix* (1999), *eXistenz* (1999), and others. These dystopian fantasies each represent a version of the engorged data map. In all cases, the map is distinct from the territory, threatening to limit the authority or authenticity of the physical world.

The strength of the mapping metaphor to describe a virtual domain, distinct from geographical specificity, has origins within the history of cartography. In the second

century, Ptolemy wrote in the opening lines of his *Geographia*, that maps are "a representation in picture of the whole known world together with the phenomena which are contained therein" ("Ptolemy's geographia", 1999-2001). The *Geographia* was "lost" to scholars until the fifteenth century, when it was widely used by Renaissance cartographers in the rapidly expanding project of mapping the world (Woodward, 1989: 11). Ptolemy's simple definition would have profound impact on the cultural value of maps in modernity.

Maps, as they were commonly understood, were pictures that contained phenomena. The history of mapmaking has been tied to the struggle to find more accurate and more useful methods of containing the physicality of the globe. For instance, Geradus Mercator, in the 16th century, was the first to devise a method for representing the whole of the earth in two dimensions. With the recent invention of the printing press, it was the first of such representations to be mass-produced and distributed, making it, even to this day, the most recognizable projection of the globe. Mercator's projection has been iconic, despite its glaring geographic inaccuracies: Europe, and the rest of the northern hemisphere, is well out of proportion to the rest of the world. This was in part because the representation was convenient for oceanic navigation. By drawing a straight line between any two points on the map (or rhumb line), one could easily plot the necessary coordinates. So while the geographic information was distorted, it was a useful abstraction for the reader of the map to orient himself to the globe. As Terry Harpold points out, "Distortion is simply a mathematical consequence of how maps do what they do" (1999:14).

Mercator's projection of the globe was made possible through the extrapolation of geographic information onto a network of parallels and meridians known as a *graticule*. This cartographic grid would soon come to represent, even outside of geographical data,

the "picture of the whole known world" – perhaps even more so than the specific

representation of continents and oceans. The geographer David Woodward explains that

there is a general trend in the history of cartography "towards abstraction and separation of

geometry from geography. The extremes of this abstraction can be seen when the *graticule*

of the world becomes so much a part of the everyday graphic vocabulary that the icon

becomes a stereotype removed from reality" (1989: 14).

Graticule derives from the Medieval Latin word *craticula*, which means 'little

grating.' The definition of the word 'grating' is a material used for containment or

preventing access. The abstraction of the graticule to symbolize earth, then, might be

understood as the abstraction of containment. Very often the graticule has little connection

to the actual map, but it is almost always included as a shorthand means of communicating

the stable globe as reference point, and thus a mastery of whatever is plotted therein.

While the graticule does not depart specific geographical information, it acts as a

metageography – what Harpold describes as a "sign system that organize[s] geographical

knowledge into visual schemes that seem straightforward…but which depend on

historically – and politically – inflected misrepresentations of underlying material" (1999:

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The map, as it is used in postmodern discourse, is, like the graticule, void of

specific geographic information. It is a metageographic symbol that represents

containment or the imposition of an external, abstracted geometry onto physical geography.

Consider Baudrillard's famous description of Disneyland:

> Disneyland is presented as imaginary in order to make us believe that the rest is
> real, when in fact all of Los Angeles and the America surrounding it are no longer
> real, but of the order of the hyperreal and of simulation. It is no longer a question

of a false representation of reality (ideology), but of concealing the fact that the real is no longer real, and thus of saving the reality principle (1998: 335).

The map is parallel to the territory and extends outward into it. In this case, Disneyland is a map of America – a map that more closely resembles one's experience of America, or at least one's desire for that experience, than it does the place itself. Like Mercator's projection, in Baudrillard's Disneyland, the utility of the abstraction, is more important than the accuracy of the information represented. Umberto Eco details a similar phenomenon in his *Travels in Hyperreality*, wherein he describes Disneyland's "Adventureland" as much more satisfying than the actual Mississippi River. While the former reduces all the essential elements into an immediately consumable portion, the latter is much too extended to be promptly understood (Eco, 1986). For Baudrillard and Eco, the map is simulacrum. It is representation that replaces the represented. It is not meant to clarify the territory, only to obfuscate. It is meant to ease navigation, even at the risk of destroying the space navigated.

A map is a representation, but one that because of its functional similarity to the represented object, threatens to overtake its originality, and in some cases, its function. The map is not a means to an end; but, as a symptom of postmodern culture, it is an end in itself. The metageographic overlay is all that is necessary to contain the territory – and, as result, it is what the spectator directly perceives. Baudrillard sees this shift manifested in city space: the contemporary city "is no longer the politico-industrial zone that it was in the nineteenth century, it is the zone of signs, the media and the code" (1993: 77). He explains this shift as a dislocation from the metallurgic society (where space is organized around sites of production) to the semiurgic society (where space is decentered by the flow of information and signs). In the semiurgic society, signs take on a life of their own and

constitute an entirely new social order (Best & Kellner, 1991; Jarvis, 1998). Implicit in this model is the dislocation of the subject. Baudrillard's postmodernism destabilizes the consuming subject and sublimates her into the chaotic system of signs and information that compose the social fabric.

This postmodernism demands a subject that is both everywhere and nowhere at the same time. If we consider a semiurgic society, wherein signs construct a new social order outside of the influence of subjects, then the subject is either looking onto or buried underneath the map. Just as in Gibson's characterization of cyberspace, the subject was either 'jacked in' or outside – he was never formative in the production of social space. Or in the now classic representation of the semiurgic society, *The Matrix* (1999) shows a real world covered over by the virtual world; this is done so completely that what *was* real loses all function within a society totally adapted to the metageography. The subject can act within the matrix, but cannot change it; the map is intractable, predetermined by the network of machines that compose it. In this space, there is no possibility of forming meaningful places. Baudrillard's postmodernism resonates with Anthony Giddens' description of late modernity. "Place becomes increasingly phantasmagoric," Giddens' writes, "that is to say, locales are thoroughly penetrated by and shaped in terms of social influences quite distinct from them" (1990: 19). Whether it's characterized as modern or postmodern, in virtual reality, places are phantasms; they are mere products of the "penetrating" force of maps.

While this characterization of VR warns of danger in the always-already mapped environment, Frederic Jameson warns of an environment that resists mapping. In his landmark book from 1987, *Postmodernism; or the Cultural Logic of Late Capitalism*,

Jameson suggests that the threat is not that the map precedes the territory, but that the territory has become unmappable. Late capitalism creates conditions in which real space, like the virtual, are rendered incoherent. Space is a pastiche of disconnected signifiers caused by the inundation of global capital, disrupting any possibility for material consistency, but made to appear cohesive through the ideological glue of consumerism. Global capitalism manufactures a metageographic overlay that has so completely mastered the territory that it now has little relation to contiguous space. Caught in this harrowing environment outside of coordinates, Jameson turns to the map as a way of resisting the chaos that emerges from its absence. Borrowing from Kevin Lynch's *cognitive map*, Jameson proposes a solution by the same name that extends beyond the form of the city and into culture. For Jameson, the concept of culture has almost complete coverage of social life: "a prodigious expansion of culture throughout the social realm, to the point at which everything in our social life – from economic value and state power to practices and to the very structure of the psyche itself – can be said to have become 'cultural' in some original and yet untheorized sense" (1991: 48). The cognitive map is more than the literal notations in which Lynch had his subjects engage; it is a perceptual practice wherein one can represent their position within an unrepresentable world.

Jameson's cognitive map operates in opposition to a postmodern culture that, as he maintains, resists the act of mapping. Mapping is an act of defiance, a dialectical overlay onto the uncharted postmodern pastiche. If late capitalism produces unimaginable spaces, the cognitive map (typically art) makes sense of them, and space transforms to follow its lead. The cognitive map allows the spectator to achieve a "breakthrough to some as yet unimaginable new mode of representing" (1991: 54). For Jameson, mapping is active,

albeit within an existing dialectical structure. It is the outcome of a subject acting upon the world and altering it to his expectations.

Jameson's "interested subject" offers a way out of Baudrillard's dilemma. By not buying into the inevitability of the metageography, Jameson argues that reason can overcome schizophrenia, and that logic can overcome pastiche. The subject, while he admits is altered by the historical inevitability of postmodernity, is capable of overcoming its subjective conditioning in order to revert the culture to a logical, and just, state. Jameson returns to a Cartesian view of the subject: one that orders the world through reason. If postmodernism is a momentary lapse, the cognitive map is meant to reorder the world back into alignment with the interested subject.

The map, in this sense, is redemptive for Jameson, while it is damning for Baudrillard. While Baudrillard suggests that metageography has become geography, leaving no room for critical engagement, Jameson maintains that the subject can, through mapping, ascertain a critical position outside the metageographic overlay. While these theories of postmodernism offer differing views of subject position, both similarly depict the crisis of virtuality: the logic of the territory is oppositional to the logic of the map. Baudrillard suggests that the territory is conquered by the map, as the subject helplessly looks on, and Jameson suggests that the territory evades most possibilities of mapping, save the rarified interventions from artists who aim to reorient the subject to territory. Whether something to struggle against or appropriate, the map in postmodern theory and subsequently in the discourse around cyberspace, maintains its peculiar dominance over the territory it represents.

Locality

The distinction between the map and territory in postmodernism and early representations of cyberspace has given way to a new cartographic certainty in today's digital culture. In contrast to Baudrillard's ringing of the territory's death knell, space and location would take center stage in the development of a new medium almost everyone thought would render them obsolete. Years after the initial dot-com frenzy, it is clear that the Internet has opened up new worlds. But mostly it has laid claims on making the present one fully comprehensible.

A substantial change in the rhetoric of virtuality has taken place since 2002. After the dust settled from the dot-com bubble burst, the commercialization of the Internet continued, but in a much more cautious and orderly fashion. The culture's rapid assent into virtuality would seem to have slowed. After a rush on investments, venture capitalists sat back and watched as users continued to populate cyberspace. The social networking site Friendster was immediately successful when it debuted in 2002. And very rapidly, the success of Myspace in 2003, Facebook in 2004, and Google's dramatic IPO also in 2004 sparked something of a new framework for the web. That same year, web pioneer Tim O'Reilly organized the first conference on what he called "Web 2.0." The term has since become the most recognizable designation of new trends in network media. Unlike the web of old, this web is modular, semi-automated and distributed. According to Bryan Alexander:

> Blogs are about posts, not pages. Wikis are streams of conversation, revision, amendment, and truncation. Podcasts are shuttled between Web sites, RSS feeds, and diverse players. These content blocks can be saved, summarized, addressed, copied, quoted, and built into new projects. Browsers respond to this boom in microcontent with bookmarklets in toolbars, letting users fling something from one page into a Web service that yields up another page (2006: 35).

Instead of a network composed of connected pages, the network is composed of connected users, all of which create, share and distribute content. A web of pages has only a theoretical user, while a web of users is fundamentally composed of user identities and locations. As a result, the cultural function of mapping has shifted significantly. As opposed to the metageography of cyberspace, the new web has attempted to reclaim the map as a tool for locating subjectivity in space. The newly fashioned function of the map is closer to Jameson's cognitive map than Baudrillard's simulacrum. But unlike the cognitive map, which was relegated to an act of resistance, mapping in web 2.0 has become a normalized element in network activity. Territory and physicality are increasingly at the core of network social life.

This is best illustrated by Google's recent entry into the mapping business – a service launched in February 2005. Unlike existing mapping software like Yahoo and Mapquest, Google's application included the functionality of a search engine and the dynamic drag and drop qualities of an operating system. When the user enters an address, store name, or type of business, Google Maps retrieves a range of possibilities and locates them with virtual pushpins on a dynamic map. By clicking on one of the pins, the user can read information about that particular location as if performing a regular search query. With another click, she can obtain driving directions, business hours – sometimes read reviews or discover related businesses. Google Maps is an open system that uses latitude and longitude coordinates to determine the location of sites. Any dataset with the required information can be entered into the application and dynamically searched and visualized.

But perhaps the most interesting feature of the software is its ability to overlay satellite images over maps. In 2004 Google purchased the digital mapping service,

Keyhole Corp. Keyhole's database of satellite images could be stitched together so that images seamlessly scrolled and zoomed. The integration of this feature into Google Maps was more than just a "neat" feature; it was meant to provide users with a clearer sense of the immutability of territory. As data in Google's new software was distinctly fluid, its relationship to territory was unfaltering – an impression enforced by the "you-are-here" feature of satellite images. Most users, upon first hearing about Google Maps, rushed online not to view places they've never been, but to view their own home, street or neighborhood. The impulse to locate oneself in space, even within the face of a global and expansive network, is a reaction against the metageographic construction of the web. It is a desire for cartographic certainty that has become indicative of a post-dot-com digital culture – one in which Google had no small part in defining. According to David Radin, a Pittsburg-based technology consultant: "I can confidently say that Google's new Map capability will do the same for navigating that Google toolbar did for searching the Web – change the habits of the world" (2005).

Very soon after Google launched its service, hackers began to appropriate the API (application programming interface) to create "mash-ups" from existing datasets. Adrian Holovaty, an early Google explorer, overlayed Chicago Police Department crime statistics with a Google Map (http://chicagocrime.org). Users were able to search for crimes by type, street, date, police district, zip code, ward or location. It immediately became popular amongst homeowners or prospective homebuyers who wanted to determine the safety of neighborhoods and commutes. When Holovaty debuted his site in May 2005, Google had not given him permission to use its API, yet it did nothing to stop him (Sandoval, 2005). Of course, Holovaty was not alone. Several other experiments, including

Housingmaps.com, which mapped the apartment listings from Craig's List

(http://craigslist.com), and Cytadia.com, which mapped real estate listings, brought the

Google Map mash-up into popular view. The company was adopting a wait and see

strategy as legions of hackers swarmed to its new technology.

By July 2005, Google had decided to release its API to anybody who wanted it.

Not only could programmers make their own application with Google's technology, they

were also free to make money by retaining a percentage of the Google AdSense revenue

(Google retained the right to advertise on any site that used its API.).   This business

strategy has resulted in the near ubiquity of Google Maps on the web, and has further

emphasized the importance of location for almost every aspect of network navigation.

A number of these mash-ups have resulted from Google's open sourcing of their

API – everything from real estate and crime oriented plotting (as described above) to the

peculiar trend of plotting narrative fiction. For example, "The Ultimate Interactive Google

Maps Guide to *Ghostbusters*"

(http://www.ironicsans.com/2006/04/the_ultimate_interactive_googl_1.html) plots all the

locations from the *Ghostbusters* and *Ghostbusters 2* films into a satellite image of

Manhattan. When a user clicks on one of the Ghostbuster symbols displayed throughout

the image, a short description of how the place factored into the movie, along with an

image from the movie pops up. The plotting of fictional space onto geographical images

has the interesting effect of locating a user's experience of content into lived space. Other

examples include the "Geography of Seinfeld"

(http://www.stolasgeospatial.com/seinfeld.htm) and the "Jacktracker"

(http://www.wayfaring.com/maps/show/4698), which do the same thing for *Seinfeld* and *24*

respectively. While these are fan-made mash-ups, there are numerous examples in the

commercial media as well. Most famously, HBO's mash-up of *The Sopranos*

(http://www.hbo.com/sopranos/map/?ntrack_para1=feat_main_title)*,* which uses video

clips and games to make the experience more interactive, displays precisely where

important events in the show have taken place. By offering fictional content in the non-

fiction content of a map, these Google mash-ups seek to personalize the experience of

fiction by locating it into familiar spaces. They offer users additional methods of

evaluating content, including distance and proximity – evaluative devices previously

unavailable to film and television viewers. The appropriation of this technique by major

media companies like HBO points to a trend within the traditional media to integrate the

conditions of the emerging network into content. With little doubt, the popularity of these

mapping techniques will eventually inform television storylines and narratives. The user-

generated content of a map can feed back into the writing for a more interactive television.

While one might argue that this blurring of the real and virtual resonates with the

postmodern account of virtuality, it in fact represents an interesting departure from that

formulation. The map is not encroaching upon the territory; rather, the territory is

encroaching upon the map. We need look no further than the most active formulation of

virtual reality today, MMORPGs (Massively Multiplayer Online Role Playing Games).

These VR games, such as *World of Warcraft, Ultima Online*, and *Star Wars Galaxies*, are

the direct descendents of MOOs. They are virtual worlds in which users inhabit parallel

geographies and compose parallel communities. While the popularity of these worlds is on

the rise, there exists an intriguing trend within them that corresponds with developments in

Web 2.0. For example, the 3D virtual world, *Second Life*, which as of May 2006 had over

232,000 residents, is a virtual society wherein one could own virtual land, engage in virtual business and form virtual relationships. It is also a place where virtual crowds gather around physical settings. Many academic conferences have a *Second Life* presence, composed not only of absent bodies, but of those in physical attendance as well. At the *Beyond Broadcast* conference at Harvard University's Berkman Center during the spring of 2006, participants in the physical space also participated in *Second Life*, where avatars gathered around a video feed of the conference. Also in 2006, the University of Southern California Center for Public Diplomacy's Award Ceremony was attended by more people in *Second Life* than in the physical space – although its unclear how many were present in both worlds (Linden, 2006). In any case, this use of VR bends the virtual to the location specific structure of the physical. In these virtual encounters, the overarching power of metageographic representations is defused by the time and space of the physical event.

While Web 2.0 has not disposed of the metageographic tendencies of virtual worlds, there is enough evidence to suggest a renewed importance on physical presence in even the most virtual of encounters. This trend has provoked significant anxiety amongst those with a vested interest in controlling and maintaining physical communities, because the physical is now often implicated in the phenomena of the virtual. For example, in August 2005, the University of New Mexico banned access to the social networking site Facebook from all campus terminals. The expressed concern was that the site, called *UNM Facebook*, appeared as though it was an official element of the University - it used the same colors and it appropriated the University logo on its portal. As a result, students were using their campus logins to access the unencrypted site, thus making sensitive University information vulnerable to theft. The ban was lifted in January 2006 only after Facebook,

working with the University, provided better encryption and a clear message to students not to use their university logins. Security issues notwithstanding, UNM was concerned that the extension of the physical community into the virtual posed a significant threat to campus life. Campuses are not equipped to police the behaviors of people online. And because students using Facebook are engaged in university-specific communities, universities are implicated in the behaviors of those students. From UNM's perspective, Facebook is similar to a bunch of rowdy kids at a neighborhood pub all wearing UNM sweatshirts – only amplified to ninety percent of the student body.

While the importance of the physical world is creating anxiety for institutions with a stake in their physical isolation, it is being marketed to users as a break from the metageographic control of postmodernism and the perceived tyranny of the virtual / real divide. Many Web 2.0 companies are working under the assumption that users don't want complete anonymity; they want the opportunity to perform certain aspects of their identity within a confined interface framework. And they want their physical presence to be searchable and retrievable.   Sprint and Verizon have recently turned on services that can pinpoint the location of cellphones through satellites and cell towers. Sprint is already offering a service called Family Locator that allows users to physically locate designated people in their network (https://sfl.sprintpcs.com/finder-sprint-family/signIn.htm). Another example is the company LocaModa, which claims to "power the web outside" (http://locamoda.com). Through interactive billboards, they allege to create networks "that extend the power of the web to the street…creating a closed loop between the web, cell phones and retail spaces." Many companies are working towards a future where

cellphones have Instant Messaging capabilities, where you can communicate with friends and know precisely where they are (Maney, 2006).

An early prototype of this kind of system is Dodgeball (http://dodgeball.com). This social software application combines a MySpace-type network with text messaging. The idea is that users create a profile on the web and select a network of friends. When they're out at a club, for instance, they report their location to Dodgeball using their cellphones – the location gets logged into the system and sent to other users in their network. Then, all members of a given network can search a location for nearby friends before heading out. Another service called Radar (http://radar.net) extends this concept beyond location-flagging to an annotated location-flagging. Radar is a mobile blogging service that implores users to "Share what you do, while you do it, with the people who matter most." Users can post images and text from their phones onto the web, as well as browse and comment other web posts from their phones. The three clauses in Radar's tag line capture nicely the direction of current web commerce: "share what you do" centers the position of the subject; "while you do it" emphasizes its integration into everyday life; and "with the people who matter most" suggests the selectivity of networks enhance the importance of individual subject position and location.

The Visibility of Everyday Life

The rhetoric of the new web, as exemplified in the above examples, is turning towards cultivating a popular perception of what Mark Weiser, the Xerox PARC scientist, called ubiquitous computing. In ubicomp, as it often called, computation is an instrumental technology to assist in accomplishing other tasks. According to Weiser:

A good tool is an invisible tool. By invisible, I mean that the tool does not intrude on your consciousness; you focus on the task, not the tool. Eyeglasses are a good tool -- you look at the world, not the eyeglasses. The blind man tapping the cane feels the street, not the cane. Of course, tools are not invisible in themselves, but as part of a context of use. With enough practice we can make many apparently difficult things disappear: my fingers know editing commands that my conscious mind has long forgotten. But good tools enhance invisibility (1993).

Weiser's characterization of ubicomp has become central to the big business of consumer networking. It is true that technologies are steadily inching towards invisibility, with smaller and smaller devices and simpler and simpler interfaces. But there is one important addendum to Weiser's formulation: the territory (the location of social and cultural life) is inching towards *visibility*. The spaces that are traversed with cell phones or the connections made through Google Maps have become the marketable features of the technology.

The commodification of everyday life resonates with philosopher Henri Lefebvre's assertion that "the everyday is a *product* (1987: 9)." For Lefebvre, the everyday is the excess of modern society. It is "defined by 'what is left over' after all distinct, superior, specialized, structured activities have been singled out by analysis" (Lefebvre, 1992: 97). It is the byproduct of the market's direct manipulation of every aspect of society – including work, politics and family. All that is left over is relegated to the category of the everyday. But Lefebvre claims that this is not an oversight; in fact, the everyday is a carefully structured element of capitalist society – one that is purely passive – that provides a space of consumption seemingly distinct from the more regulated sectors. By virtue of it being intentionally outside of the scope of representation, outside the parameters of the map, the everyday is "organized passivity" (Poster, 2002: 745).

The recent shift in marketing of new technologies suggests that Lefebvre's formulation, while still useful for identifying the category of the everyday, is a reversal of contemporary trends. Contrary to being residual, the everyday has become *the* product through which all other products are organized. Everything else – including politics, work and family – has become residual. Take, for example, the commercial for Microsoft's Internet Explorer 7 browser (released January 2006). A man runs through his daily routine: brushing his teeth, buttering toast, and feeding the cat. But instead of using a toothbrush, a knife and a can opener, his bare hands take on the appropriate functions. He steps outside in his bathrobe to take out the trash and sees a very attractive female mail carrier approaching on a bike. He uses his hands to transform his bathrobe into an ironically "stylish" seersucker suit. He then frames the woman with his hands, snaps an imaginary photograph and pulls a Polaroid from his wrists. The commercial concludes with the caption: "Everyday tasks made easier." Far from the fantasy dreamscape of cyberspace which existed in fantastic parallel to the real world, this commercial aims to associate the new digital culture with the physical locations of everyday life. The character is not whisked away into a fantasy realm; he is within his own context – a context enhanced by the overlaying of network technologies.

Another example is CNN's new CNNtoGO service, which allows users to beam video content onto their cell phones. The website boasts that viewers no longer need to be burdened by programming schedules: content now "fit[s] into your lifestyle" (http://premium.cnn.com/togo/). The aim of this enhanced service is to align the consumption of digital content with real world activities.   Traditional news outlets have

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long been feeling the crunch of digital distribution; but now, even sites firmly established in digital distribution (like CNN), are being pushed to disguise content as everyday life.

While Microsoft and CNN are invested in the proliferation of content, they are now more concerned with its availability, accessibility and integrative potential into existing patterns of consumption. And of course in manufacturing new patterns of consumption into which content can be integrated. For instance, Apple describes its new laptop as "the superfast, blogging, podcasting, do-everything-out-of-the-box MacBook" (http://apple.com). While blogging and podcasting are surely substantial trends, this promotional campaign seeks to normalize those behaviors as products of the technology, just as they attempt to differentiate their product *from* the technology. Apple is more concerned with selling the behaviors than in selling the technology. In the case of the MacBook, the ad suggests that the box is a way out of the box – that the computer allows one not to be so dependent on the computer.

Lefebvre warned that outside of a revolution, humanity would be incapable of escaping the banality of the everyday. Web 2.0 might be just that revolution; although, certainly not one Lefebvre would have endorsed. While the everyday has escaped the appearance of banality, it doesn't break from the logic of capitalism. It disintegrates previous perceptual distinctions between production and consumption, work and leisure, friend and stranger by compiling each binary into an apparently neutral, and fully visible, terrain. But the everyday is still highly organized; only now, through the careful design of open-ended interfaces (i.e. Myspace), it is active space through which subjects choose their position within defined frameworks. Instead of relying on metageographies, responsibility is given over to the subject to plot her position and to build personal, locatable networks.

The metageography of cyberspace, as articulated in postmodern theory, is tilting towards another overarching logic: multiple, interlocking microgeographies.

While the shift to microgeographies has opened up networks to non-proprietary and non-market based interactions (Benkler, 2006; Lessig, 2004), it has also redefined the parameters of the network and thus redefined the scope of commodification. Aspects of everyday life, once beyond the reach of markets, have become central in defining the re-commercialization of the web. That I can now map my personal location in relation to my chosen geographical and social space implies considerable new freedoms in network navigation, but it also implies considerable freedom for markets to navigate these personal networks. From text messaging to conversations on Myspace, these microgeographies, or maps of everyday life, are more vulnerable to market infiltration than the metageographies of cyberworlds. As everyday life becomes increasingly visible through increasingly invisible technologies, it becomes even more important for users to reflect upon the act of cartography. While the metaphor of mapping in early cyberspace constructed the located subject as distinct from the virtual world, the metaphor, which has become quite literal in web 2.0, now alters subjectivity through proximity. Metageographies have given way to microgeographies. And it just might be that we are so busy basking in geographic detail, that we fail to see the graticule.

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