Becoming Data:
Mapping, Navigation and Loss in the Networked Culture

By Eric Gordon

An ordered world is not the world order.
--Martin Buber, *I and Thou*[1]

In the contemporary media landscape, a lack of ordering suggests a lack of meaning. A .jpg sitting on my desktop gets lost in a pile of recent downloads unless I put it in its proper folder; the websites I've visited are forgotten unless they're bookmarked; conversations seem ephemeral unless I have them tucked away in an email folder. From there, information is often reproduced and networked as a means of assuring its longevity. With network organizers like flickr, del.icio.us, and blogger, personal organization becomes synonymous with social organization. Outside of "the network" memories appear to be at risk – only through a perpetual backing up and distribution of data can we hope to stave off the inevitability of fading memories. The Apple website turns this into an imperative: "*Make summer last forever*. Protect your summer vacation photos, movies and more with .Mac's backup software."[2] The more data is reproduced, it seems, the more reproduction is necessary to simply maintain the stability of memories and experiences.

Over the past several years, the sheer amount of data accessible to the general public has grown exponentially. While this information explosion has certainly produced more discrete bits of information, much more noteworthy is the increase in methods of data storage. As most files exist in multiple locations and formats, the total file size of

[1] Martin Buber, I and Thou, trans. Walter Kaufman (New York: Touchstone, 1970) p. 82.
[2] Apple Computer, .Mac, http://www.mac.com, 2005, website, August 12, 2005 2005.

data bits has well exceeded the total amount of discrete information available. The organization of data, perhaps more than its production, has emerged as the central concern for the computer industry.

Storage and search functions have become a primary growth sector. Google's recent IPO success has spawned upstart companies to focus less on the production of content and more on managing it. Companies producing blog software[3], specialized search engines[4], and remote storage systems[5] have largely surpassed those companies focused on content that characterized the initial dot-com boom. In addition to the user-side of things, a swelling number of networked-attached storage (NAS) companies[6] (storage elements that connect directly to a network) are struggling to supply the hardware infrastructure necessary for the increased demand.

As what was once not data (snapshots, email, consumer habits, and other people), becomes data, simple acts of consumption translate into rather complex acts of mapping and navigation. Even the rather innocuous act of accessing a website requires at least a rudimentary understanding of the network in which it exists and the manner in which its content is distributed. Learning how to organize and access content within culture's new technological scaffolding suggests not only the need to acquire different skills, but also a need on the part of consumers to accept and appropriate into daily practice the changing definition of content. As we are confronted with more complex means of navigating the culture, a need emerges for a meticulous mapping of that same culture. From blogs to personal data sites to digital cameras, mapping one's personal patterns, habits and

[3] http://www.typepad.com, http://www.moveabletype.com, and many others.
[4] http://www.technorati.com, http://del.icio.us
[5] Apple's iDisk, Xdrive, Servare
[6] NettApp, Isilon, and Exagrid

memories is no longer secondary to the everyday process of navigating content; it is the very same process.

While mapping has been introduced in recent years as the foundation for personal meaning and identity construction, it has also emerged as the greatest threat to those same processes. In everything from geopolitical struggles to computer networks, it is the map that provides the means for construction *and* destruction. In this essay, I will explain how the networked culture has necessitated a means of consumption in which cartography is imperative to the production of meaning. But as cartographic techniques proliferate as a means of fortifying personal and community identities, the boundaries defined in such processes make those fortifications vulnerable. As a result, the map enables the erasure of meaning. As a means of illustrating this point, I will look closely at the film *Eternal Sunshine of the Spotless Mind* (Gondry, 2004). Michel Gondry and Charlie Kaufman's surreal love story provides an important illustration of the contemporary and inevitable experience of becoming data. I look to this film to guide my discussion on the specificity of networked experience in the digital age.

Experiencing Networks

> Graphs or networks have properties, hidden in their construction, that limit or enhance our ability to do things with them.
> -- Albert-László Barabási, *Linked*[7]

It is increasingly difficult to conceive of content outside of networks. Even what we might consider single channel content emerges within a complex system of convergence.

[7] A paraphrasing of Leonhard Euler's Königsberg proof: Albert-László Barabási, *Linked: How Everything is Connected to Everything Else and What It Means for Business, Science, and Everyday Life* (New York: Plume, 2003), 12.

Motion pictures, for instance, exist in television promotions, official websites, archives such as imdb.com and fan sites. Each of these offshoots of a single film might be considered a node in a network. These nodes, no matter how distant, become important artifacts in any act of consumption. It is common for the content of films to extend to official websites, with added features such as outtakes and character back stories made available for download.[8] While every node is directed back to the hub (or the film itself) the satellite nodes play an important role in the creation of textual meaning. This is also true with television. As an example, the website for ABC's popular program *Lost*[9] features games, video recaps of previous episodes, premium content not available elsewhere, and discussion forums. The website serves as a breeding ground for rumors and theories concerning the show's central enigmas. So while the site remains in the service of the central hub (the television program), it establishes itself as a necessary node in the network.

Even if one doesn't seek out these satellite nodes, their mere existence allows the user to ascertain gravity in a singular text. Every node, from the perspective of a given user, is something that has the *potential* of being recalled. Even when not accessed, knowledge of a node's existence implies the extension of the network, and thus the relative importance of the immediate node. As with memory, we don't have to be thinking of something presently to say that we have memories of that thing. It is the potentiality of a node, much more than the presence of that which it represents, which constructs meaning in any network. That we could never recall the entirety of our memory does not preclude the existence of memory in general. It only enhances the

[8] Some examples…

[9] http://abc.go.com/primetime/lost/

phenomena we remember. Spotty recollections of a childhood vacation, for instance, draws our attention to the blank spaces, to the sea of data that flows in between the images recalled. For instance, I remember in great detail a walk on the beach with my parents; that isolated recollection gives me the impression of remembering the entire day during which the event took place. Partial recollection of a network does not preclude me from being able to experience the network as such.

Networks, thusly understood, extend into every aspect of modern life. The physicist Albert-László Barabási argues that network logic determines the structure of everything from memory to biological ecosystems to societies.[10] But while networks are present in almost every aspect of the natural and manufactured world, he points out, they are often only made knowable by technologies. The obvious example is the Internet; the networked interactions made explicit by digital technology surely predate Google. However, we tend to think of the things we do online as the direct product of technology as opposed to something that justified the existence of the technology in the first place. Another example is the railroad. Rail didn't so much create new places as it did construct meaning through the relative distance between places. Chicago's post-rail boom was the result of its geographic proximity to New York and the burgeoning West. Chicago's rail connectivity reinforced existing trade routes, but the increased speed and economy of the railroad prompted precipitous urban growth locally and the emergence of several other secondary and tertiary hubs. Individual nodes made accessible or inaccessible by the relative presence of links alter not just the condition of the whole network, but also the

[10] Barábási, *Linked*.

character of each individual node. Whenever technology enhances existing networks or produces them, the nature of the network inevitably bends to the logic of the technology.

So while networks might guide all forms of social and physical organization, as Barábási points out, the quality of networked interaction is directly influenced by the quantity of technological layers in any given network. Technologies rarely construct completely new networks; rather, they build on one another, constructing faster and better methods of connectivity from pre-existing methods of connectivity. Manuel Castells has suggested that technologically enabled networks correspond with the pre-existing network of capitalism and further a culture that is already fundamentally distanced from its participants. Most of what we experience, he argues, is filtered through the network: not present, but always already a representation. Experience can be momentarily apprehended but never possessed. The technological nature of capitalism keeps experience at arm's length so that it might always contain the promise of consumption.[11]

Martin Heidegger, while never referring specifically to networks, explains the precondition for them in his essay "The Question Concerning Technology." Identifying the byproduct of modern technology as "standing reserve," he suggests that "everywhere everything is ordered to stand by, to be immediately on hand, indeed to stand there just so that it may be on call for a further ordering."[12] Heidegger argues that machine technology has separated us from the world to which it was meant to attach us. On one hand his argument is rather commonplace, in that it's just another anti-technology position decrying modern alienation. But his identification of our active engagement with that alienation in the form of ordering is worth considerable attention. The modern

[11] Manuel Castells, *Network Society…*

[12] Martin Heidegger, "The Question Concerning Technology," Basic Writings, ed. David Farrell Krell (San Francisco: Harper Collins, 1993). P. 322.

world is only knowable insofar as we can order it. Technology becomes an end in itself, giving the world over to be ordered so that we can understand the nature of ordering. Heidegger's position is in clear alignment with the technology of digital networks; the digital network in many ways makes literal what for Heidegger was only a metaphor. Consider bookmarks in a browser, folders of documents on hard drives, or blogs. Now, perhaps, it is possible to see the standing reserve on our desktops.

Heidegger makes clear that the dangers of modern technology are not only that we, as stable subjects, become alienated from objects in the world. It is also the case that we become alienated from ourselves, as we become standing reserve. In his words:

> This danger attests itself to us in two ways. As soon as what is unconcealed no longer concerns man even as object, but exclusively as standing-reserve, and man in the midst of objectlessness is nothing but the orderer of the standing reserve, then he comes to the very brink of a precipitous fall; that is, he comes to the point where he himself will have to be taken as standing-reserve.[13]

If we can see the standing reserve on our desktop, does that mean we can also see ourselves as part of that standing reserve? Indeed, the multiple icons through which we are represented in instant messenger, email, hard drive, etc., literally allow us to order ourselves. That we become data in the networks we order is to be expected, as we expect those around us to be available for ordering. Take Amazon.com for example. While it functions as an archive of books, it also functions as a network of users. What has kept it relevant in a marketplace filled with archives is its transformation into a network. User comments, book lists, and author comments, add other users to the standing reserve. It is not only objects in an archive I can order, but also a network of individuals that have used the archive. Ultimately, myself included. This is not a

[13] Heidegger, "The Question Concerning Technology," p. 332.

byproduct of the machine; this is the general function of the machine. It is designed for an ordering subject, just as it is designed to disperse that subject to be ordered by others.

I turn now to the film *Eternal Sunshine of the Spotless Mind* (Gondry, 2004) as it represents with a surreal clarity the process of becoming data in the networked culture. Written by the unconventional Charlie Kaufman (*Being John Malkovich* (1999), *Adaptation* (2002)), *Eternal Sunshine* is a love story between two people, Joel (Jim Carey) and Clementine (Kate Winslet), who want desperately to hold on to one another. The film begins with the meeting of the two soon-to-be-lovers. On a cold February morning, Joel decides to skip work for a seemingly random excursion to the beach. He first notices Clementine on the beach, like him, walking contemplatively along the cold sandy shore. He sees her again in a coffee shop and then again on the return train. Eventually, they begin talking to one another and their awkward and rapid path towards love begins. In a practically vignette style, the story follows Joel and Clementine from their blissful beginnings to resentment and then anger. Within the first half hour of the film, Clementine ends the relationship, leaving them both devastated. Overwhelmed with grief, Clementine seeks the help of Lacuna, Inc., a company that specializes in a medical procedure that erases specific people and things from memory. Once Joel learns of Clementine's radical measure, he decides he can't handle the pain of being the only one who remembers, and he begins the process himself. The process consists of a mapping of the brain, followed by a targeted destruction of the sour memories.

The story is told from Joel's perspective. However, it is unclear at the film's beginning if the story is unfolding in real time, in flashbacks, or as we learn to be the case about twenty minutes into the film, from the surreal perspective of a mind in the process of being erased. This becomes apparent to the viewer just as it becomes apparent to Joel. Becoming aware of the erasing procedure, Joel and his mental representation of Clementine (because the story is unfolding in Joel's mind) struggle to subvert the neural map by hiding details and adding elements of randomness to confuse the system. *Eternal Sunshine* makes literal the ubiquitous tension between the impulses of ordering and giving oneself to be ordered. As Joel watches Clementine vanish in front of his eyes, he is confronted with the horrors of a pliable culture: the realization that before death, impermanence is the natural state of things. His struggle represents the security that corresponds with being mapped as he finds momentary solace in his ability to maintain control of his memories. But more dramatically, it represents the ironic consequence of mapping: erasure.

Mapping

So long as we represent technology as an instrument, we remain transfixed in the will to master it.

Martin Heidegger, "The Question Concerning Technology"[14]

Claudius Ptolemy in 153 CE defined a map as a "representation in picture of the whole known world, together with the phenomena contained therein." Lacuna, Inc. makes maps of people's brains. It is possible to consider the brain, for any given person, as the whole known world. Thoughts, memories and emotions are the phenomena contained therein.

[14] Heidegger, "The Question Concerning Technology." P. 337.

Accordingly, once this "complete" document of the world has been procured, the mastery of that world is only formality.

For Lacuna, Inc. the process of mapping begins with material objects: pictures, cups, books, etc. that evoke the targeted memory (typically another person, although there is a quick reference to someone erasing the memory of a dog). Patients view the objects while strapped into a machine, and their emotional responses are documented and located within their brains. The objects are reproduced as data, or representations of objects, and located on a map of the "whole known world." For the purpose of mastering the territory, the resulting map is much easier to deal with than the objects or even the person. Once the map transforms what is actual into standing reserve, it can be ordered.

The name Lacuna draws attention to the dual function of the map. Lacuna is an anatomical term that means cavity or depression – a strange name for a company in the business of mapping. But, while maps can help preserve territories by allowing people to understand the order of the physical world, maps can also assist in destroying territories. Once mapped, spaces can be targeted and erased. For example, in 1909, an international congress was formed to create a map of the world, an objective that seemed to require a time of peace. However, before the international map was completed, World War I broke out and actually served to speed up the process. A General in the United States Army said soon after the war broke out: "It happens that if a country has not actually been surveyed, or is but little known, a state of war generally produces the first improvements in its geography."[15] Destruction, very often, serves as a greater motivator than preservation for producing maps.

[15] Quoted in: Lloyd A. Brown, The Story of Maps (New York: Dover Publications, 1970) p. 305.

But can territories really be erased once they've been mapped? In *Eternal Sunshin*e, something goes very wrong during the erasure process. The procedure takes place in the middle of the night so the patient can wake up in his own bed and not remember a thing. After Joel takes a pill that renders him unconscious, two technicians, Patrick and Stan, arrive at his house. They hook him up to a machine, call up the map of his brain on a monitor and begin the process of locating and destroying his memories of Clementine. Then Patrick, the awkward tech assistant played by Elijah Wood, begins to tell Stan about his new girlfriend. It turns out that Patrick used information he gleaned from Clementine's procedure to make her fall in love with him. He essentially stole Joel's identity. Joel somehow overhears this from his half-conscious dream state and at that point decides he no longer wants to go through with the process.

Patrick's identity theft makes it clear that data is never truly erased from systems; only the procedures for calling up data are changed. Browsers are redirected and addresses are deleted, but data itself remains in memory until it is over-written, and even then, it can often be reconstructed. Patrick steals Joel's identity, or more accurately, he steals Clementine's representation of Joel. In this sense, Joel is not erased from Clementine's memory; his data is merely called up from a different place.

The human subject in *Eternal Sunshine* exists within a flux of data. And it is quite difficult to draw the line between one subject and another: what's the difference between Joel, and Clementine's representation of him? Can we say that each has a distinct consciousness? The philosopher Emmanuel Levinas sheds some light on this

question. "To be I is," according to Levinas, "to have identity as one's content."[16] Surely, when Patrick commandeers Joel's identity so that he might replace the loss that Clementine elected to experience, Patrick is, for himself, I. The complexity of the networked culture in which these characters engage illuminate Levinas' statement. He never suggests that one must possess one's *own* identity, or an identity that is somehow natural to oneself. Indeed, he never suggests that such a thing is even possible. So Patrick's appropriation of Joel's identity, while clearly perpetrated with malicious intent, is an everyday act made explicit (or even extreme) through the technological enhancement of everyday acts. In other words, people are always borrowing or appropriating personality traits or identities from other sources, but when assisted by technology, these simple appropriations are rendered destructive. To return to the film's dominant metaphor, maps can locate data in space, but they cannot determine their history or predict their use. As is made clear by Patrick's actions, how data gets used is entirely up to the reader of the map. And in a networked culture, there is never just a single reader.

Maps, thusly conceived, determine one's position in relation to data and as a product of the network, inscribe the user as data in relation to other users. Maps are tools for individual navigation, just as they are tools for systems to navigate individuals. These two instrumental functionalities exist concurrently. By navigating any data set, users essentially agree to have their choices and patterns become data for others to navigate. When I leave a comment on a blog, vote for my favorite American Idol, or buy groceries with my "club card," some representation of me is charted for another's consumption.

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[16] Emmanuel Levinas, *Totality and Infinity: an Essay on Exteriority*, trans. Alphonso Lingis (Pittsburgh: Duquesne University Press, 1961): 36.

With every cell phone call I make, my location within 6 feet is recorded and stored on a server for a year.

The consumer data collection industry in the United States spends millions lobbying against more restrictive data policies. According to Bruce Schneier, an expert on computer security issues, the United States has "many more laws restricting the government collection and use of information than laws restricting corporate use of collection and information."[17] The centralization of information in the hands of government is still seen as the largest threat to individual agency. This friendly climate in the United States toward personal data collection by corporations suggests a willingness to be monitored as long as long as it results in the convenience and perceived control of consumerism. For instance, just as Wal Mart monitors consumer habits for future marketing strategies, consumers have come to expect the resulting convenience of that surveillance. If you want to return something purchased at a different store, you expect the data to be networked; if you lose a receipt, you hope that the store has kept your records. Regardless of the threats that accompany this compromised privacy, the payoffs are much more immediate.

The repercussions of the liberal attitudes towards data promiscuity are evident well beyond the florescent corridors of Wal Mart. Not a day goes by when we aren't in some way engaged with a network – either entered into one or searching one. From reading to driving to dating, information, even if not always accessed, is always accessible. It might be said that Americans have engaged in something of a Faustian bargain: willfully giving up privacy in exchange for the control, convenience and safety

[17] Eric Dash, "Europe Zips Lips; Us Sells Zips," The New York Times August 7 2005.

of the network. Even as network control shifts back to government with the increased threat of terrorism, the willingness to submit to the extreme privacy breeches of the Patriot Act are the result of the same neo-liberal approaches to governance. We're not just promised safety from terror; we're promised the freedom to navigate information and territory without hindrance. We're encouraged to consume, to cultivate our sense of agency within the data stream. But the contradictions are clear. While networks can be used to apprehend terrorists who exhibit suspicious behavior, they can just as easily be used to set off bombs or destroy records. Faced with the reality that networks can protect and destroy, that maps can preserve territory or conquer it, users are perpetually engaged in zero sum decisions.

Yet, the desire to order only grows. Popular culture is filled with personalized lists – from iTunes to Netflix. As the capacity for data storage expands, with bigger and faster iPods and TiVos, we grow increasingly eager to make use of those excess gigabytes. Put this way, it would seem as though subjectivity merely bends to the latest in network capacity. If I have a 80 gigabyte hard drive, I am compelled to fill it with something. German media theorist Friedrich Kittler argues this point. He understands human beings as appendages of media, as opposed to the other way around. Referring to one of the more fundamental technologies with which we engage, he states: "humans could not have invented language," he says, "they must have evolved as its pets, victims or subjects."[18] While Kittler's rhetoric is a bit extreme, he ultimately reinforces Heidegger's point that technologies are not simply tools to aid in human endeavor; once

[18] Friedrich A. Kittler, Gramaphone, Film, Typewriter, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford: Stanford University Press, 1999) p. 109.

their function becomes naturalized, they essentially define human endeavor. Geoffrey Winthrop-Young describes Kittler's position this way:

> This does not mean that computers are artificial human brains, or that they digitally ape specifically human ways of thinking. Rather, they optimize certain patterns of information processing that were also imposed on human beings but subsequently were mistaken to be innately human qualities. Where subjects were, there programs shall be – because programs were there in the first place.[19]

In accordance with this, we might conclude that becoming data is an apperceptive phenomenon, a state of consciousness that precedes any engagement with specific machines. This is not difficult to imagine. When I log on to my email, I do not perceive that I am being ordered by the network with which I'm engaged; when Amazon's bot recommends products, I do not perceive that the message is a result of my navigation patterns being abstracted and reprocessed as original communication. But as every subject of technology is a subject of ordering, it is difficult to understand technology as a tool used to accomplish something befitting of an already established subject.

And yet, the majority of digital technology (for storage or communication) is built and marketed as just that. The structure of narrative, even the existence of content, is premised on individual subjects acting upon the technology: games, interactive narratives, even advertising that requires a click to activate. A defining feature of digital technology is its adaptability, its customizability. The concept of "on-demand" requires that there be a subject there to demand something. If we are, as Kittler suggests, merely "pets" of technology, then why is technology treating us like its master? Why does it allow us to feel in control of the network? Despite the known risks of mapping (identity theft, telemarketing, etc.), technology seduces us through the control of ordering.

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[19] Geofrey Winthrop-Young, "Silicon Sociology, or, Two Kings on Hegel's Throne? Kittler, Luhmann, and the Posthuman Merger of German Media Theory," The Yale Journal of Criticism 13.2 (2000): p. 397.

Heidegger and Kittler would argue that there is no agency in ordering, because we are simply performing the function of technology. But as becomes clear in *Eternal Sunshine*, while ordering is consistent with the functionality of technology, it is also the means by which agency can be announced over the din of the machines.

Off the Map

> Representations are authorized to speak in the name of the "real" only if they are successful in obliterating any memory of the conditions under which they were produced.
> --Michel deCerteau, *Heterologies*[20]

Joel and Clementine seek control by manipulating the process of ordering. If the map of Joel's brain details every space in which Clementine resides, the only way to preserve her memory is to place her off the map. The two characters struggle to find points in Joel's memory that have not been plotted. They explore buried memories of his childhood associated with embarrassment or shame: i.e. when he was pressured into killing a bird by a group of kids, when he was hiding under the kitchen table not wanting to go to school, and as a last resort, when he was alone in his bedroom with a "girlie" magazine. Clementine is pulled into all of these scenarios, momentarily spared from the figurative erasure of Joel's map and the literal erasure of the *mise-en-scene*. Meanwhile, back in "real" time, the lab technician Stan is forced to call in his boss, Dr. Howard Mierzwiak (Tom Wilkenson) to find the two itinerant characters. He arrives, bedraggled in the middle of the night, and bangs away at a computer complaining of how they're no longer "on the map." But in very little time, they are found and the map is extended to cover the new territory. The film cuts back to Joel's mind. After the scene where Joel is pressured

[20] Michel deCerteau, *Heterologies: Discourse on the Other*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1986): 208.

into killing the bird, he and Clementine (alternating between small children and their present appearances) walk home together from the scene. This idyllic moment is quickly interrupted as the house they're standing next to begins to rot, the bikes they're pushing disappear, and the background literally shifts to white. Despite their efforts to subvert the map, they are quickly re-ordered.

While technology is disciplining the characters into submitting to the logic of the map, with each technological correction, the characters become more resolute in their efforts to subvert the map. By ordering themselves into deliberate patterns that appear random to the machine, they essentially "learn" the machine instead of assuming "control" over it. Similar to how the mathematician Alan Turing conceived of artificial intelligence in his 1951 essay "Computer Machinery and Intelligence," machines think not through creating original thought, but by deceiving humans into thinking that they have. His famous Turing Test placed a human subject in conversation with two entities, a machine and another human. After a series of questions, the human subject would be asked which one of the two entities was the human. If he or she chose the machine, then the machine passed the Turing Test. The test was designed to measure not whether machines were capable of producing original thought, but if they were capable of producing convincing representations of thought. Joel and Clementine engage in what might be called a reverse Turing Test. As subjects of technology, they seek to understand it and reproduce it so that they might trick it into thinking their placement is consistent with its logic. They succeed in making the machine believe that they are part of the machine. They don't hide by asserting their otherness from the process; instead, they resist being mapped by mapping themselves.

Determining agency within networks is not a matter of locating a stable and consistent subject; it is a matter of defining subjectivity as a dispersed and malleable assemblage of parts. Just as one can only read a map if they understand the logic of its symbolic representation, one can only assert agency in a network, if they understand how data is ordered within that network. In other words, becoming data does not preclude the possibility of being human, but in fact, given the technological conditions under which we live, is a prerequisite.

Martin Heidegger, while supplying a productive framework through which to understand networked interactions, is rather cynical in his conclusions. Being, Heidegger says, is concealed by the standing reserve. Data and humanity cannot properly coexist as they contain radically different impulses for self-fulfillment: data wants to be mapped and humanity wants to map. But as our relationship with technological networks grows increasingly instrumental, it is simply impossible to maintain such stringent boundaries around the definition of human. Media theorist N. Katherine Hayles, suggests that this view of the self, "authorizes the fear that if the boundaries are breached at all, there will be nothing to stop the self's complete dissolution."[21] The natural reaction to such catastrophic consequences, she argues, is the claim to control. By policing the borders between human and machine, each can be preserved as separate, if parallel entities. This is a failed proposition. According to Hayles,

> The very illusion of control bespeaks a fundamental ignorance about the nature of emergent processes through which consciousness, the organism, and the environment are constituted. Mastery through the exercise of autonomous will is

[21] N. Katherine Hayles, How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics (Chicago: University of Chicago Press, 1999) 290.

> merely the story consciousness tells itself to explain results that actually come about through chaotic dynamics and emergent structures.[22]

Every map we produce is an assertion of mastery within the network. On-demand content cultivates an illusion of control. It allows us to think that we can order the world to suit our needs while staving off the "chaotic dynamics and emergent structures" within which networks actually exist. The problem is not that I order my world through iTunes and email, but that by virtue of that ordering, I feel as though I have control. Again, that I participate in ordering the world as standing reserve is not at issue; that I use that ordering to falsely fortify my humanness is what leads to vulnerability and eventually loss. It is at that point, that I become as Kittler predicts, technology's pet. The real challenge will be in understanding the network sufficiently enough where I can be comfortable abandoning control.

In *Eternal Sunshine*, once Joel and Clementine understand the process by which their representations of one another are being erased (after all their attempts at hiding fail), they seek out more meaningful spaces. They find themselves at the house on the beach where they first met. It is the site of the encounter from which all of Joel's memories spring. It is the hub of the network. When they enter the darkened structure, the timeline of events becomes clear to the viewer of the film. We've seen the house once before, but couldn't quite place it in their relationship. It is not until the end of the film, that we are given this final piece to reconstruct the order of the course of events we've seen. When they get to the house, that "aha" moment for the viewer is similarly powerful for Joel. As he enters the abandoned beach house with Clementine, it is as if he

[22] N. Katherine Hayles, How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics (Chicago: University of Chicago Press, 1999) 288.

is experiencing their first and last encounter at the same time. With hope and sorrow, Joel relives their original moments together. As Clementine explores the house and runs upstairs, Joel, nervous about trespassing, runs out of the house and leaves Clementine behind. In a repetitive refrain, Joel laments: "Why did I leave the house that night?" Of course, he is referring to both nights: the night they met and the night they met again for the last time; the night he began ordering Clementine and the night he stopped. As the house slowly melts away on screen, Joel's map of Clementine is erased.

But the film's afterward returns to its opening scene. Joel decides not to go to work on a cold February morning and instead takes a train to the beach. On the train, he meets Clementine. As it turns out, this is their first encounter since having their memories of one another erased. They return to the beach, and the house at which it all began and ended. Taking notice of one another, but not knowing why, the two former lovers begin to talk. Just as data can never truly be erased from a hard drive, the remnants of their memories spur them to recreate what had been erased. Like moths around a flame, they swarm to that original and final encounter.

Eternal Sunshine represents the repercussions and possibilities of becoming data. Both Joel and Clementine are ordered by the other into standing reserve and subsequently erased. Yet, what becomes clear by the film's end is that the process of ordering or being ordered does not preempt the process of encounter. The philosopher Martin Buber argues that the world is twofold: it is composed of two fundamental relationships, I-It and I-You. In an I-It relationship, we encounter the world as knowable and mappable objects (even other people). In an I-You relationship, there is true reciprocity. In other words, there is

no longer a clear distinction between I and You, they emerge only as relation. The I-You, according to Buber, is fleeting, and it is always the case that You turns into It so that we can reflect and possess. But even though it is temporary, "the You knows no system of coordinates."[23] So when Joel and Clementine retreat to the house, they retreat to I-You, an unmappable relation. Even though we see the It of that experience erased in front of our eyes, the true encounter with another person remains outside the purview of control.

It is clear that the ordering of personal worlds will drive industry and culture for some time to come. It is also clear that we will continue to give ourselves over to be ordered. As digital memory grows ever larger and devices grow ever smaller, the capacity and occasion for ordering will increase. However, denying technological realities for the paper-thin mythology of humanism is, as Hayles rightly point out, destructive; and believing that we can assert autonomous control over the networks we navigate is equally so. Digital networks extend into everyday lives as the means of ordering the world. Within these networks, the world presents itself to us as a limited quantity of obtainable artifacts. We participate in this world by ordering what Buber calls the It-world and transforming ourselves into obtainable data to be ordered by others. *Eternal Sunshine of the Spotless Mind* represents an occasion where, even within the parameters of the networked culture, encounter is still possible; indeed, encounter, if only momentary, still defines the experience of the network. With that in mind, Martin

[23] Martin Buber, *I and Thou* (New York: Simon and Schuster, 1970): 81.

Buber's words seem more accurate today than ever before: "Without It a human being cannot live. But whoever lives only with that is not human."[24]

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[24] Buber, *I and Thou,* 85.