BORGES AND NEW MEDIA:

CONNECTIONS VIA

HETEROTOPIC

SPACES

by

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ABSTRACT

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Borges' short stories such as "The Aleph" and "The Garden of Forking Paths" were uncanny in their foreshadowing of hypertext and internet developments in the 1990's. Borges' work was often credited as inspiration for various projects striving to make use of these "new" technologies in creative ways. These projects include, for example, Stuart Moulthrop's seminal Storyspace work, "Forking Paths," and a MyStory project called, "Borges Fetishization," based on Greg Ulmer's theories of Electracy. The connection between Borges' situations and web-based projects such as these can be further developed through an examination of heterotopic space. The heterotopias found in Borges' work and in the new media projects are critically important and underexplored elements of the work. This thesis will explore the types of heterotopic spaces within Borges' texts, their significance within the text, the underlying political implications, and the subsequent influence they had on a selection of significant New Media theories.

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INTRODUCTION

In 1970, Borges wrote about his stay in Austin, TX, while teaching at the University of Texas. He makes the comment that the friendliness and generosity of Americans "helped me overlook skyscrapers, paper bags, television, plastics, and the unholy jungle of gadgets" ("Autobiographical Notes," 95). At another point in the same essay, he says that he was "unimpressed by railway trains, by propellers, by airplanes, and by electric fans" (62). One of his goals in his writing was to compose "beyond the here and now, free of local color and contemporary circumstances" (62), and so references to technology are conspicuously absent in the bulk of his work. When they do appear it seems to be in spite of Borges' clear distaste for gadgets and mechanics. One must ask, then, when it comes to New Media technology, why invoke Borges?

Borges' short stories such as "The Aleph" and "The Garden of Forking Paths," from a present day perspective, seem uncanny in their foreshadowing of hypertext and New Media developments in the mid-1980's and early 90's. Works from his volumes, *Ficciones* and *The Aleph*, published between 1941 and 1949, are often cited as metaphors and as unexpected prefigures for various technologies. Stuart Moulthrop writes that "Though they come from a time long before the advent of electronic textuality, Borges' stories frame fundamental questions about the limits of narrative…that inform hypertextual fiction" ("Reading from the Map," 119). In an article called, "Webmaster Borges," author Douglas Wolk writes, "I am not the first to point out that Borges' great invention, the Library of Babel, that immense, honeycombed labyrinth containing every possible text—true, false and gibberish—is a fanciful metaphor for the Web" (n.p.). He goes on to say that the Aleph "is Netscape Navigator in all but name," the "Zahir…is none other than Microsoft Internet Explorer," and "The Lottery in Babylon" is "a precise allegory

of the dot-com IPO market and internal Web commerce" (n.p.) In an article called, "Searching for Cyberspace," David O'Dwyer writes that one can "substitute 'cyberspace' or 'the Net' for 'Tlon', and you have a dystopian McLuhanesque vision of the perils of our networked society, warning against the increasingly blurred boundaries between the 'real' and the 'virtual'" (n.p.). Most recently, *The New York Times* published "Borges and the Foreseeable Future," in which author Noam Cohen provides a list of "prophetic Borges short stories…and examples of those prophesies fulfilled" (n.p.). The encyclopedia of Tlon, he says, is like Wikipedia, Funes' memory is like micro-blogging and "the Internet itself is the Universal Library" (n.p.). Cohen says that "a growing number of contemporary commentators—whether literature professors or cultural critics like Umberto Eco—have concluded that Borges uniquely, bizarrely, prefigured the World Wide Web" (n.p.).

In fact, it seems that academic discussions of Borges' short stories are consistently identified as prefiguring something, regardless of the specific time period in question. Even critics who situate Borges within the era of his own lifetime often reference the notion that Borges was ahead of his time. Gisle Selnes writes in the journal, *Variaciones Borges,* that "his work seems to anticipate some of the most basic theoretical tenets of his own times --while simultaneously tracing their limits and articulating some of their inherent paradoxes" (79). Borges' work seems to be that of the "post." His work is described not as structuralist, but poststructuralist: in 1966 Michel Foucault uses Borges' piece called "John Wilkins' Analytical Language" as his springboard into deconstructing foundational systems in *The Order of Things*. It is not modern but postmodern: John Barth uses Borges just two years later in "The Literature of Exhaustion," an essay that essentially "amounts to a manifesto of postmodernism" (Keep, McLaughlin and Parmar). Barth focuses primarily on Borges' short story, "Pierre Menard," as a primary example of an author who has pushed literature beyond its natural limit. And now, it is not the human but posthuman within Borges' work that is of note: In the introduction to *Cy-Borges: Memories of the Posthuman in the Work of Jorge Luis Borges*, editors Stefan

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Herbrechter and Ivan Callus address the "logic of the precursive" (Herbrechter and Callus, 19). They invoke Katherine Hayles' definition of posthuman, meaning "not that humans have died out, but that the human as a concept has been succeeded by its evolutionary heir. Humans are not the end of the line. Beyond them looms the cyborg…" (qtd in Herbrechter and Callus, 16). Herbrechter and Callus say that "what Borges contributes to posthumanism is a memory of cyborgs and of the challenges they pose to experience and thought—but one that contrives to proceed before the invention of cybernetics" (17). In many ways, these critics are all commenting on elements in his work that seem to always be just out of reach. Like the imaginative worlds of Philip K. Dick, the technology never quite seems to catch up with Borges' imagination.

To some degree, it is no surprise that Borges prefigures, anticipates and contrives to proceed before those who chronologically succeed him. For one thing, Borges was deliberately striving for a "timeless" quality in his work. Ronald Christ writes, in *The Narrow Act*, "each of Borges' stories tends to present an action which reveals the repetitiveness of history and characters who are the manifestations of a single being…in order to reach the primordial world of myth" (31). For another, Borges was reading about other thinkers like himself who were focused on the paradoxes of information structure and the complexities of organizing knowledge. For example, Borges alludes to Paul Otlet in his essay, "John Wilkins' Analytical Language." Otlet foretold a similar future in information structure at about the same time that Borges began writing his short stories. Borges was first and foremost a librarian, and Otlet was a bibliographer. Although their day-to-day tasks differed greatly, they overlapped significantly in their consideration of the underlying structures of language, information and communication. Otlet amassed an analog version of the World Wide Web using note cards which "represented the latest advance in information storage technology: a standardized, easily manipulated vessel for housing individual nuggets of data" (Wright). In 1934, Otlet wrote about a time where all information would be like blending radio, cinema and the telephone. Otlet's genius, like

Borges', lay in his ability to foresee the future of information architecture regardless of advanced digital technology.

But perhaps even more important than Borges' timeless quality is the notion of "precursive logic." There is no need, he says, for the standard chronological, cause-effect relationship. Borges explains this in his essay, "Kafka and his precursors," when he says that every author invents his own precursors. The work of each author "modifies our conception of the past, as it will modify the future" (365). Borges lists several authors who he considers to be Kafka's precursors: Kierkegaard, Browning, and Lord Dunsany. "Kafka's idiosyncrasy," says Borges, "is present in each of these writings, to a greater or lesser degree, but if Kafka had not written, we would not perceive it; that is to say, it would not exist" (365). This concept of precursive logic is a popular way to justify otherwise tenuous historical connections, and one critic goes so far as to state that "one of the standing tenets of the version of postmodernism informed by the work of Borges is that the chronological succession of 'great works' – the backbone of 'tradition' – is no longer operative in a post-Einsteinian universe" (O'Donnell, 54).

Other writers, like Umberto Eco, have tried to explain in more detail how the chronological relationship between two authors can be so slippery. In "Borges and My Anxiety of Influence," Eco explains that two authors obviously may be contemporaries and can influence one another, or that one author may precede another thus providing historical influence. However, that is not all. Eco situates these hypothetical authors not as points on a timeline, but as two points on a triangle. The third point, X, is "culture, the chain of previous influences…the universe of the encyclopedia" (1260). Then he says that one must also, in the diagram, account for the *Zeitgeist*. These two authors, the chain of culture and the *Zeitgeist* can then be configured in myriad ways, and each writer's experiences, histories and memories will forge or obscure various connections. That is, a writer may be influenced by another writer but not through a direct connection or contact. A writer may come to know of his connection with another writer only through a third party pointing out the similarities. The author didn't recognize

or remember having been influenced until after the fact. Eco says "it is often the case that these moments are confused because any consideration of influence must take account of the temporality of memory" (1262). So it is neither uncommon, nor unreasonable, to utilize this type of precursive logic when examining the connections between Borges and subsequent movements, authors or ideas.

Not all critics are so enthusiastic about precursive logic, however. When it comes to relating Borges to New Media technologies, J. Andrew Brown says that often such an argument is:

> more of an affirmation of the sense that hypermedia is Borgesian than a compelling argument for why we should read it as such. A more intriguing question for this reviewer is why the perceived need exists to identify something as 'Borgesian' in the first place (231).

Aside from pointing out the similarities between New Media and Borges, why should one make such connections? Often, critics say that such readings help us understand the new technology by way of analogy, metaphor, or making "possible insights and approaches and equivalences that might not otherwise have been remarked" (Herbrechter, 35). But why hone in on "hypermedia" in particular? Why continually turn to the potentially technological in Borges' works that are themselves explicitly devoid of technology? Would not the work of a bona fide science fiction writer like Philip K. Dick or H. G. Wells be more relevant and persuasive?

In the array of Borges criticism and responses, the New Media criticism of the late 1980s and early 90s marks a turning point. This is the moment in which critics, programmers and authors were suddenly able to not only *build upon Borges' ideas*, but to actually take a stab at *building Borges' ideas*. For the first time, they were able to take his concepts and situations and "create" them using hypertext, the Web, multimedia, and so on. Essentially, they moved Borges' work from the space of the page into what some call "cyberspace," some call the "metaverse," some call "virtual reality," and some, nostalgically, call the "information

superhighway." All of these terms underscore a new relationship among users, information and language, and space. Regardless of the chosen term, it is here, within the discourse of space, that some fundamental connections can be made between Borges and New Media.

A close examination of the types of spaces one finds will reveal that Borges was responding to a particular configuration of social and political space in early 20th century Buenos Aires, and that some of these conditions again converge in the 1990s New Media community that Borges not only prefigured but directly influenced. These theorists brought Borges' political baggage with them through the work of Foucault; it is, in part, what attracted them to Borges in the first place. An examination of the discourse of space in Borges' work will shed light on the roles that human relationships play in the face of external, uncontrollable and emergent political currents. Though Borges' works are not overtly political, Borges himself was living in a politically tumultuous time. He had contentious relationships with Argentinean leaders, and he had ongoing concerns about both the spread of fascism and the spread of capitalism. These issues are written into his works and become clear as one examines his use of space. The issues of space, of bodies within space, information architecture, and of the power structures striving to control bodies and space intimately connect Borges with New Media. An exploration of these spaces will shape not only the hope with which we face new technologies in the 21st century, but it will drive potential strategies to reshape the very spaces themselves as possible (and impossible) alternatives to the "reality" of today's global power structures and information flows.

CHAPTER 2

THEORIST TURNED ARTIST

2.1 Moulthrop and "Forking Paths"

Critics and thinkers for decades have been addressing the metaphoric connections between computer networking and some of Borges' trademark concepts like the library of Babel, the "Forking Paths" novel or the Aleph. For example, in 1991, Ned Davison published an article titled, "Literary and Electronic Hypertext: Borges, Criticism, Literary Research, and the Computer." He talks about a "labyrinth of 'software,'" and "networks of verbal paths" (1159), and he makes overt connections to Borges' stories. He says that such connection "provides a meeting place for literary and electronic hypertext where the two essentially separate but parallel concepts are drawn together as companions in literary research" (1161). In *Unthinking Thinking*, also published in 1991, Floyd Merrill talks about the "hyperfictionalization" that Borges has in common with math and physics, and he maps Ts'ui Pen's novel out on a two dimensional grid similar to Otlet's archive of notecards in Belgium.

In 1986, Stuart Moulthrop, then an Assistant Professor at Yale University and today described as "an award-winning artist, writer, and scholar of digital culture" (Moulthrop, "Details"), used a new hypertext authoring system called *Storyspace* to create a project called "Forking Paths." It was based on Borges' short story, "The Garden of Forking Paths," published in 1941. Moulthrop's project marks a turning point from that of criticism which simply seeks to *comment* to that of criticism which seeks to *build*. It brings specific narrative issues—such as linear time and information space—to the forefront of the New Media discussion. The theory, says Moulthrop, "of time as plenum rather than linear continuum evokes the Borgesian master trope of the labyrinth" ("Reading from the Map," 120). Users maneuver through "Forking Paths,"

as if they really are in a labyrinth, not knowing what they will next encounter or how it will relate to what they have already read. Through mapping and spatialization, Moulthrop takes Borges' notion of an infinite labyrinth from a concept to an actuality, "like any game in an electronic arcade" (Brook 272). One might describe this as an "untranslatable translation" (Guertin, interview).

Borges' story is about a Chinese man named Yu Tsun, who works for German intelligence during World War I. He has learned the secret location of a British artillery park in a town in France, and he must communicate the name of this town, Albert, to the Germans. Yu Tsun creatively decides to murder a man who has the same name as the town, Albert, so that the name will be mentioned in the major newspapers. He chooses Stephen Albert, a well-known British sinologist. When Yu Tsun arrives at Albert's house, he finds himself caught in a web of great personal significance. Albert tells Yu Tsun of a philosophical theory, coincidentally postulated by Yu Tsun's great-grandfather, Ts'ui Pen. His great-grandfather, it seems, committed his life's work to two great projects: the writing of a masterpiece of fiction and the creation of an infinite labyrinth. For years, the great man's descendants have believed that he achieved neither of these projects, since he left behind him no trace of the labyrinth and only a fragment of the novel, which is described as "a contradictory jumble of irresolute drafts" ("Garden," 124). Stephen Albert reveals to Yu Tsun that the labyrinth and the novel are one and the same. The great-grandfather, Borges writes, "believed in an infinite series of times, in a growing, dizzying net of divergent, convergent, and parallel times. This network of times which approached one another, forked, broke off, or were unaware of one another for centuries, embraces all possibilities of time" ("Garden," 127).

Moulthrop's project, "Forking Paths," took Borges' story and broke the narrative into "nodes," adding new material that he himself had written, which he then intertwined with Borges' work. Moulthrop was attempting to emulate the labyrinth described in the original short story by using the short story itself as the foundation. Each node is a paragraph or page of

text, and within that text are certain highlighted words. By clicking on a word, users are transported to another page with a new paragraph of text. It is possible for users to return to where they were, but ideally Moulthrop hoped that users would forge ahead through the hypertext. They could create their own version of "Forking Paths," by clicking on words or links which appeal to them at that moment. The next time they "read" "Forking Paths," they may have an entirely different experience by clicking on different links (Moulthrop, "An Anatomy").

Moulthrop created something that today we would recognize as a simple, static set of hypertext pages and links. This surely sounds very simple and commonplace to today's users who read texts via social networking pages like Facebook, ongoing feeds from Twitter, and e-reading devices like the Kindle. In 1986, though, Storyspace was a groundbreaking concept. Moulthrop wrote that hypertext systems like this "would usher in a new paradigm for textual communication," ("You Say You Want," 693) and he was right. He had set the stage for many more Borges-inspired New Media projects.

"Forking Paths" is one of the earliest and best known projects that sought to use technology to "create" one of Borges' famous situations. Moulthrop received much attention for this Borges-inspired *Storyspace* work. Over fifteen years later, a version of "forking paths" was included in the *New Media Reader*. The editors call it "the most famous unpublished piece of hypertext fiction" and say that it "should help to show even more clearly the influence that Jorge Luis Borges has had on new media literature" ("Forking Paths, 1987").

2.2 Ulmer and "Borges Fetishization"

Another early though lesser known project was called "Borges Fetishization." It is a website that was created by Marcus Casal as part of Greg Ulmer's Fetishturgy project. The Fetishturgy project was developed in and through several graduate courses Ulmer taught at the University of Florida in the mid 90s. Joseph Tabbi, Professor of English at the University of Chicago and the founder of the *Electronic Book Review*, describes Ulmer, Casal's professor and guide as this site was built, as someone who "has been working for some time to support

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the transition of the academy from literacy to electracy" (n.p.) Victor Vitanza says that "Ulmer focuses primarily on a theory of invention…which would lay bare associational thinking, co-incidences and accidents," and that "his anti-method of invention, therefore, moves from a linear, discursive production of discourse to a non-linear, hypertextual/multi-media production" (n.p.). In a 1996 interview, conducted via email, Ulmer said that these courses had "invented fetishturgy as a poetics of homepage design" (qtd. in Tabbi).
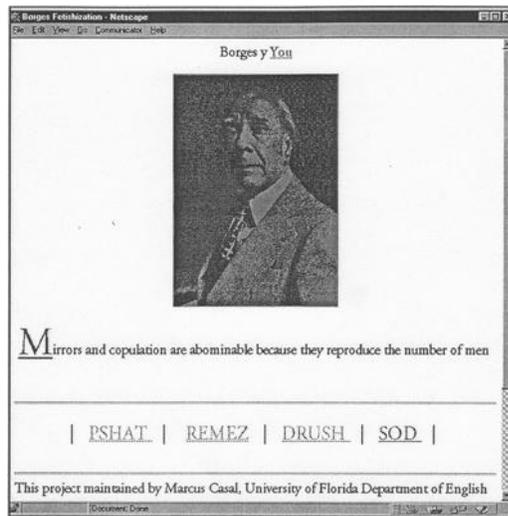
Figure 2.1 Screen Capture of Casal's Project: "Borges y You"

The first screen of the project, with a photo of Borges in the center, proclaims, "Mirrors and copulation are abominable because they reproduce the number of men" and the user is faced with six hyperlinks: The word "You," above the picture, the extra large M in the word "Mirrors" and four unusual words: "Pshat," "Drush," "Remez," and "Sod." From the "Borges Fetishization" main page, click on "you," and a screen appears which states, "Meet the fetishturgist. He likes you, in a sense. More precisely, he likes what you're hiding." This is coupled with a picture of someone in a leather bodysuit and gasmask. Click, instead, on the M and you get, in two languages, "Advertencia pagada: paid warning. You've come a long way, baby!" The image this time is a cartoon called, "Kid A in Alphabetland," and says, "You deliver mortals from the prematurity of birth. Only to lead them to the madness of language, the

sickness of reason and the nightmare of history! Not to mention libidinal alienation. The mirror stage is for the birds!" (Casal).
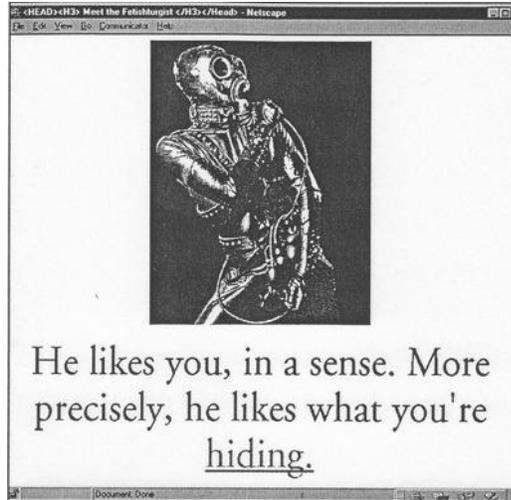
Figure 2.2 Screen Capture of Casal's Project: "Meet the Fetishturgist"

Figure 2.3 Screen Capture of Casal's Project: "*Advertencia Pagada*"

Casal makes the most of the electronic text formatting. He deliberately makes some letters or words larger than others, he changes the colors and codes in unusual spacing. Each page also contains several links, which are intriguing enough to draw the user further in although there is no "plot." He has taken the screen and, in Richard Lanham's terms, forces us

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to look "AT" it rather than "THROUGH" it. The use of different size fonts, or scaling, is also important in that it makes the user "self-conscious about perceptual distance and the conventions, neural and social, that cluster around it" (42). This, Lanham says, can transform reality utterly, without changing it at all: "That distance itself can so change an object ... locks us into a conception of art as essentially interactive" (42), which is in direct contradiction to "canonical passivity." Casal has tapped into this and has used Borges to his advantage.

The "Borges Fetishization" site, while not explicitly based on any particular story, exemplifies many of Borges' themes: it examines proliferation and repetition, in this case of information that the World Wide Web created or, rather, facilitated; fetishization, in this case of the screen upon which the project appears that we look at rather than through; and the use of lists and play with language which taps into the need that viewers have to find logical connections where, often, there are none. This is, after all, how we as readers are accustomed to making meaning within a narrative. When faced with unrelated objects side-by-side, our inclination is to find the underlying connection or structure.

<u>2.3 Nelson and "The Aleph"</u>

Next, consider Borges' short story, "The Aleph." The Aleph, as explained in the story, is an object found in a very particular spot in the basement of one of the character's homes. When one holds one's head at just the correct angle, it is possible to see "the place where, without admixture or confusion, all the places of the world, seen from every angle, coexist" (281). The online project is one of the most ambitious in its interpretation of the Borges text. The creator, Fernando Das Neves, was a computer science student at La Plata National University in Argentina in 1997. He is a programmer more than a student of literature, but he pays homage to Borges on the first page of his website by quoting a non-standard translation of "The Aleph":

"The Aleph?" I repeated.

"Yes the place where there exists, without intermingle, all the places in the orb, seen from all the angles."

Das Neves' Aleph is described as "a tool for spatially representing user knowledge about the WWW docuverse." The docuverse is defined as the universe of information found on the WWW. This type of knowledge, like the knowledge found in Borges' Aleph, is difficult to share, Das Neves explains, because it is easily lost (as the memory of Borges' Aleph quickly fades from the narrator's memory,) and because it is difficult to explain to others (or, as Borges puts it, because the descriptions are "inadequate"). He is working on a visual algorithm which uses an absolute coordinating system, "so if two users synchronize their coordinate systems, they can talk about 'that zone in the upper right corner,' without needing to know the other person's map."

Figure 2.4 Screen Capture of Das Neves' Project: "The Aleph"

Das Neves' description includes several diagrams of his vision of the Aleph. They are two-dimensional representations of multiple layers, using axes and coordinates, as well as several graphic indicators (color, size) to organize the docuverse as opposed to the universe of information found in the Library. As Das Neves says, "We build the map by considering that any part of the docuverse can be described by a set of terms" (n.p.).

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The Das Neves site describes the search engines of the 1990's as either "explorers" of information space which explore the Web looking for new documents or "cartographers," which structure the information found by the explorers in ways suitable for a better understanding of the space. What the Aleph will do is "provide graphical maps as the way to build a common ground where the group can see, talk and share what they have found, and helps the user in relating documents to contents and other documents."
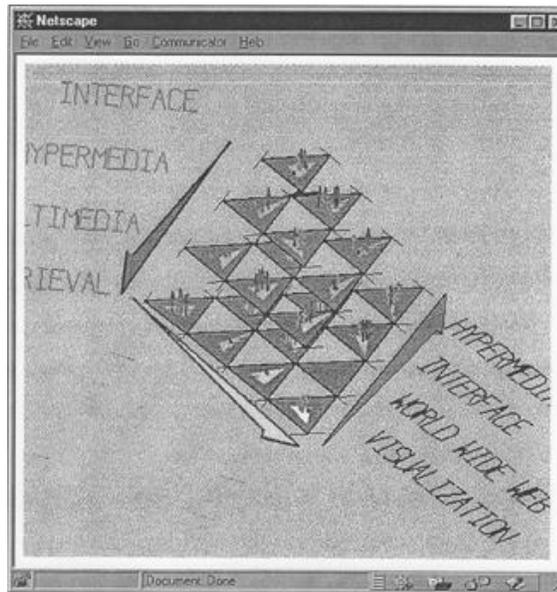
Figure 2.5 Screen Capture of Das Neves' Project: "Interface"

The Aleph is similar to Ted Nelson's Xanadu project, which Nelson began in 1960 with the mission of creating a "deep-reach electronic literary system" (Nelson, "Xanalogical Structure"). Nelson and his team were focused on creating a system that would not only index and search huge numbers of documents, but would "support analysis and detailed understanding." They wanted to create a system that would help the reader make deep, meaningful connections throughout the content with which they were working and to develop their ideas, not simply to link from one place to another like hypertext links on the Web (Nelson, "Xanalogical Structure"). In fact, says Nelson, the "World Wide Web was not what we were working toward, it was what we were trying to *prevent*." The Web, he says, "displaced our

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principled model with something far more raw, chaotic and short-sighted. Its one-way breaking links glorified and fetishized as 'websites' those very hierarchical directories from which we sought to free users, and discarded the ideas of stable publishing, annotation, two-way connection and trackable change" (Nelson, "Xanalogical Structure") The notion of "broken links" inside Borges' Aleph is not addressed in the story. One assumes that the Aleph is advanced enough (or smart enough, or magical enough) to prevent broken connections. It would be horribly out of place for the narrator to encounter a "404 Not Found" image during a visit to the basement stairs. In this way, the Aleph is much more advanced than any current real version of searching or indexing software.

Nelson would like to do away with the idea of "documents" and "applications" that are each separate and often incompatible. Instead, he proposes a model of "transclusion" and "Edit Decision Lists." What he describes is similar to RSS newsfeeds that can be formatted by end users to meet their own delivery needs. However, Nelson's plan is more comprehensive than this and includes all kinds of media in addition to text.

2.4 Hypertext Discourse

In the late 80's and early 90's, several tools like Storyspace were released that made hypertext technologies more accessible to scholars and writers, thus providing them with the means to begin actually experimenting with "alternate realities" rather than just writing about them. This discourse and activity of the New Media theorists began to increase at a rapid pace. As Janet Murray writes in *Inventing the Medium*,

> These authoring environments and applications programs of the 1980s marked a new era in the expressiveness of the medium, by opening up the encyclopedic and spatial properties of the computer to wider communities of practices, communities composed not of programmers but of artists, writers, and educators (9).

Personal computers became readily available, Interactive Design and Information Architecture began to emerge as popular scholarly fields of study, and notions of networks as rhizomes

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provided a "radical new pattern of meaning" (Murray 9).   Thinkers like Moulthrop, along with others including George Landow, J. David Bolter, Greg Ulmer, Sherry Turkle, Donna Haraway, and Michael Joyce actively engaged in this movement programmatically, scholastically and creatively. Kristin Veel says that "in general, Borges's oeuvre seems to have had great impact on the way in which cyberspace and the Internet has been conceptualized and may possibly be 'responsible' for many of the utopias that theorists wish to see made possible in cyberspace" (165). Clearly, at the time when New Media technologies were nascent, Borges had a profound influence over theoretical discussions and creative activities.

Not everyone was so enamored with the changes undertaken by these practitioners. In particular, James Brook sees the enhancements Moulthrop made to the text, this realization of Borges' implied possibility of multiple, simultaneous plots, as actually the "hellish punishments" that "Moulthrop inflicts on the Borges story and its readers" (271). He takes issue with the text having been spatialized and mapped. He calls it a "high-tech emulation of the combined attractions of *Reader's Digest* and the pinball machine." (272) It "enshrines Moulthrop's irremediable misunderstanding of the Borges story, which is based on maintaining the tension between the ever-tightening requirements of the plot and the increasingly remote refuge of the fictional labyrinth" (272).

In fact, Moulthrop himself, though not exactly apologetic, claims surprise at the continued interest in this project which he calls "a sort of low-grade literary pastiche concocted as a laboratory demonstration—or parlor game" ("Concerning"). In 2003, in response to the publication of the *New Media Reader*, Moulthrop issued the following statement on his website: "I have no idea what value this document might have for hypertextual studies, but there it is if you really care…If Victory Garden is the fresco, perhaps 'forking paths' could be considered a preliminary cartoon" ("Concerning"). Perhaps the project itself is merely a "cartoon" in the face of subsequent developments, but within the context of 1986 Hypercards, Storyspace and mainframe computing, it was an essential first step toward a literary realization of

conceptualization of computing and binary code.

Recent comments about the project, from the perspective of writers who have now been exposed to hypertext for two decades, acknowledge some of the issues. In David Ciccoricco's 2009 examination of the intersection between Borges and technology, he says of projects like those in the Storyspace era that there was a certain optimism and joy at the idea of "digital media opening up new possibilities for a depleted literature," and critics/developers at the time could "aspire to a new logical end, or at least a new utopian one" (78). However, he says, it soon became evident that "computers will not help writers actualize the ideas put forth by Borges in his parabolic fictions" (77). Borges, says Ciccoricco, "endeavors to pursue constraint to its logical end," and the "indiscriminate selection" involved in an infinite hypertext piece with multiple authors is contrary to this constraint (79).

Ciccoricco's notion of constraint within Borges' work is worth considering here. These constraints which Borges imposed upon himself were a way of closing a space in his language. He was able to bring ideas together more closely and more immediately by, for example, using lists. "Just as he suppresses gradations of hue in choosing colors, so in his essays does he often eliminate transitions between the strings of example and the series of thoughts these examples provoke," says Ronald Christ in *The Narrow Act*. This "emphasizes a series of discrete examples or thoughts" (8). Indeed, many critics of Borges have noted that his brevity in language and the proximity of words is one of his strengths.

Moulthrop argued in 1991 that the system of "forking paths is larger than any single fiction," and that it strategically includes Borges' network of "real and imagined writings,...a metafiction" ("Reading from the Map," 120). This is what he ostensibly tries to emulate in "Forking Paths" because, he says, "the garden of forking paths is capable of containing multitudes, and to impose any single tendency on it would be to bind the proliferation of meaning within absurdly narrow constraints" (121). Traditional printed pages within books, the type of format that contributed to notions such as Barth's "literature of exhaustion," no longer

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forced writers and readers into what Moulthrop called, "absurdly narrow constraints" (Moulthrop, "Reading from the Map," 121). Hypertext had opened new possibilities.

Carolyn Guertin, in her essay, "Wanderlust: The Kinesthetic Browser in Cyberfeminist Space," helps us make sense of these two competing ideas. "Links are a paradox uniting the full and empty space between nodes in the network," she says. "They are the means of connection through rupture. They underlie the continuity of space by breaking it and folding it back together" ("Wanderlust"). So in this way, despite the fact that there is more text at the reader's disposal and that Borges' "constraints" have been lifted, the hypertext links provide a strategy of "connection through rupture." This is similar to Borges' elimination of transitions. Moulthrop, she says, "sees the subversive potential of hypertext as being embodied in its inherent sense of (technological) rupture and breakdown that self-consciously exposes political agendas and forces us to question our own assumptions" ("Wanderlust").
This seems to be in the spirit of what Borges was exploring through his use of language and Guertin's notion of "connection through rupture" lays the foundation of a commonality between Borges and the early New Media theorists beyond the similitude of Borges' trademark concepts. We should then ask, what are the underlying assumptions and political agendas upon which these New Media projects were based, and can we connect them to Borges?

CHAPTER 3

FROM EXUBERANCE TO ANXIETY

3.1 Moving into Networked Communities

A few short years after Moulthrop's development of "Forking Paths," hypertext was "no longer…'bleeding edge' technology." Moulthrop and others were beginning to question what had happened to the "digital revolution." Moulthrop wrote an article, "You Say You Want a Revolution" in 1993, and he makes clear that his optimism for the "new utopian end" is gone. "Some of us keep saying…that we need a revolution, a paradigm shift, a total uprooting of the old information order…And yet this is not what we have received, at least so far"(693). Maybe, he speculates, the question is wrong. "Maybe," he says, "we suffer disappointment because we do not understand what we are asking for. What could 'revolution' mean in a postmodern context?" (693). To address the question of revolution in a postmodern context, one must consider the bigger picture of computer networking in which hypertext was situated.

At more or less the same time that Moulthrop was experimenting with Storyspace, text-based networked chatrooms were flourishing. Sandy Stone tells a story of a psychiatrist named Sanford Lewin who, in 1982, created a feminine persona named Julie to use in an online text-based chatroom. It began as a sort of accidental experiment in which he could experience "interacting with women as a woman" (Stone, 70) The experiment worked, and over the course of several months he developed deep and meaningful relationships with other women he met online. As these real relationships were developing, so too was the fictional Julie persona. Through Lewin's writing, she married, attended professional conferences, and performed volunteer work.   This online community, though existing nowhere except cyberspace, had intense meaning to those who were participating. This is, in part, because the online communities offered the potential for great freedom from the rules and requirements

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of real life. This disembodiment was part of the revolution that Moulthrop and his colleagues were seeking. Participants were free to create a persona that did not even have to be a human, much less a "law abiding citizen." Stone says that "social rules do not necessarily map across the interface between the real and virtual worlds," and that these networked computer spaces "presaged radical changes in social conventions" (80).

Eventually, Lewin grew weary of his experiment and his dishonesty. He wrote Julie into the hospital and tried to end her life by writing an infectious disease into her story. "The result was horrific," Stone writes of the effect of hospital stay on the other chatroom members. "People offered medical advice, offered financial assistance, sent cards, sent flowers. Some people went into out-and-out panic" (76). Finally, Lewin revealed himself. By then, though, most of Julie's "friends," real people who were grieving the real loss of virtual Julie, were not able to reconstruct the same intense relationships with him that they had felt with her. It is hard to know how much of this is because of Lewin's breach of trust, because he was actually a man and not a woman, and because Lewin himself admitted that he communicated very differently as Julie. What is certain, though, is that despite his initial freedom in the creation and development of his new persona, the social mores and obligations of "real life" rather quickly crept back into his virtual utopia.

These online communities were initially met with great hope and excitement from both the creators and participants. In fact, many of the programmers and software developers who had access to early text-based network chatrooms like these were often involved with the technology precisely because of "the utopian possibilities it offered" (Stone). MOOs in particular were quite popular. A MOO is a completely text-based environment. As users type in commands ("turn left," "enter the room,") they can read descriptions of the places they are visiting.

In "A Rape in Cyberspace," Julian Dibble explains how the text-based LambdaMOO, "a very busy rustic mansion built entirely of words," became the scene of a text-based graphic

rape in which one member was publicly textually violated by another member. The group of users, who felt a strong sense of community, decided that "something needed to be done" (n.p.). LambdaMOO was then "faced with the task of inventing its own self-governance from scratch" (n.p.). The programmers of the MOO were reluctant to participate in the invention of this governance. Eventually, after extensive discussion and debate, they created some rules that allowed users to vote to "toad" the offender. "Toading" essentially meant elimination or deletion from the community. It was an online "death." LambdaMOO witnessed the beginning of a formal governing body, and Dibble says that:

> the community itself would have to be defined; and if the community was to be convincingly defined, then some form of social organization, no matter how rudimentary, would have to be settled on. And thus, as if against its will, the question of what to do about Mr. Bungle began to shape itself into a sort of referendum on the political future of the MOO (n.p.).

Again, a utopian vision is short-lived, quickly overrun with rules and structure.

3.2 Hope for Revolution

Perversely, the introduction of rules and structure stems from the participants themselves and not from any external mandate. In fact, the general public was perhaps acutely aware and leery of external mandates at this time thanks to George Orwell's *1984* and other dystopias. References to Orwell's dystopic future were ubiquitous throughout the 80's and everyone was on the lookout for anything remotely "Big-brother-like." Had the state or any other institution tried to insert itself and hammer out these rules on LambdaMOO's behalf, they would likely have been rejected outright. Though they may not have put it into terms of sovereign power, this is precisely what these MOO users were exercising. The creation of online selves is "the site of a massive exercise of power," Stone says. This is a tremendous threat to the governing powers of real life which are based on being able to track and control a real, physical body that represents one's real self (90). "Social order," she says, "implied

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spatial accountability" (90). The subject here is "a political, epistemological and biological unit which is not only measurable and quantifiable but also understood in an essential way as being in place" (90). Much of the struggle toward the revolution sought by the theorists and practitioners of New Media included seeking out ways to shed this bodily connection to subjectivity, and to conceive of ways to exist and to commune in a sovereign way, without rules and regulations that mirrored "reality."

Why would users deliberately re-saddle themselves with the baggage of the everyday world? Part of the problem was that the sparkling promise of "uprooting" the existing structure was quickly undermined: again, this was not accomplished by a Big-Brother government crackdown, but by the enthusiastic, hopeful, utopia-seeking users themselves. Moulthrop's experience with Storyspace and hypertext leads him to question how genuine the cry for revolution really is. "Are academic and corporate intellectuals truly prepared to dispense with the current means of text production and the advantages they afford in the present information economy?" ("You Say You Want," 703). He seems to have arrived at the conclusion that the revolution is not impossible, but that our desire for it may be. The advantages and security of the existing systems are simply too seductive.

Ulmer echoes this. Toward the end of his online interview with Joseph Tabbi, they begin to speak of institutions, power, and money. Tabbi writes to Ulmer, "You write: 'Everything happens through institutions,' and 'politics begins within one's own institutions.'" Tabbi asks that they consider the institution of the Internet itself. The current politics, Tabbi says, are:

bound to have real effects on the speed with which we evolve toward an electracy, and

on the human pain and further cultural dislocation that such evolution must entail. (n.p.).

Ulmer's response is that "the fate of the intellectual in revolutionary politics is either to be rounded up and massacred, or put to work in the service of a propaganda machine" (qtd in Tabbi). For Ulmer, the Internet is not posing a question of revolutionary politics. He says that "the matter of the institutionalization of the new apparatus involves in principle an economic

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dimension of spectacular proportions…Economics may be the site of the greatest crisis of invention we face. One dynamic is the commodification of everything (why not including grammatology?)" (qtd. in Tabbi). If everything is embedded within economics and we are destined, as Ulmer said in Tabbi's interview, to "work in the service of a propaganda machine," the revolution is over before it ever begins.

Finally, Ted Nelson is perhaps the most vocal about his disappointment with the direction of the technology and he seems to agree with Moulthrop and Ulmer that institutionalization and reluctance to break out of the current system are preventing truly radical achievements. On Transliterature.org, Nelson says that users "have been taught to use Microsoft Word and the World Wide Web as if they were some sort of reality dictated by the universe, immutable 'technology' requiring submission and obedience." The general public has been duped, he says, into believing that these technologies are the direction that we must go. "But technology, here as elsewhere, masks an ocean of possibilities frozen into a few systems of convention." He says that "People, not computers, are forcing hierarchy on us, and perhaps other properties you may not want" (n.p.).

3.3 Patterns of Structural Overlay

This pattern of exuberant hope turning to quickly dashed optimism and the overlaying of structure onto a chaotic potentiality has continued into the 21st century with the much more robust, visual environments available such as Second Life. Second Life is similar to LambdaMOO except that it utilizes a graphical interface and users create an avatar rather than describing in text who they are. In an article from *PC Pro*, author Barry Collins says that in 2005, "I underwent one of the most eye-opening experiences of my life…I spent a week virtually living and breathing inside Second Life." But the article, written in 2008, is titled, "Whatever happened to Second Life?" with a subtitle of, "It's desolate, dirty, and sex is outcast to a separate island." Though several of Collins' readers posted comments vehemently supporting the Second Life experience, Collins concludes that despite the initial hype, today Second Life

"ultimately serves no purpose." A 2010 email sent by Andreas Schiffler to the mailing list of the *Institute for Distributed Creativity*, says, "people are dropping for various reasons," including "the loss of being 'free of all rules and social restrictions.'" The hope that Second Life offered a new and better cyberspace was relatively quickly tempered within the same cycle of highs and lows, though in shorter revolutions, that theorists experienced with hypertext and the World Wide Web.

Although some of these projects are not directly connected to Borges, these participants and communities are relevant because they demonstrate a pattern of hope and excitement, followed soon after by doubt, anxiety or even abandonment. Moulthrop, Ulmer and Nelson are not in direct conversation with one another, but they certainly seem to be in agreement. It is easy to see the revolutionary potential of breaking out of institutional hierarchies and systems, but due to the participants' own quick overlay of repressive structural hierarchies, nothing will significantly change. One can trace the same this same pattern in Borges' characters and communities. This shift or break is the rupture with which the last chapter ended. It is not a failed rupture of sovereign citizens from structure. Rather, it is a rupture between creators and the success of their languages: programmers and their code, theorists and their projects, authors and their texts.

3.4 The Hopes of Borges and his Characters

"I know there is something utopic in my ideas, and a distance between intellectual possibilities and real ones, but I trust in the extent of the future and that it will be no less generous than my hope," writes Borges in 1926 ("Verbiage for Poems," 22). This quote is somewhat of an anomaly: Borges is not known for being a particularly hopeful writer. Although moments of hope within Borges' short stories are abundant, any particular moment is very brief. The last line of "The Library of Babel," the narrator tells the readers that perhaps, if one traveled long enough, one might discover that "the same volumes are repeated in the same disorder— which, repeated, becomes the order: the Order. My solitude," he concludes, "is cheered by that

elegant hope" (118). In "Tlon, Uqbar, Orbis Tertius," Borges describes the ur, an object that is "the thing produced by suggestion, the object brought forth by hope" (79). And in "The Lottery in Babylon," the original lottery was a game for "commoners," and was simply a drawing in which the winner took the pot of silver coins. These "so-called 'lotteries' were a failure," says the narrator, because "they appealed not to all a man's faculties, but only to his hopefulness" (102). Perhaps this is an oblique reference to the Eva Perón Foundation, which was funded by a "substantial cut of the national lottery" ("Who is Eva Duarte de Perón – Evita?") All of these hopes are quickly overshadowed.

Often, it is the absence of rules and structure (and/or the appearance of alternate schemas and orders) that displace the characters' initial optimism with extreme anxiety and fear. In "The Book of Sand," a stranger arrives at the narrator's doorstep selling Bibles. After some conversation, the stranger reveals that he has "a sacred book that might interest a man such as yourself" and says that it is "called the Book of Sand because neither sand nor this book has a beginning or an end" (481). The stranger then whispers:

> The number of pages in this book is literally infinite. No page is the first page; no page is the last. I don't know why they're numbered in this arbitrary way, but perhaps it's to give one to understand that the terms of an infinite series can be numbered any way whatever (482).

The narrator, who zealously purchases the book, later regards it as "a nightmare thing, an obscene thing, and that it defiled and corrupted reality." He, as the owner, "was no less monstrous" (483). So while Borges frequently includes concepts that invoke the kind of external rupture sought by Moulthrop through hypertext and the Web, Borges ends by pointing his readers back to the notion of anxiety or terror, or at best, of an unanswered question. It seems similar to the place that so many people involved with New Media found themselves: Moulthrop, Ulmer, Nelson, Lewin, LamdaMOO and SecondLife users all seem to find themselves in a

situation of discontent or disillusionment very similar to Borges' characters. Although Borges does give his readers moments of hope, his vision overall was not an optimistic one.

These moments of hope, though, do give the reader quick glimpses into his characters' depths. Wendy Faris says that in Borges' work we see a "parallel opposition between dry rationality and emotional sensitivity." Often, before the end of a story, she says, "Borges shifts us away from the intellectually engaging complications of the narrator's tale to focus on the narrator's emotional state" (352). Perhaps these moments of hope in Borges' work, suggests Guertin, "are where we come to understand the characters" precisely because hope is so uniquely human. These are, perhaps, she says, "his revelations of character" (Guertin, interview).

Often, literary critics seem more inclined to comment on Borges' use of unusual situations than any revelations experienced through his characters. Faris says "it is this emotion that draws readers to the best stories, but which is often deemphasized by the critics" (351). For example, Sturrock said that Borges was focused on "stories of ideas, not people" (3) and Christ says that his fiction "stresses plot at the expense of character" (26). Octavio Paz wrote that:

> In Borges's works, human society and its many and complex manifestations, which run from the love of two people to great collective deeds, do not appear. His works belong to the other half of literature, and all have a single theme: time, and our repeated and futile attempts to abolish it. (5)

In fact, Borges was explicitly uninterested in performing psychological studies with his characters. Christ says that "he eliminates the idiosyncrasies which most writers depend on for revealing personality, and focuses instead on an essential or primordial character" (24). Clearly, Borges' protagonists are involved with issues of time and his work with such themes is what helped him gain international prominence. However, these glimpses of hope tie the stories to characters and to Paz's "complex manifestations" of society. We see in Borges' characters the

same paradoxical effort to simultaneously overlay and break out of a structure that the New Media users and theorists demonstrated.

Although the New Media theorists and developers also spoke primarily about Borges' situations, they seem to have aligned themselves with Borges' characters by reading the stories as exciting possibilities. Like the characters, they are focused on hope and they read his ideas as notions to strive for. They hoped, perhaps mistakenly, that by using Borges' situations as models, they might lead to or tie in with the implied revolution of the new technology. In fact Borges' trademark concepts are, overall, dark and filled with anxiety. Guertin points out that they were never intended to be blueprints for societal change but rather maps of existing problems. It is no surprise, then, that many of the New Media theorists struggled with the same types of conclusions. We see (ironically?) an ultimately triumphant defeatism echoed in the commentary about cyberspace projects inspired by Borges.

CHAPTER 4

FOUCAULT AS LINK

4.1 Borges as Foucault's inspiration

Borges' stories seem to have become the archetypal metaphor for the digital revolution, more so than those of any other fiction writer, and with good reason. The kinds of institutions mentioned by Ulmer, Moulthrop and Nelson are clearly evident in Borges's work. This connection is, in large part, because many of these New Media developers and theorists found Borges through Foucault's lens of Marxist critical theory. Borges had certainly become an international literary figure by the 1960s and some of his work was available in both English and French, but it was Foucault's reference to Borges in the introduction of his book, *The Order of Things*, which provides one of the clearest, strongest connections between Borges and many of the New Media theorists. Because Borges was spread as a "meme" among Foucault's readers, he now brings with him the baggage and agenda of Foucault—even if that was not Borges' intent nor were Foucault's ideas anything about which Borges was even aware.

Foucault attributes the inspiration for *The Order of Things* to Borges' list of unexpected categories in a "certain Chinese encyclopaedia." In this book, Foucault performs an exploration of an "archeology" of structures or, one might say he builds an information architecture for systems such as language and history. Foucault looks at the ways in which these structures are false or restricting, and the ways in which they provide the misleading hope of revolutionary change or discovery. He questions "within what space of order knowledge was constituted" (xxi). These are the same questions that Borges poses in his fiction and that theorists of New Media were grappling with.

For theorists of New Media in the '90s, the "space of order" was still an open question and tended to manifest itself as "information architecture"—a contemporary field dedicated to

ordering and structuring data: numbers, languages, bits and bytes—in order to facilitate communication among people in the most efficient way possible. Consider, for example, the language of binary code as an artificial structure. Ted Nelson's Xanadu project was an attempt to create structures to manage and analyze immense amounts of data and documents. Other programmers like Tim Berners-Lee, who is credited with "inventing" the internet in 1989 and who released the first web client and server in 1990, were addressing "the semantics of metadata" (Berners-Lee).

Foucault's particular goal in *The Order of Things*, inspired by Borges' incongruous list from a fake encyclopedia, is to consider what compels people to continue "linking things that are inappropriate," or to create a "disorder in which fragments of a large number of possible orders glitter separately in the dimension, without law or geometry, of the heteroclite" (xvii). A closer look at this Borges reference and Foucault's book will reveal several deeper connections between Borges' stories, the work of some of the theorists working with New Media, and the notion of rupture between author/language rather than author/audience.

<div align="center">4.2 Lament in "John Wilkins' Analytical Language"</div>

This Chinese encyclopedia reference comes from Borges' short essay titled, "John Wilkins' Analytical Language." The piece opens by noting that the "fourteenth edition of the Encyclopedia Britannica has omitted the article on John Wilkins." This omission is "justifiable," Borges says, "but inexcusable" (229). Borges' short piece about Wilkins begins as a specific lament over the exclusion of Wilkins, but it quickly expands into a lament over the inability of language, or of any other artificial structure, to bring us any closer to "truth." The omission of Wilkins from Britannica is simply the moment for Borges that solidifies and exemplifies the inadequacy of language.

Borges frequently invents his allusions, but in this case Wilkins was indeed a real person who did indeed propose a new "universal language" in a 1688 book called *Essay towards a Real Character and a Philosophical Language*. P. A. Wright Henderson describes

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Wilkins' rationale for his new language as this: "Character means language, or rather writing, and a universal character is the script of a language like that which was spoken before the confusion of tongues; a language for and of all men" (85) Wilkins created an information architecture comprised of representations of hierarchies. "He began," continues Henderson, "by dividing the universe, the sum total of existence, things, thoughts, relations, after the manner of Aristotle, though not into ten, but into forty categories, or genera, or great classes, such as World, Element, Animal…For each of these he devised a monosyllabic name," and so on. For example, ZaNA is the name for salmon because the "great class" of Za means fish. N makes it specifically a Squameous river fish, and A signifies the red-fleshed kind (Henderson, 87).

As Borges begins to dissect Wilkins' underlying linguistic structure, he makes the well-known comparison to the fake Chinese encyclopedia (attributed to the very real Dr. Franz Kuhn) that inspired Foucault. The categories famously include groups of animals such as "those that are included in this classification," "innumerable ones," and "etcetera…" ("John Wilkins," 231).

Borges also compares Wilkins' structure to the Bibliographical Institute of Brussels, another confounding but real model, which also "resorts to chaos: it has parceled the universe into 1,000 subdivisions" and includes categories such as "Number 262 corresponds to the Pope; Number 282, to the Roman Catholic Church;" and "Number 179: "Cruelty to animals" (231). This is a direct referent to Paul Otlet, the previously mentioned Belgian bibliographer who was working on an elaborate classification system in the 1920s and '30s. Otlet, inspired by Melvil Dewey, had created the Universal Decimal Classification, the rules of which were published in a 2,000 page volume. According to Alex Wright, Otlet "simply believed that documents could best be understood as three-dimensional" (Wright), and he had much in common with Ted Nelson's ideas regarding a deep search engine. Otlet had a "notion of a mechanical brain, a substratum of memory, an external mechanism and instrument of the mind," says W. Boyd Rayward. Otlet, together with Henri La Fontaine, created a place called the *Mundaneum* and filled the warehouse-sized space with wall-to-wall card catalogs. The

index cards included not only bibliographic information for a multitude of publications, but keywords that allowed subject matter to be cross-referenced with other publications. Although the system is mechanical and, in light of today's digital computing, rather primitive, Otlet's vision was immense. "Otlet saw knowledge organization as the solution to a social crisis and a necessity for a harmonious international society" (Frohmann, 13). The work of Otlet and La Fontaine was intimately connected with larger global initiatives such as the founding of the League of Nations, and Otlet believed that "an ideal social order can be realized only by building international institutions dedicated to the organization and communication of knowledge" (Frohmann, 13).

Rayward goes on to say that Otlet had "anticipated the kinds of organization and technology that were to inspire Vannevar Bush's 'Memex'" (Rayward, 9). Vannevar Bush developed the Memex in the United States, a machine "which was to enhance human memory by allowing the user to store and retrieve documents linked by associations" ("Internet Pioneers"). In Bush's well-known 1945 essay, "As We May Think," he says that "our methods of transmitting and reviewing the results of research are generations old and by now are totally inadequate for their purpose" (37). He describes in this essay his proposal for the memex, "a device in which an individual stores all his books, records and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility. It is an "enlarged intimate supplement to his memory" (45). Like Otlet, Bush's memex implies much greater possibilities than simply mechanizing redundant tasks. "Presumably," he says, "man's spirit should be elevated if he can better review his shady past and analyze more completely and objectively his present problems" (47). Tools like the memex will allow man to "push his experiment" of civilization "to its logical conclusion" (47).

Of course if one traces programming code and structures back far enough, one is bound to arrive in the late 17th century and mathematician Gottfried Leibniz's "universal language" which would serve as a precursor to today's binary code. According to the Stanford

Encyclopedia of Philosophy, "Some scholars have suggested that Leibniz should be regarded as one of the first thinkers to envision something like the idea of artificial intelligence" because of his development of a "universal language." This was comprised of "symbols, which would stand for concepts or ideas, and logical rules for their valid manipulation. He believed that such a language would perfectly mirror the processes of intelligible human reasoning" ("Leibniz's Philosophy of Mind"). Leibniz was influenced by the I Ching and in examining several I Ching hexagrams, made a correlation between the lines and the empty spaces as the 0's and 1's in his own code. According to Stanley Antosik, the fact that Leibniz misinterpreted some aspects of the I Ching "pales before the fact that he used binary numbers to express some of the concepts meant to be manipulated by the Universal Characteristic" (Antosik).

Liebniz is not the only "information architect" whose brilliance relied upon and often resulted in misinterpretation. Many of these artificial structures, especially the ones mentioned by Borges, are considered to be failures, not only by Borges and other critics, but by the developers themselves. A common theme throughout the documentation and records of these men is a sense that what they were trying to achieve is, in fact, not what they ultimately created. For example, Rayward says of Otlet that, "though not entirely neglected, Otlet's contributions to our understanding of bibliography, documentation and what is now called information storage and retrieval…have not had the attention in the English-speaking world that is their due" (v). Clay Shirky says of Otlet that "the failure of 'universal subject classification working in concert with the mutable forces of scholarship' didn't happen because that idea fell out of fashion -- it was fashionable as recently as 1998, with people being paid fabulous sums of money to pursue it. It failed because it does not work." In response to questions about his role in the development of the World Wide Web, Ted Nelson wrote in 2006, "I believe humanity went down the wrong path because of that project at Brown. I greatly regret my part in it, and that I did not fight for deeper constructs" (Nelson, "Lost in Hyperspace").

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To return to the primary example at hand, Henderson says that Wilkins' experimental language "seems to be built on sand, on a classification of things superficial, imperfect and capricious" (Henderson, 89). Borges, in some ways, agrees. He says that while "the words of John Wilkins' analytical language are not dumb and arbitrary symbols," the "forty-part table on which the language is based" *does* seem to be an arbitrary symbol ("John Wilkins," 230). The notion that language is arbitrary is supported by the work of the Swiss linguist, Ferdinand de Saussure.

These comments seem to echo the gross disappointment of some of the New Media theorists with regard to their hopes for an Internet revolution. Like these several examples, binary code as the underlying structure of the Internet is also flawed. This is partially why the revolution sought by Moulthrop would never meet expectations. "There is no classification of the universe," Borges concludes in his essay about Wilkins, "that is not arbitrary and speculative" because "we do not know what the universe is" (231). Borges' lament of Wilkins' drop from Encyclopedia *Britannica* becomes ultimately a lament that "all languages in the world…are equally inexpressive" and are, at best, merely provisional (229).

4.3 Compulsion of Desire

Borges goes on in his "Wilkins" essay to say that the "impossibility of penetrating the divine scheme of the universe cannot, however, dissuade us from planning human schemas, even though it is clear that they are provisional" (231). This planning from which we cannot be dissuaded is a drive or a compulsion. That is, despite this impossibility of penetrating a divine scheme or answering the question of the order of the universe, humanity persists in seeking out and trying to create an order or even, as the narrator in the "Library of Babel" says, "the Order." While the previous series of examples certainly supports the claim that the structures were failures, it also undeniably demonstrates the human drive across times and cultures to persist in creating or identifying them. As Bush says, "It would be a brave man who would predict that such a process [as our current inadequate system of organization] will always remain clumsy,

slow and faulty in detail" (39). This drive in and of itself does have revolutionary potential. The human hope that Borges infuses into his characters, and the hope espoused by the theorists and practitioners of New Media technologies reflects such a drive and thus references to hope are critically important.

The notion of "drive" is a useful way to understand what Borges means by his phrase, "dissuade us from planning" (231). Drive is what Gilles Deleuze and Félix Guattari discuss in terms of desire. As with any term used by Deleuze and Guattari, it is nearly impossible to affix a constant definition, but they say of desire at one point that, "desire causes the current to flow, itself flows in turn, and breaks the flow" (*Anti-Oedipus*, 5). So desire is, more simply, the energy that keeps the flow fluctuating between its inception and breakage. It is not the need for a successful outcome, particularly in situations like the New Media revolution that users themselves thwarted. Participants needed the action and motion of working toward a goal much more than they needed to actually reach it. "If desire is repressed," Deleuze and Guattari continue, "it is because every position of desire, no matter how small, is capable of calling into question the established order of a society…it is explosive" (*Anti-Oedipus*, 116).

If we were to stifle projects like those of Wilkins' universal language, this drive to plan alternate human schemas would simply appear elsewhere. If desire is rigorously enough repressed, then it will reappear with the force of an explosion and can be quite disruptive with regard to the structures that are in place. Deleuze and Guattari explain that there is great tension between society and desire as the drive and push to create new alternate human schemas in language and space. "If a society is identical with its structures—an amusing hypothesis—then yes, desire threatens its very being. It is therefore of vital importance for a society to repress desire…" (116). In expressing his desire to explore alternate languages that have the potential to reveal new orders, Borges becomes complicit with the potential of revolution.

Foucault sees this connection, and thus it is no accident that many New Media critics who are inspired by Foucault use similar language regarding the discourse of politics. These are the underlying ideas that attracted them to Borges as more than just a writer of "science fiction." This is perhaps what they were thinking on some level as they solidified the connection among Borges, Foucault and technology. The found inspiration in Borges' language which signified for them that technology would make possible a seismic paradigm shift, a tremendous rupture. It would change not only the way information is organized and accessed, but would change our very self-awareness. The technology, building on the experiments and hopes of a long series of information architects from Leibniz to Berners-Lee, would potentially allow access to "the divine scheme of the universe" ("John Wilkins," 231) by tapping into and channeling the users' drives. More than that, they all share the rupture with their own language of choice: in some way, language has failed them all. Foucault brings Borges and the theorists together in this way. He calls to attention the drawbacks of these structures and our innate drive to pursue them anyway.

CHAPTER 5

UTOPIAS AND HETEROTOPIAS

5.1 Utopias

Borges, in his last paragraph of "John Wilkins," prefaces a final pessimistic thought with the phrase, "Hopes and utopias aside…" We have already seen how frequently Borges mentions the various hopes of his characters throughout his stories. The implication, one may read here, is that as pessimistic as Borges is typically considered, he did have hope briefly, at least long enough to warrant the need to set his hope aside. These failed schematics offered Borges, for a moment, the hope of a utopia through language: The expectation that one's desire for a structure capable of "penetrating the divine scheme of the universe" might be achievable through the use of language.

If one is driven by the hope that a linguistic utopia will be an improvement over current "real" structures, one will never see his/her hopes realized. According to Marcuse, a utopia is that which "refers to projects for social change that are considered impossible" for one of two reasons. Either "the subjective and objective factors of a given social situation stand in the way of the transformation," or " it contradicts certain scientifically established laws, biological laws, physical laws; for example, such projects as the age-old idea of eternal youth or the idea of a return to an alleged golden age" (Marcuse). According to Foucault in "Of Other Spaces," utopias have a "relation of direct or inverted analogy with the real space of Society." In *The Order of Things*, Foucault describes utopia as "a fantastic, untroubled region," which permits "fables and discourse: they run with the very grain of language and are part of the fundamental dimension of the fabula" (xviii). He says that a study of attempted schemas and of "the exotic charm of another system of thought" underscores "the limitation of our own, the stark impossibility of thinking *that*" (xv). Either way, a utopia is unattainable despite hope and desire

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for its realization, because it is simply a magnification of the existing and faulty structure of the everyday world. The meaning of utopia as "no place" makes clear that this is a hopeless search by definition. A utopia can never exist, yet one is driven to continue with the search.

Foucault says that when one encounters a series of elements such as Borges' encyclopedia entries, the search "to find a place of residence for them, to define a common locus beneath them all" will not lead to utopia. Rather, it will lead to heterotopia (*Order of Things*, xviii). A heterotopia does not exist in opposition to a utopia or to reality. There is no direct tension. There is direct tension between reality and utopia, however. According to Peter Johnson in "Unraveling Foucault's 'Different Spaces'," utopias are, for Foucault, "the central conception of urban space that cuts through capitalist spatializations, resisting homogenization and rationality" (84).   Utopia is in opposition with reality and the "everyday world." Heterotopias, on the other hand, says Johnson, "unstitch, undermine and transform utopias" (85). They "are fundamentally disturbing places." They "display and inaugurate a difference and challenge the space in which we may feel at home…It is about conceiving space outside, or against, any utopian framework or impulse" (84). The heterotopia is a third option, situated around (and perhaps, but not necessarily, between) reality and utopia. Borges' librarian in the "Library of Babel" who is searching for "The Order" misses this. "There is no combination of characters one can make…the the divine Library has not foreseen," he says (117). He cannot see past the binary of reality versus utopia to the third option.

The New Media theorists did see this. They rather quickly shifted their gaze away from a utopic notion, if that is really where they were ever looking to begin with, and away from the simple binaries associated with it, on to that of the "third" option: the notion of multiplicity. The idea of multiplicity is fairly well accepted today among scholars and theorists. As Victor Vitanza says, if you have one and you have two, "then you always have some more." Alain Badiou says that no longer are we searching for Truth with a capital T, but for many little truths. And Manuel Delanda echoes the same idea when he speaks of many revolutions versus "The Revolution."

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If one hopes for a utopia in Borges or on the Web, one is destined for disappointment, as demonstrated in the stories and projects we have examined. But hoping to find heterotopias, on the other hand, opens countless possibilities and is full of potential.

<div align="center">5.2 Heterotopias in Language</div>

The *Dictionary of Geography* defines a heterotopia as, "the coexistence in an impossible space of a large number of fragmentary possible worlds" ("Heterotopia"). The OED says that a heterotopy means "displacement in position, misplacement." Literally, from Greek of hetero and topos, it means "other place," or different place" ("Heterotopy"). The etymology of topos includes not only a physical place, but a topic: one's place in terms of language and rhetoric. Heterotopias, says Foucault:

> are disturbing, probably because they secretly undermine language, because they make it impossible to name this and that, because they shatter or tangle common names, because they destroy 'syntax' in advance, and not only the syntax with which we construct sentences but also that less apparent syntax which causes words and things (next to and opposite one another) to 'hold together'… Heterotopias… desiccate speech, stop words in their tracks, contest the very possibility of grammar at its source (*Order of Things,* xviii).

Our first definition of heterotopia, then, is a series of incompatible worlds as topics that can exist next to one another only in language. This is true of many of the heterotopias found in Borges. In fact, Foucault points out that Borges deliberately omits words such as "and" or "then" so that they exist as closely as possible to one another. "It is not the 'fabulous' animals that are impossible," says Foucault, "since they are designated as such, but the narrowness of the distance separating them" (xvi). It is in closing the gap, partially through the omission of transitional phrases in his lists, that Borges begins to create a linguistic heterotopia.

In the "Aleph," Borges creates a linguistic heterotopia when he describes what the narrator sees as he peers into the Aleph:

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I saw the populous sea…saw every letter of every page at once…saw the circulation of my dark blood, saw the coils and springs of love and the alterations of death, saw the Aleph from everywhere at once, saw the earth in the Aleph, and the Aleph once more in the earth and the earth in the Aleph, saw my face and my viscera, saw your face…the inconceivable universe ("The Aleph," 284).

By repeating, "saw," the reader is returned to the beginning of the sentence with each new item on the list. In a way, then, the series collapses on itself with the repetition of the basic noun/verb set with each new element. Each element overlaps with all the others because they are all immediately the thing seen after the action of looking.

The list of the Aleph's contents is clearly stopping language in its tracks by mashing together multiple times and spaces and by forcing the reader's perpetual return to "I saw." This list could never "really" exist, and it is incomprehensible to the narrator—and to the readers, as well. How could one see "every letter of every page at once," "the circulation of my dark blood," and "the earth in the Aleph, and the Aleph once more in the earth?" (283-4). Borges shifts times, perspectives, scales and realities. In some ways, this exemplifies what theorist Henri Lefebvre calls "mental space," which includes "logical and formal abstractions" (Lefebvre, 11). This mental space stems from "a philosophy of space revised and corrected by mathematics," which Lefebvre calls "topologies," (3) again tying us to topos. He says that "the modern field of inquiry known as epistemology has inherited and adopted the notion that the status of space is that of a 'mental thing' or 'mental place'" (3). Notions of paradoxes, proliferation, set theory and illogical structures are the kinds of ideas that Foucault and many contemporary critics invoke when writing about Borges' relationship to the Web and technology.

The narrator does not end the story with his experience with the Aleph. He must also recover from the experience. We find that, in the long run, it is the narrator's journey, desire and hope that bring the depth and significance to the story well beyond the arresting description of the Aleph itself. Borges the narrator, in trying to describe what he sees, says it is difficult

because "what my eyes saw was simultaneous; what I shall write is successive, because language is successive." This is where, he says:

> a writer's hopelessness begins. Every language is an alphabet of symbols the employment of which assumes a past shared by its interlocutors. How can one transmit to others the infinite Aleph, which my timorous memory can scarcely contain? (282).

The existing structure of language is futile, and this is what brings on the hopelessness of the narrator here. The futility underscores the narrator's inherent isolation, with only insufficient language as his form of connection and community with others. Similarly, it is the structure of computer code that brings on the hopelessness of theorists working with New Media. The heterotopia is the space created through this tension between the desire of language and the capabilities of language. The heterotopia is the site of the limit of this tension.

5.3 Physical Heterotopias

Eventually in Foucault's work, heterotopias came to signify structures of physical and living spaces as well as those found in language. This physical approach provides our second definition of a heterotopia. Textual and physical heterotopias are both places where structures are tested and broken, and within Borges' works, examples of textual and physical heterotopias become intertwined.

The story of "The Aleph" is a prime example of this intertwining. The Aleph represents a unique type of "mental" space that seems to provide access to new levels of thought, and it drives the urge we have to communicate those levels to others. It makes possible the coexistence of impossible elements, and it fosters paradoxes that regular space cannot resolve. Consider now, though, not the list of items contained in the Aleph, but the Aleph itself as the container of these things. Consider the description of the physical space of the Aleph. For example, the Aleph exists in a very real and very tangible location: in the basement of a house, at a particular angle off of the staircase. Most of Borges' heterotopias are not dreamlike mental states: a character cannot simply close his eyes and imagine alternate worlds. They do not

appear and disappear randomly. They are clearly defined objects that exist in very particular places in the physical reality of the story's setting. The Aleph is both a linguistic heterotopia and a physical place within Borges' story.

It is in a later essay, "Of Other Spaces," that Foucault extends his description of heterotopias to include physical spaces. According to Johnson, Foucault's concept of a heterotopia in the real world is very generally a "range of 'different spaces' that somehow challenges or contests the spaces we live in" (76). These "other" spaces or "counter spaces" include such examples as "cemeteries, brothels, prisons, asylums and holiday villages" (76). Heterotopias are "set apart for some form of rites of passage, or initiation" or for "some form of deviation." These are the spaces society creates to put people who do not abide by the accepted structures of that society—for better or for worse, criminals and artists alike. Johnson details the various rules that seem to accompany the heterotopias that Foucault points out, which only underscores for the reader that although heterotopias can be discussed in terms of a common type of space, each heterotopia is a singular place that defies categorization and predictable structure. Some of them are grounded in "a meticulously arranged enclosure," some micromanage daily life in "minute detail," and others control entry and exit points. Additionally, in order to enter a heterotopia, Foucault says "the individual has to submit to rites and purifications,…have a certain permission, and make certain gestures" ("Of Other Spaces"). This is clearly the case of the Aleph.

In "The Aleph," the Aleph itself is inside the home of Carlos Argentino Daneri, a man with whom our narrator has a terse relationship. Daneri describes his home as "the home of my parents—the home where I was born—the old and deeply rooted house on Calle Garay" (280). Once inside the house the Aleph is "right under the dining room, in the cellar." One must "lie on the tile floor and fix your eyes on the nineteenth step of the pertinent stairway" (282). Many readers of "The Aleph" remember this detail because it is so darkly comic, and it puts the narrator Borges into a rather precarious position. "Suddenly I realized the danger I was in; I had

allowed myself to be locked underground by a madman," says the narrator (282). But more important than any comic relief it might provide, consider that because of this location, no one would be able to experience the Aleph without explicit permission from Daneri.

Daneri is middle or upper class and his house is a relatively protected, secure space. His social position and financial status are mentioned in several details. The house includes a parlor, a piano and a maid. Daneri has a photography darkroom in the cellar; and though he works in a "subordinate position in an illegible library," it is white collar work and he seems to have plenty of leisure time. He also has the money to hire a lawyer when his personal access to the Aleph is threatened so he is portrayed as financially secure. Very few people enter the house, for Daneri does not socialize with just anyone, much less grant permission to anyone to view the Aleph. He does not really even socialize with our narrator. The narrator, whose name is Borges, visits Daneri every year on the anniversary of the death of Beatriz, Daneri's cousin and the woman with whom the narrator Borges was in love. This annual act was, says the narrator, an "irreproachable, perhaps essential act of courtesy" (274).

Daneri calls the Aleph a "magnificent observatory," and says that as a child he "could not understand that he was given the privilege so that the man might carve out a poem!" (281). It is a wonderful gift, perhaps equivalent to finding or experiencing a utopia, but in fact it brings out the worst in both Daneri and the narrator Borges. The threat of losing his house due to a nearby café's expansion provides Daneri's impetus to share the Aleph with the narrator, not out of generosity but as a boast. Daneri held "the deep-seated fear that I wouldn't see his 'miracle'"(282). Daneri, who claims to have discovered the Aleph himself, asserts his ownership as he tells the narrator about it for the first time. "It's mine, it's mine; I discovered it in my childhood…Zunino and Zungri shall never take it from me—never, never! Lawbook in hand, Zunni will prove that my Aleph is inalienable." After experiencing the Aleph, the narrator, for his part, resorts to petty "revenge" and denies ever having seen it. "I refused, with gentle firmness,

to discuss the Aleph; I clasped him by both shoulders as I took my leave and told him again that the country—peace and quiet, you know,--was the very best medicine one could take" (284). The physical heterotopia of the Aleph is juxtaposed against a "normal" reality within the narrative. It becomes the "counter space," like the prison or holiday village that Foucault describes which, he says, "all refer in some way or another to a relational disruption in time and space" (Johnson, 78). The first relational disruption evidenced by the Aleph is the utopian ideal that a character imagines when thinking about the textual heterotopia. This implies the notion that the Aleph could really exist, and this is an affront to the institutional hierarchy of reality. It is a threat to the existing power structure because of its utopian nature. The second relational disruption is the actual physical heterotopia of the Aleph that "exists." It is existing alongside and within the power structures of society. While it has the potential and capacity for disruption, this potential does not emerge until a character applies his/her desire to the situation. The Aleph is a relational disruption in physical and textual ways, and in both types of relational disruption, the characters, along with their hopes, desires and relationships, play a pivotal role.

CHAPTER 6

TENSION AND SOLITUDE OF HETEROTOPIAS

6.1 Heterotopias and Social Space

Because of the importance of the characters, the relationships and the movement that heterotopias entail, it will help our understanding to consider them to be embedded within a particular type of space: the "social" space described by Henri Lefebvre. In *The Production of Space*, Lefebvre seeks to develop a new concept of space, one that will help to encompass what he sees as the fractured discourse of space, a discourse which, he says, is usually sublimated to historical discourse. He classified space into three major divisions, one of which was the mental space previously discussed as a space grounded in topos, language, logic, and paradoxes. This is like the space of Borges' childhood, in many ways driven by the books in his father's library, and perhaps also like the space of his old age which, due to his blindness, necessitated an immersion in language. A second kind of space, natural space, according to Lefebvre, is the physical world that exists without any human intervention or care. Natural space, he says, is becoming smaller and smaller as the reach of human development expands and incorporates more natural resources in a wider variety of ways. This is the space of the Argentine Pampas in the early 20th century, providing a stark foil to the cosmopolitanism of Buenos Aires. Natural space is succumbing to Lefebvre's third type of space, social space, which is a blend of natural and human produced space. He hypothesizes "that (social) space is a (social) product," and based on this he claims that "every society…produces a space, its own space" (31). For us, the primary social space at hand is the port city of Buenos Aires.

For Lefebvre, production (which is inherent in social space) is founded in Marxist concepts and is fundamentally political. He makes a distinction between creation and production. Natural space creates, while social space produces and reproduces. Social space

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entails an economy and scalability. Social spaces are products and they themselves produce products, and this has special significance. Generally, a product of social space "can be reproduced exactly, and is...the result of repetitive acts and gestures," as compared to the unique "work" created by nature which "has something irreplaceable and unique about it" (74). Social space "infiltrates...the concept of production, becoming part—perhaps the essential part—of its content" (85). Ultimately, social space moves beyond this simple binary and provides an opening into "a space which is at once a product and a work, combining art and science within itself" (Lefebvre, 409). Social spaces enact this blend to greater and lesser degrees: there is no set formula, no set ratio. Thus social space is a complex and unpredictable blend of natural materials, creativity and economic production.

It is within this spectrum of social space that one must situate Foucault's notion of a heterotopia and, by extension, Borges' many concepts and the work on the New Media theorists. David Harvey says that Foucault expanded his notion of heterotopias to explicitly include physical space in addition to language as a "direct challenge to rational planning practices as understood in the 1960's and the utopianism that infused much of the movement of 1968" (537). The description makes it possible "to identify spaces in which difference, alterity and 'the other' might flourish or (as in architecture) actually be constructed." This provides "the potential for coexistence in the multiple utopian schemes—feminism, anarchism, ecological and socialist—that have come down to us through history" (538). For example, Michael Joyce says the spaces created by hypertext tools lead:

> to a kind of shining electronic village upon a hill—an integrated, personalized, machine-enhanced, universally accessible, associative, new, yet familiar, world platted upon the patterns of synapses, deeded to each according to her or his needs" (623).

The social space created by a given community is driven by laws of production, labor and institutions. While a utopia is a vision of "better than that," of an imaginary world in direct comparison with reality, the heterotopia is something "other than that," something different

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from—but also implicitly and intensely—similar to. The heterotopia needs the "other than" in order to function as an alternative space.

6.2 Necessary Tension

The Aleph's relational disruptions as linguistic and physical heterotopias cause the characters to experience anxiety and unease. The same complexity is demonstrated through the spaces present in Borges' "Garden of Forking Paths." In terms of the heterotopic spaces in "The Garden of Forking Paths," the grandfather's novel seems to most clearly reflect a linguistic heterotopia. Its underlying structure and organization is incomprehensible to those playing by "the rules" of the given society. According to Scott Simpkins, the description of the novel is "designed to create a multinarrative which saturates its textual capacity and thus achieves the desired state of complete signification" (150). Borges thus "forces the reader ... to consider the properties often unknowingly granted to texts," and ultimately the reader produces a defamiliarization of the text (151). Borges does not immediately present this to the reader. It is masked within an elaborate plot in which the protagonist has taken on a multiplicity of roles, as Simpkins point out, and the setting is divided into layers.

In this case, then, the heterotopia is the novel itself and it is embedded in a wider social space that is predicated on productivity and capital. Physically, the novel is held on the property of Stephen Albert, the sinologist who Yu Tsun has come to murder. Albert lives in a small suburb, "virtually in the middle of the countryside" (122.) Even within the suburb, the house itself is "a far way." Deep within the countryside, at the house, the protagonist Yu Tsun encounters "a high rusty gate" and then must travel further down a meandering path to the library (123). The novel itself is within a drawer of a tall lacquered writing cabinet in the library. Physically far removed from the general public, the novel is also held in a type of protective custody by Albert similar to Daneri's protection of the Aleph. Upon greeting Yu Tsun, Albert says, "I see that the compassionate Hsi P'eng has undertaken to remedy my solitude" (123). P'eng is a consul and this signifies that Albert is under his patronage, living on state land and

funded by state coffers. Not just anyone may have access to this heterotopic novel. What is more, Albert is about to become a part of an even bigger global political scheme by being murdered by Yu Tsun in order to further the German war efforts.

A tension is maintained between the heterotopia and the social space (and politics, production and economics) that envelops it. Johnson notes that many critics who have addressed the notion of heterotopic space have maintained a "persistent association with spaces of resistance and transgression" (81). Harvey says that we must address the "presumption that power/knowledge is or can be dispersed into spaces of difference" (538). Heterotopias are clearly related to the question of power, he says, but not in the form of resistance as many assume. Because a heterotopia can only exist as an alternative to social structures, the corollary is that social structures must therefore exist. The revolution that would do away with social structures would also inadvertently and necessarily do away with the heterotopias that facilitated the change to begin with.

The idea of the Aleph remains only as the memory of a threat, but the house in which it was contained is ultimately demolished to make way for an expansion of a business next door. The great-grandfather's novel as heterotopia embodies intense connections between Yu Tsun and Albert, and Yu Tsun and the past/future familial generations. This is not strong enough, though, to thwart the political plot. Albert slows the murder down with the allure of the novel, but ultimately Yu Tsun's political plan is carried out. Politics and the expansion of capital necessarily prove stronger than the physical heterotopic space.

6.3 Natural and Mental Space

The narratives of both "The Aleph" and "The Garden of Forking Paths" are grounded in the setting of a "real" physical space, a social space in which Borges describes buildings, jobs, and professions. The characters engage in social activities such as sharing a drink in a café and asking for directions in a train station. What about Borges' stories in which the physical reality is questionable and social relationships are minimal?

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Social spaces in general, and heterotopias in particular, can never be separated from analysis of production. They can never be pure "work" or purely natural, according to Lefebvre, because they are both "a precondition and a result of social superstructures," that is, of institutions, of the state and of the communities in which people live. Social space has a "material underpinning," though in itself it is not a proper object (409). As such, social space and heterotopias cannot be cut off from these fundamental structures of society, regardless of how the society at hand may be defined. Lefebvre frequently underscores the idea that space cannot be conceived of as "a passive receptacle" (90). This will lead one into "the trap of treating space as space 'in itself', as space as such" (90). Rather, social space is a network of relationships among its fundamental parts. Social space is "the outcome of a sequence and set of operations, and thus cannot be reduced to the rank of a simple object" (73). Social space is an object in as much as it must pre-exist in order to tie the parts together, as well as exist afterward in some fashion as the outcome of the new connections. But "social relations," says Lefebvre, "have no real existence save in and through space. Their underpinning is spatial" (404).

"The Circular Ruins" is a story in which the protagonist enters a heterotopic space that allows him to create, mentally and physically, a "real" man. As opposed to "The Aleph" and "The Garden of Forking Paths," this heterotopia does not facilitate any kind of back-and-forth or in-and-out movement. The protagonist enters the heterotopia within the second sentence and never leaves it. This provides an opportunity for readers to consider a heterotopia that does not incorporate any of the fundamental networks of relationships inherent to the surrounding social space.

Borges tells us the protagonist arrives unnoticed on the riverbank of a remote jungle. He drags himself to the nearby circular ruins that had been "devoured by an ancient holocaust" (96). The setting is exceptionally natural, with "unrelenting trees" (96), birds and hemlock. Though there are nearby woodcutters, the protagonist is exposed to "a minimum of visible

world," (97) and his basic needs are taken care of through the sacrificial fruit and rice of the farmers. The protagonist doesn't interact with anyone else, and Borges seems to convey no expectation that the protagonist should physically work in any way in order to sustain himself physically. The protagonist sets for himself the goal of dreaming a man and he experiences failure, frustration and insomnia over the course of a year. Eventually, the protagonist completes his goal and creates a man. Per the instructions of the god of Fire, he is to "send the youth, once instructed in the rites, to that other ruined temple whose pyramids still stood downriver, so that a voice might glorify the god in that deserted place" (99).

Borges seems to allow the protagonist to exist in a strange binary of only mental and physical space. There does not seem to be any social space. He may work as a "wizard" by using the "supernatural" and "magic" to create a man. However, by not producing anything material and by not forging any relationships with other people, he is not a part of social space. "Under the pretext of pedagogical necessity, he drew out the hours of sleep more every day" (99). His mind and "being" are entirely in mental space, but the body of the narrator is living within a purely physical, natural space. This natural space is separate from the rules, structures and institutions of society.

Lefebvre makes a fundamental distinction between natural space and social space. "Everything that is in space," he says, "is produced either by nature or by society" (101). However, nature, he says, "does not produce" because there is no labor inherent to nature. "The 'beings' it creates are works; and each has 'something' unique about it." Nature does not "know" it is beautiful, for example: it has no intention, drive or need to be beautiful in the same way that man has a drive to create systems of languages. Rather, says Lefebvre, "to say 'natural' is to say spontaneous" (70).

Lefebvre goes on to say that this non-productive natural space is slowly merging with, and often being taken over "by abstraction, by signs and images, by discourse, as also by labour and its products" to the degree that "nature is dying" (71). Natural space becomes "the

'raw material'" from which social space is produced (31). In fact, this raw material is only one part a part of a "unity" within social space. This unity entails not only "the forces of production" like nature, but also "structures (property relations)" and "superstructures (institutions and the state itself)" (85). The space produced by society reveals an underlying structure of unification and it is the one we have been discussing in terms of "reality." Heterotopias provide an opening, a potential, or an alternative for participants to encounter hope by fluxuating between the heterotopia and the social space of productivity and capital.

The protagonist in "The Circular Ruins" is an example of being trapped in both a mental space and physical space, while at the same time being excluded from social space. He is not able to move among or between the natural space of the ruins, the creative space of his mind or the social space of the farmers. According to Carolyn Guertin, "Desire requires both the existence of and entrance to other spaces and, as a result, motion can become heterotopic space." ("Wanderlust"). We can understand this to mean that desire drives people to question and push existing structures. Without motion, desire is thwarted and can become disruptive.

What drives the protagonist of "The Circular Ruins" is the desire "to dream a man" (97). In the last line of the story, Borges writes, "With relief, with humiliation, with terror, he realized that he, too, was but appearance, that another man was dreaming him" (100). The circularity runs through the title, the setting and the plot. "If there is a 'universal truth' here, it is that we are condemned to be our parents, all the way back to Adam" (Schaffer). Once accomplished, "the man lived on now in a sort of ecstasy" (100). He believes his creation to be his son. Strangely, the narrator feels victory and ecstasy, but he does not express joy or pride. He feels fear and concern for him. This seems to undermine the type of paternal lineage experienced in the "real" world. If one is but an appearance, a "mere simulacrum," can one also be a father or a son? Or, perhaps, this is a "peopling, a propagation, a becoming that is without filiation or hereditary production" that Deleuze and Guattri discuss in *A Thousand Plateaus*. "We oppose epidemic to filiation, contagion to heredity, people by contagion to sexual reproduction, sexual production"

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(241). This is the only connection that the protagonist has to anyone and the lack of codified social relationships leaves the narrator in an exceptionally solitary state.

6.4 Solitude

And what of Borges' stories where there is only an interior setting? What about a protagonist who is not split between two incompatible modes of space, but rather embedded firmly in one or the other? With less connection to the social space of the real world, and notably with less connection to capital and productivity, the characters' solitude becomes even greater. Why would the lack of capitalism and economy spur such notions of solitude and anxiety? Because these structures underlie our notions of family and home. According to Peter Johnson in "Unraveling Foucault's 'Different Spaces,'", heterotopias "are a form of escape without the comfort of a home" (86). This "escape without the comfort of a home" is perhaps in part what Borges was exploring in his short stories and it ties directly to issues of relationships and solitude.

The books in the Library of Babel, where every book exists and yet the letters on the books' covers "neither indicate nor prefigure what the pages inside will say" ("Library of Babel," 113), are another example of a text-based heterotopia that stops language in its tracks. Some of these books contain other books, some contain the past, and others contain the future, and the narrator says that there is speculation of a book of books. These examples and the sheer quantity of books that would be required make clear that an "impossible space" is required in order for the elements of these series to exist. But in this case, rather than embedding the heterotopia deep within a physical location in social space, Borges has created a completely new heterotopic universe in which the narrator lives. He never makes mention of trying to physically leave the library and there does not seem to be an unknown "reality" outside, as we saw in "The Circular Ruins." Without any way to enter or exit this physical heterotopia, the tension between social space, a space of capitalism and productivity, is, if not absent, then at least hidden. This narrator's solitude is the greatest we will have seen so far.

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Consider the types of inhabitants that are detailed by the narrator. Every man is a librarian, but there are also chiefs, inquisitors, and authorities. At one point, faced with a blasphemous sect that "proposed that the searches be discontinued," the "authorities were forced to issue strict orders" and soon "the sect disappeared" (116). At another point, "Purifiers" begin traveling through the Library hexagon rooms of the library destroying "worthless books." "They would invade the hexagons," says the narrator, and "show credentials that were not always false…" (116). These titles imply some sort of power structure, but this structure is not provided in any detail. The characters and titles are two-dimensional, gross generalities, especially when compared to the level of specificity in "Forking Paths" or "The Aleph." The narrator says at one point that definitions within the Library are impossible to pin down. While "library" is in some volumes what one would expect in terms of a symbol, "a library—the thing—is a loaf of bread or a pyramid or something else, and the six words that define it themselves have other definitions." Then, provocatively, the narrator asks, "You who read me—are you certain you understand my language?" (118). This leaves the door open to completely reinterpret the titles above. Who is to say what a chief or an authority is, how this position functions, and what it "means" within the heterotopia of the Library?

Additionally, within the library, there is not any economy, per se. In Borges' description, he includes sleeping quarters and lavatories, but no other types of spaces that imply the necessity for products or consumer goods. The library lacks kitchens, recreational areas, and certainly there are no businesses, factories or farms. We have no reference to an outside world from which sacrifice or sustenance is delivered as in "The Circular Ruins." In fact, aside from bookshelves, railings and lightbulbs, the only objects that seem to exist in the Library are mirrors and dice, common icons of chance and gaming. There is no mention of money, trade, or the value of any given object. The one product that does exist, the book, is inexhaustible and escapes an economy of scarcity. Borges does describe some of the inhabitants as "greedy individuals," but, for the most part, "all men felt themselves the possessors of an intact and

secret treasure" (115). All men are librarians and all men own all the books, presumably equally.

Just as the Aleph brought forth the worst in Daneri and the narrator, in the Library the equality of book ownership brings with it not a sense of freedom and liberation but one of solitude and anxiety. The significance of this non-economy on the inhabitants can be seen in particular through the homeless narrator who suffers from an intense solitude. Although the librarians are born into particular hexagons that are vaguely described as communities ("individuals abandoned their sweet native hexagons," 115), they seem to suffer from a lack of relationships, a desire that the community does not fill. The narrator mentions no familial ties, loves, patriarchies. Although Borges' characters are not particularly well developed, in most of his short stories Borges does generally situate them within certain specific relationships. The narrator in "The Aleph" is driven by his love of Beatrice to continue visiting Daneri. The narrator in "The Garden of Forking Paths" feels an affinity for his great-grandfather and stalls his assassination attempt in order to learn more about him. Even in the "Book of Sand," the narrator invokes a familial connection when he offers to trade a Bible that was "left to me by my parents." Later, as he become more immersed in the Book of Sand, he says "I had but few friends left, and those, I stopped seeing" (483).

The characters that seem to be operating in such extreme solitude are the ones that are inside the heterotopia with no tension between the "reality" of social space and the heterotopia, and thus they have no hope of escape. We begin to see this in "The Circular Ruins," and it is overwhelming in "The Library of Babel." As much as the real world is troubling and stressful, Borges' characters find the alternate space of the heterotopia to be more lonesome, anxiety ridden and hopeless without any tension or boundary between the heterotopia and surrounding social space. They long, in some ways, for the familiar structures and rules of capitalism, production and desire.

Lefebvre places great importance on the element of social relations within his discussion of space and on the creativity and uniqueness that individual people bring in the formation of an individual community. The ramifications of Lefebvre's connections for Borges and for 1990's New Media are twofold. First, because the unity of social space revolves around networks and relationships, social space cannot exist without communities of people. "The whole of (social) space proceeds from the body" (Lefebvre, 405). The uniqueness of each community helps each social space exist as "work" in addition to "product." In Marc Augé's terms, we can describe this difference in terms of non-place: each community is more like an anthropological space which has unique ties to a particular physical place, than it is a non-place which is a generic, repetitive, manufactured space. Second, perversely, the unique qualities of communities that provide the potential for revolution also provide a necessary and unseverable tie to structures and institutions. These structures and institutions resist change and revolution, and channel the social desires into other less threatening endeavors.

Lefebvre goes a long way in helping us understand why users in the 90's also longed for familiar rules and structure, despite their publications and projects that claimed a contrary desire. Complete immersion into the new space of code and "the virtual" is disconcerting. It is uncomfortable to leave one's body behind in a physical location while our mental space expands and reshapes our vision. As Heidegger said, we (our dasein) must be IN the world. What's more, setting up this kind of binary opposition between our physical and mental space stifles the movement of desire. In order to facilitate this movement, we need the social space replete with rules and structures as a buffer. Social space allows us to move back and forth, and to release our desires in a variety of ways.

6.5 Intensive Properties of Heterotopias

Structural resistance to change creates a great tension, which can be described as an intensive property of social space. Social space is a locus that blends product and work, repetition and uniqueness, social and natural. So, too, is a heterotopia this same kind of locus.

What distinguishes the heterotopia is that it has an intensity that exceeds the social space around it. Manuel Delanda describes intensity as a property measurement usually focused on things like speed, temperature, pressure and density. He opposes intensive properties to extensive properties, those which typically revolve around length, area and volume. Intensive properties drive flow and mark spontaneous changes of state, such as the moment that the temperature changes water to ice (n.p.). When this tension, an intensive property of social space, reaches a critical threshold, social space produces a heterotopia.

Further, once a heterotopia appears within a social space, it can begin to exhibit its own intensive properties. The intensity of a heterotopia can allow it to become an attractor. An attractor, according to Delanda, can pull other elements or variables off their trajectories, similar to the pull of a black hole in space (n.p.). Within any given social space, the presence of a heterotopia will intensify the situation and draw other elements within the same field toward it. Because social space is a blend of work and art, and because work is predicated on formal hierarchical structures and Marxist notions of production, the heterotopia can only appear as embedded within this type of structure. That is why, in story after story, Borges portrays a physical heterotopia that is deeply embedded within capitalism and institutions of power. The heterotopia acts as an attractor that threatens to pull capitalism off its course. However, although in Borges' stories the heterotopia produces a temporary disturbance, it is never strong enough to produce a permanent negative result. In a similar way, that is one way to understand why the revolution as conceived by Moulthrop as a clean break could not be achieved.

Through our examples of the spaces found in Borges' narratives, it becomes possible to see how social space combines natural space, productivity, creativity, relationships and desire; how it embodies various potential alternate spatial structures; and how these potential alternate structures, as heterotopias, can only exist within social space. The heterotopias as we have defined them here are both topological (grounded in language, information and topics) and

physical. They are connected by human relationships and serve as objects of hope, of desire and of memory.

Heterotopias act as attractors that bend trajectories of objects and people within the field of social space. We cannot and would not want to stop the movement of social space. If we did, we would suffer the same isolation and anxiety of the librarian in "The Library of Babel," or the same type of binary split as the narrator in "The Circular Ruins." We would lose our hope. The tension between the heterotopia and social space is crucial, as is the movement of our desire between both spaces.

When speaking of Borges in relation to New Media projects, it is easy to focus solely on his complex situations, paradoxical ideas and impossible spaces. But what drove Borges to consider so carefully the paradoxes and patterns of institutions, language and space? What incited him to play with these structures in such a way that Foucault was inspired by him to write an entire book on the subject? Where does his fascination come from? To answer these questions, one must first consider the social space of Argentina during Borges' lifetime and then consider Borges' relationship to that space.

Often, we overlook Borges' human connections and the complexity of his characters within his stories' spaces. However, Borges wrote in 1926 that "all literature, in the end, is autobiographical. Everything that is poetic that confesses, that gives us a glimpse of a destiny" ("Profession of Literary Faith," 23). Although his character development is brief, we have seen the significance of these references. What is more, without considering Borges' physical life and politics, and by only considering his text and his mental spaces, we have effectively forced him as the author to straddle the line between mental and physical space like the protagonist in "The Circular Ruins." An examination of Borges' own physical space will open further possibilities for understanding the spatial relationships at work in his stories and in New Media projects.

CHAPTER 7

BORGES' PHYSICAL AND POLITICAL SPACES

7.1 Buenos Aires as Home and Heterotopia

Borges' concern with nationality is only mentioned rarely, if ever, in discussions of New Media developments and theory. Borges addressed issues of family, nationality and the "eternal" throughout his writing career. However, "Borges's reputation in the world has cleansed him of nationality," writes Sarlo, and his work has undergone a "triumphant universalization" (2). This genericization of Borges' work seems to equate to the global reach of the Web in that the details within both his work and the information available on the Web have been glossed over. Something important has been lost through this universalization and it can only be identified and regained, says Sarlo, through an examination of Borges' relationship to the space in which he lived. The heterotopia, says Foucault, is a "real" place and functions as an "effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted." One might consider early 20th century Buenos Aires as this type of heterotopia, one which has the potential to unravel both the utopia and reality, and to exist side-by-side with them.

Borges was born in Argentina, spent much of his teenage years in Europe with his family, returning to Argentina when he was 21. He had become a radical poet by then, promoting the "ultraist" movement among other Argentine writers. The movement originated in Spain, but Borges was inspired by it and modified it to suit Argentine needs. According to Ronald Christ, Borges defined the Argentine version of Ultraism as "seeking not merely the modern or new, but the eternal" (3). Although Borges later disavowed this period of his work, he wrote that "what we wanted to write was essential poetry" ("Autobiography," 62) and it does seem to foreshadow some of his trademark brevity.

By the late 1920's, Borges had taken a definitive stance in Argentine politics. In a 1926 essay, "A Profession of Literary Faith," Borges said that he had "committed a few compositions commemorating the Rosas era, which, as a consequence of my readings and a fierce family tradition, is the old country of my emotions." Juan Manuel de Rosas rose and attained power between 1830 and 1850 and he "intentionally claimed the gaucho ethos for himself" (Curtin, 76). The gauchos of 19th century Argentina were a mixture of Chilean Indians, African slaves and "men from the fringes of colonial society" who became "nomadic cattle hunters" (Curtin, 76). Rosas was an *estanciero*, essentially a land and cattle owner who hired gauchos to manage the work. Depending on whose history one reads, he was more of a capitalist than a frontiersman. Rosa's support from these gauchos helped him become one of the most powerful *caudillos,* or "personal dictators" in Argentina. Rosas said, ""I have made myself into a gaucho like them, to speak as they do, to protect them, to become their advocate, and to support their interests" (qtd. in Curtin, 76).

Rosas eventually turned his back on the gauchos in his efforts to make more money and power. The histories of Rosas are varied and he is portrayed both as a hero to the common man and as a dictator. "Liberals and democrats tend to see him as a villain, while Peronistas cast him as a hero on account of his populism" (Curtin, 79). Although Rosas "enjoyed great popularity, he was in no sense a real populist," says Nicolas Shumway in *The Invention of Argentina*. According to Shumway, Rosas

> disclosed the other face—the antipopular face—of Argentine federalism: an aristocratic notion of authority and privilege that might provide for the poor out of a paternalistic impulse, but in no way would include the low-born as equal citizens in a pluralistic government. His was a restoration of the hierarchical society of the Spanish monarch (120).

Borges says that after he published his political compositions, several critics then "hurled sophistries and maledictions at me" ("A Profession of Literary Faith," 23). He was attacked both

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"in the name of skyscrapers," and "in defense of the tin shacks" (23). That is, both the rural and urban camps in the political debate over the Rosas legacy were upset with Borges.

Two years after publishing this essay, Borges clearly voiced his support for Hipolito Irigoyen's reelection in 1928. Irigoyen, a candidate for the Radical movement in Argentina, had been previously elected President and led the country from 1916 to 1922. He had a history of advocating liberal democratic notions, including rights for workers and expansion of enterprise with a certain amount of social mobility. At the same time, though, he practiced cronyism within his administration and spent large sums on social programs and building. His administration was not very adept at balancing the national budget or developing democratic institutions that would be required, long term, to sustain Argentina's new democratic government. As a result of these and many other factors, he was overthrown by the Argentine military which opened the door to the hostile "conservative restoration," led by General Uriburu (Romero, 59). At this point, "like many of his generation, Borges's disgust with politics became complete" (Ruch).

Between 1915 and 1930, roughly the period of time that Irigoyen and the Radicals were in power, Argentina experienced phenomenal growth and modernization. The population of Argentina rose from 7.9 million to 11.6 million between 1914 and 1930, in large part due to immigration (Bethell, 139). By 1930, the country had 435,000 cars, "a substantially larger number than in many Western European countries, and a sevenfold increase from eight years before" (Bethell, 139). Electric wires, telephone wires, radio antennas, and trains were cutting across the landscape.

Borges said that when he returned in 1921, after having been in Europe for seven years with his family, "it came to me as a surprise…to find that my native town had grown, and that it was now a very large, sprawling, and almost endless city of low buildings with flat roofs, stretching west toward the pampa" ("Autobiography," 61). In Buenos Aires specifically, the population of the city was around two million (Glaeser) and another significant percentage lived in the closely surrounding area. The population of Buenos Aires was so much higher than all of

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the surrounding country that an essay was published in 1940 titled, "*La Cabeza de Goliat*," in which the author "used the biblical metaphor to characterize Argentina as a country suffering from hyperencephalitis (an unhealthy enlargement of the head)" (Foster and Lockhart, 3) This disproportionately high population of the city seems to have continued into the present. Even in 1998, "one third of the country's population of thirty-four million resides in Greater Buenos Aires, and another third is concentrated along the river network that extends north and northwestward from the Buenos Aires delta, leaving barely ten million to populate the remaining vast stretches of the country" (Foster and Lockhart, 3).

This dense, growing population was extremely heterogeneous in its demographics and interests. In 1936, foreigners accounted for 36% of the population and "immigrants and sons of immigrants accounted for 75% of total population growth in Argentina" (Sarlo, 12).   The government had actively been recruiting foreigners for a long time in an effort to build a solid labor force for the country's agricultural and ranching industries (Romero). Literature played a powerful role here, too, particularly because the literacy rate in Buenos Aires at this time was over 90%. Various forms of media were reflecting and promulgating the heterogeneity of lifestyles, political orientations and cultural ideals. "Mass circulation books, serial novels and magazines were produced for this new public," and the publishing houses were also printing: "European fiction, philosophical and political essays, popular science, poetry." All of these factors helped to create a cosmopolitan population and "a culture that was becoming more democratic in production, distribution and consumption" (Sarlo, 14).

This social space of modern, newly capitalized and industrialized Buenos Aries had a direct impact on the people living in it. Relationships developed that could not exist without both the people and the unique space. Natives and immigrants, upper and lower classes, intellectuals and conspirators all rubbed elbows in early 20th century Buenos Aires, creating a "fluid system of aesthetic circulation and borrowing" (Sarlo, 13). This fluid system was driven by the people's desire to earn a living and to prosper.   Sarlo says, "the socioeconomic

processes…altered not only the urban landscape and ecology of the city, but also the lived experiences of its inhabitants" (9). The radical notion of desire had been channeled into productive activities, its force not seen by institutional power as subversive but rather harnessed to further the goals of the state. In spite of the encroaching homogeneity of modernism, she says, there was "a cultural style permeating the fabric of a society that offered little resistance, either politically or socially" (9)

What Sarlo describes is clearly a heterotopia as defined by Foucault. In fact, one might think of Buenos Aries at this time as a physical heterotopia within the social space of Argentina, and Borges' writing as a textual heterotopia within that physical heterotopia: like stacking dolls or perhaps a Chinese Box Puzzle.

7.2 Borges and *Las Orillas*

In this type of environment, differences become pronounced and "the boundaries between private and public are constructed and reconstructed incessantly" (Sarlo 13). Sarlo points out that the street is one of Borges' primary metaphors and for him it is "a symbolic space" (13) For us, the street can begin to represent the heterotopia of Buenos Aires. "In the street," Sarlo says, "time is perceived both as history and as the present" (13) The street is "proof of change" and "the site where these changes are turned into a literary myth" (13). The motion and movement that a street implies contributed to the creation of a physical heterotopia in Buenos Aires. This backdrop has infused Borges' work, she says, with a "tension" that is "a game on the edge of various cultures, which touch on the borders, in a space that Borges would call *las orillas*" (4).

Textually, *las orillas* means "edge, shore, margin and limit" (Sarlo, 20). Physically, *las orillas* were poor neighborhoods just outside of the city proper, along which the Maldonado creek ran. According to Andrew Hurley in a footnote to "Streetcorner Man," one of Borges' earliest stories, "the Maldonado (barrio) was a rough place, and the creek was terribly polluted by the tanneries along its banks" (Borges, *Collected Fictions*, 530). It was an area both "semi-

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rural and semi-urban," where the people worked in urban enterprises (slaughterhouses, for example), but retained a close connection to their recent past (Sarlo, 21). They tended to be rough and coarse personalities.

Borges wrote a screenplay in 1950 with his friend Adolfo Bioy Casares that they called *Los Orilleros.* This screenplay is sometimes translated as *The Hoodlums* or *Riverbank Men.* The *orilleros* were the men who lived on the riverbank, specifically in the story's setting of Maldonado, but also generally they were the men who inhabited *las orillas.* It was based on an earlier story by Borges , published in 1933, called "Streetcorner Man" (sometimes translated as "Man on Pink Corner"). "Streetcorner Man" was, in fact, based on an even earlier version of the same story that Borges wrote in 1927 called, "Men Fight." All of these stories revolve around a stranger who rides into town looking for a fight with the local tough guy. They do fight, and the stranger is killed. According to Borges, this story was based on "a legendary or historical account…that illustrates the cult of courage" ("A History of the Tango," 401) Borges wrote that when he first heard of the legend, in which two strangers fight for honor rather than personal reasons, "the detachment of that duel was engraved on my memory" (401). One of the important features of all three of these versions of the legendary story, says Borges in a 1955 essay called, "A History of the Tango," is that "the challenger is defeated" (403). This may mean, he says, that there is "a tacit condemnation of provocation," or "the dark and tragic conviction that man is always the maker of his own doom" (403). In either case, the heroes of the stories are "creating, without realizing it, a religion that had its mythology and its martyrs— the hard and blind religion of courage, of being ready to kill and to die" (403). The Argentine, says Borges in the same essay, "finds his symbol in the gaucho and not the soldier."

Here, Borges was able to create a mythic history that he believed his Argentine generation was lacking. "There are not legends in this land," he wrote, and "not a single ghost walks through our streets. That is our disgrace. Our lived reality is grandiose yet the life of our imagination is paltry" (qtd. in Sarlo, 20). For Borges, *las orillas* became one of his imaginary

spaces, "an indeterminate space between the plains and the first houses of the city, an urban-criollo topology, defined in the now classic formulation as the street…without a sidewalk on the other side" (21).

Borges' focus on the street without a sidewalk on the other side seems to be an appropriate metaphor for Soja's description of historicism. Soja defines historicism as "an overdeveloped historical contextualization of social life and social theory that actively submerges and peripheralizes the geographical or spatial imagination" (15). On one side is the social development of homes and building, facing the undeveloped, natural side. The street becomes the in-between. The booming industries were creating new divisions and borders within Argentina and, in particular, Buenos Aires, that reshaped the space and changed the flow of desire. This had the effect of sublimating the imagination. David Harvey describes heterotopias as a way to "provide a privileged means to escape the norms and structures that imprison the human imagination" (537). The heterotopia is identified in places where this imagination re-emerged. For Borges, this was the street and *las orillas*. For those working with literature in the face of New Media, this was the Web.

7.3 Space and the Marxist Tradition

Soja sees history, capitalism and modernity (for us in particular, the modernity of Argentina) as inherently connected, and two primary movements arose in response to these connections. One "centered on the Marxist tradition, the other in more naturalist and positivist social science." (29) This Marxist reaction to modernism began as a creative, revolutionary avant-garde movement that eventually, by the 1950's, became "hegemonic, rigid, establishmentarian" (30). Eventually it evolved into what is now commonly called Western Marxism, and it is from this branch of Marxism that "the reassertion of space and the critique of historicism eventually emerge" (30). While capitalism was bending space to its will, Marxism and other turn-of-the-century avant-garde movements were quietly perceiving the "instrumentality of space and the disciplining effects of the changing geography of capitalism"

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(34). Soja says that in the second half of the 20th century, Marxist analysis provided for new interpretations of:

> the patterns of land rent and land use, the variegated forms of the built environment, the location of industry and transport routes, the evolution of urban form and the ecology of urbanization, the functional hierarchy of settlements, the mosaic of uneven regional development, the diffusion of innovations, the evocations of cognitive or 'mental' maps, the inequalities in the wealth of nations, the formation and transformation of geographical landscapes from the local to the global. (52)

From this perspective, to engage in a discussion of spatiality as equal to historicity is innately political and, as Soja has explained, has revolutionary tendencies. What is more, when one speaks of cyberspace and New Media technologies, one must consider that "'Time' as we know it has no meaning in outer space—or in virtual space either" (PG#). The kinds of heterotopias that can be encountered when dealing with virtual space, according to Carolyn Guertin, are "alternate worlds" that "fracture and entangle time and space simultaneously" ("Quantum Feminist Mnemotechnics").

Amidst all the flux of the early 20th century, Borges was trying to situate himself as a writer of "the eternal" while very much immersed in Argentine culture and people. The Argentinean literary movements with which he was involved sought to "carve out a new space for itself in opposition both to the grand old men of Argentine culture…and to the naturalist and socially committed work of other young writers." This support of the "new," says King in the introduction to Sarlo's book, "was in itself a revolutionary activity" (x).

Borges wanted to be in touch with the "real" Argentine people and says that he lived "on the shabby northern outskirts of town" ("Autobiography," 40). However, the family "lived in one of the few two-story homes," owned a library of several thousand books, and maintained a country place to which they could escape in the summers. Borges had been deemed part of the elite "Florida" group of writers as opposed to the "Boedo" group that represented the people.

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Though this was later revealed to be a contrived rivalry, it still bothered him that he had not been placed with the Boedos. And he had the patronage and friendship of the wealthy Victoria Ocampo, the creator and editor of *Sur* magazine, and the woman who helped publish many of his early works.

<u>7.4 Borges Within His Own Texts</u>

One can begin now to imagine where Borges and his autobiographical elements appear in his texts. This may seem obvious: Borges frequently creates characters with his own name who naturally seem to be autobiographical in nature. He wrote in 1926 that "all poetry is the confession of an I, apersonality, a human adventure. The destiny thus revealed can be make believe…archetypal…or personal…I seek to achieve the latter" ("A Profession of Literary Faith," 26). In "The Aleph," one might assume that Borges the author has identified himself as Borges the narrator because they share a name and because the narrator seems to be a bit more objective (even more likeable) than Daneri. It is the narrator who mocks Daneri's "pedantic farrago" full of "verbal ostentation," ("Aleph," 279) which seems to directly contradict Borges' own goals in his writing. And it is the narrator who, at the end of the story offers the postscript and poses the insightful question regarding the name of the Aleph: "Did Carlos Argentino choose that name, or did he read it, applied to another point at which all points converge, in one of the innumerable texts revealed to him by the Aleph in his house?" (285).

But is it possible to read Borges, the author, as Daneri, owner of the house with the Aleph in the basement? From this perspective, Borges is much more like Daneri and Albert than he is like the protagonists of those short stories. Borges relates more to Daneri than we initially realized: It is Daneri who is surrounded by a fair amount of wealth and well being, but who yearns for a connection to something more; Daneri is given this something more in the form of the Aleph; Daneri uses the Aleph to compose poetry, culminating in winning "second place in the National Prize for Literature" (284).; and neither Daneri nor Borges is comfortable with his privileged access to his heterotopic space.

Regarding the "Garden of Forking Paths," if we were to identify Borges with any one character more than another, it is possible for the same reasons to read Borges as Stephen Albert. Albert is situated in a stable government job, has a nice house and seems to be well educated. He is the custodian of the book, a librarian of sorts, who has had access to the great-grandfather's novel, who seems to have solved the riddle of the labyrinth, and who is suffering from a great sense of solitude. The narrator, on the other hand, is working for the Germans, to whom Borges was adamantly opposed in real life.

Borges once wrote that, "My Kafkian story 'The Library of Babel' was meant as a nightmare version or magnification of that municipal library," ("Autobiography," 84). He also said of that job:

> Now and then during these years, we municipal workers were rewarded with gifts of a two-pound package of mate [tea] to take home. Sometimes in the evening, as I walked the ten blocks to the tramline, my eyes would be filled with tears. These small gifts from above always underlined my menial and dismal existence (83).

Could the Aleph or the grandfather's novel be symbolic gifts with the same kind of hierarchical ramifications? These heterotopias are tied not only to personal relationships, but also by contrast serve as reminders of a person's "menial and dismal existence." It's often a futile task to seek an author's biographical references within his work, or to identify "meaning" based on the author's intent. However, in this case Borges invites this line of questioning. "Nobody should dare to write 'outskirts' without having spent hours pacing their high sidewalks; without having desired and suffered as if they were a lover; without having felt their walls, their lots, their moons just around the corner from a general store, like a cornucopia," wrote Borges ("A Profession of Literary Faith," 27). These pursuits provide suggestive notions regarding Borges' relationship with space.

Borges has clearly infused his stories with some autobiographical and situational elements. Although he was not a political writer, his works are driven and influenced by

Argentinean politics. So, too, with the New Media theorists. Neither are they typically writing overt political treatises. But their questions, their influences and their play are all strongly political, nonetheless.

CHAPTER 8

A NEW PARADIGM OF NON-PLACE

8.1 A New Generation of Borges Projects

Since the "World Wide Web" became readily available, writers/programmers have continued to create countless online, interactive versions of various Borges' stories. Some are simple hypertext "retellings." Some are "adaptations" that were inspired by the story and loosely follow the plot or recreate one of the key concepts. Projects currently available online include, for example, "The Library of Babel: Digital Access to the Books of the Library," which provides a "full text search in the books" of Borges' library. The site is based on a random text generator, and users can click on book titles to skim various incoherent sets of letters, or enter a specific term into the search engine (n.p.). Some sites inspired by Borges recreate the stories as various types of games. Max Clarke, for example, has turned "The Book of Sand" into a puzzle that readers must order correctly.

Natalie Bookchen has a wonderfully elaborate project based on "The Intruder" that Esko Lius calls a "gamely narrative" (n.p.) and that creates a history of ten first-generation video games. The project, which recontextualizes Borges' story as "existing on the border of computer and video arcade games and literature," forces the player to take part in a misogyny that is "connected to the masculine point of view of the games," (Lius) and which "serves simultaneously to reinforce and abstract violence" ("SHIFT-CNTRL"). In Borges' story, two brothers share a woman between them. When their jealousy over this woman becomes too great, they sell her to a brothel but later buy her back. Ultimately, they kill her and, "almost weeping, they embraced. Now they were linked by yet another bond: the woman grievously sacrificed, and the obligation to forget her." Bookchin's project reads the narrative to the user as the user progresses through the games and the horrifying final game forces the reader to

literally put the woman into the scope of a gun and shoot her in order to find closure in the game and in the story. Bookchin writes that "the reader's own role and the artifact grow to form a new world, a semifictive plane that hardly any printed short story can actualize" (Lius).

Although similar to Moulthrop's Storyspace project, Nelson's Xanadu and Ulmer's Fetisturgy, these new projects are presented to a group of users that has changed from the rather small, select group of programmers, enthusiasts and theorists of the early 90's to the general public. Many of today's users approach the 21st century connectivity as a given, or even a right. In fact, in July, 2010, Finland became "the first country in the world to sign a law that provides every citizen of the country with a legal right to a broadband connection," according to an article in *Business Week* (Kharif). "Most of us can no longer perform our work duties, do homework or communicate with friends without having access to the Internet…People need broadband connections to live normal lives," the article states in a matter-of-fact tone. Children born after 1980, the "Millennial Generation," have never known life without it and simply approach this technology as one more common, everyday tool.

These developments are heavily corporatized and use of these systems often requires the user to agree to terms and conditions. Even open-source applications are part of this trend, in competition not for profit but for market share and for greater numbers of users.   Our actions and choices are recorded, tracked and sold as aggregated statistical data. It's all part of biopolitical production, which was precipitated by a shift away from material production and labor into intellectual and informational production. Today, say Michael Hardt and Antonio Negri in *Multitude*, "economic production is at the same time cultural and political," and when it comes to our immaterial labor that produces information, ideas and knowledge:

> production spills over beyond the bounds of the economy traditionally conceived to engage culture, society and politics directly. What is produced in this case is not just material goods but actual social relationships and forms of life (94).

For the most part, users have come to accept this, if they think about it at all. We could cynically echo Ulmer again here, who said that those of us who weren't "rounded up and massacred" have been "put to work in the service of the propaganda machine." In exchange for our biopolitical production, we are given access to these tools and technologies for little or no cost. Our daily lives thus are firmly embedded within ubiquitous and transparent contractual relationships.

8.2 Non-Place

The transparent contractual relationships inherent to biopolitical production are a critical component of what Marc Augé calls, "non-place." According to Augé, non-place is in opposition to anthropological space, or what we've been describing as social space. Anthropological spaces "create the organically social" (94) and are "relational, historical and concerned with identity" (77). An anthropological place is singular and historical. It is "symbolized" (82). By contrast, a non-place is "non-symbolized," and is a space which does "not integrate the earlier places" (78). For Augé, a non-place lacks social relationships and is predicated on solitude, similitude and contractual agreement. It is a space with no unique historical social memory and often Augé's use of the term is equated with very generic everyday places such as the airport.

The non-place "produces effects of recognition" that begin to replace the symbolic value of anthropological place. Augé says that "a paradox of non-place" is that these purely generic, non-social, ahistorical places become a source of comfort. Consider, he says, "a foreigner lost in a country he does not know," who "can feel at home there only in the anonymity of motorways, service stations, big stores or hotel chains" (106). These generic non-places become "a reassuring landmark" (106). Augé takes France as his primary example, but non-place also describes most of the daily spaces in which the average 21st century American finds himself. The entire Western world, as exemplary of non-place in general, is one where "people are born in the clinic and die in the hospital," and "where transit points and temporary abodes are proliferating under luxurious or inhuman conditions" (78). In the 1970's, Lefebvre explains

that social space is slowly overtaking natural space, but we see today in the 2010's that non-place is taking over social (anthropological) space.

Equally important to the proliferation of non-places, which now comprise most of the spaces we inhabit on a daily basis, are non-places' elements of politics and their circular relationships between the individuality and anonymity of inhabitants. Social space was defined by relationships, but non-places have to do with motion, speed and transition. Augé contrasts the "realities of transit (transit camps or passengers in transit) with those of residence or dwelling; the interchange (where nobody crosses anyone else's path) with the crossroads (where people meet); the passenger (defined by his destination) with the traveler (who strolls along his route…); communication (with its codes, images and strategies with language (which is spoken)" (108). Language has, significantly, been reduced to communication in non-place.

In order to gain access to a non-place, Augé continues, one must first prove one's identity. Non-place "deals only with individuals (customers, passengers, users, listeners), but they are identified (name, occupation, place of birth, address) only on entering or leaving" (111). Non-places "create solitary contractuality" (94). Once one has proved one's identity and gained access to the transitory present space of the non-place, one is able to slip into a type of anonymity that Augé compares to role-play. We are free of all our daily cares and worries because we are temporarily at the mercy of the situational rules of the non-place. This liberation from situational rules is similar to the liberation from rules and structure found in the heterotopia. Importantly, though, while Augé says that in non-place this provides a person with a sense of relief, clearly in a heterotopia it is accompanied by anxiety and worry.

Augé's *Non-places* was published in 1992. One might argue that non-place has proliferated to the degree that now we never can exit non-place. Rather, we simply cross boundaries from one non-place to the next. Today, however, we are no longer free of the weight of our daily pressures when we enter a non-place. We bring our connectivity with us as part of our biopolitical production. The solitude and isolation that Augé mentions continues in

terms of our physical body, but not in terms of our mind and our language. It seems that from a variety of perspectives, technology developments today are aimed at facilitating a merger rather than a division between our virtual and our physical selves. We are constantly communicating with people elsewhere, in other distant non-places. Twenty years later, the ubiquitous connectivity of the Web, the internet, the network, has infiltrated the non-place.

If social space has been largely replaced with non-place, or if social space has merged with non-place, what is the role now of the heterotopia? Can heterotopias exist as intensities within non-place? Can a non-place become a heterotopia? Augé himself compares his concept of non-place to that of Foucault's heterotopia (112). The examples that Augé offers of non-places include "hotel chains and squats, holiday clubs and refugee camps" (78). These are remarkably similar to Foucault's example heterotopias, "prisons, asylums and holiday villages" (n.p). Augé also includes "the deck of a ship putting out to sea" (89), and Foucault says in "Of Other Spaces" that "the ship is the heterotopia par excellence" (n.p). However, a non-place is not a heterotopia because fundamentally non-place exists based on contracts and structure, while a heterotopia exists to provide an alternative to contracts and structure. Foucault says that "heterotopias always presuppose a system of opening and closing that both isolates them and makes them penetrable. In general, the heterotopic site is not freely accessible like a public place" ("Of Other Spaces"). But once one has gained entry to the heterotopia, one is faced with the unknown, the uncomfortable or the uncatalogued. After gaining entrance to a non-place, one settles into the behavioral rules of the contract.

CHAPTER 9

CONCLUSION

It's no surprise that Borges prefigured the Web. He struggled to understand the politics of 1920's Argentina; the roles of capitalism, Marxism and fascism that his government alternately played; the industrial development of the natural spaces of Argentina; and the simultaneous flooding of the cities and nationalist culture with outsiders. His work as a librarian, an early information architect, led him to question the underlying structure of the world around us. In Borges' stories, his unusual situations represented his drive to find an outside, an alternate space free of the rules and laws he faced in reality. This type of drive often results in a sense of failure, or at least of overwhelming impossibility. He was concerned with the fear and anxiety that people faced when looking to exit comfortable, familiar structures. He was concerned with the ability of language to represent these fears. And, despite these concerns, he harbored a hope and an enthusiasm that at some point we might tap into the potential of the alternative heterotopic spaces.

Foucault was inspired by Borges' creative exploration of these issues and he wrote *The Order of Things* in response. Theorists of New Media, concerned with the types of structural issues in Foucault, discovered this affinity in Borges. They read Borges' stories, though, not as pessimistic forewarnings but as hopeful maps of the future. The theorists of New Media, who themselves were able to become artists as the field of hypertext developed, were soon faced with the same disappointment in politics and revolution that Borges was. The utopia they desired turned out to be a heterotopia, and the Web was rather quickly overrun with capitalism, contracts and corporate ownership. The ubiquity today of non-place and the network, which includes not just the web but cellphones, laptops and all kinds of other handheld devices, has helped users of technology cross a critical threshold into a new kind of space.

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However, the revolution with which we began, the one hoped for by Moulthrop, Ulmer and Nelson, is not necessarily over before it ever takes place. In trying to come to terms with our incessant drive to overlay structure precisely in the places where we celebrate the lack of structure, we must consider the potential of heterotopias within social space. Sandy Stone says, as we noted earlier, that social order and spatial accountability are intimately connected and of great importance to governing powers and it seemed ironic that it wasn't a sovereign power that entered the online communities and created a bunch of rules. We, ourselves, initiated it and we continue to do so with the ubiquitous contracts of the non-place, the ubiquitous communication via laptops and cell phones, and the development of "an institutional logic capable of sustaining a new society" (Hardt and Negri, 350). We must consider carefully the power that we, as users, wield.

It is possible that the revolution hoped for in the early 1990's could not happen until the number of users reached a critical threshold. It is possible that today we have reached that point. Consider the isolation that Borges portrayed in his characters when they fluctuated between heterotopic and social space. Compare that to the new age of a non-place coupled with ubiquitous computing. We are embedded within contractual relationships that are, by Auge's definition, solitary. Yet we are also constantly connected personally and professionally to a multitude of people. Where is the heterotopic space in a situation like this that provides the alternative, the necessary "other than that?"

A deeper connection exists between Borges and theorists of New Media than simply their hope and imagination for the future of information architecture, for the future of language as a system. There is a predetermined sense of loss in knowing that these systems are doomed from the start. But the drive is worth celebrating and each new round opens up new heterotopic possibilities. The potential is never utopian, because that implies an end. This next round of development in the world of programming and Internet connectivity will focus on reintegration of the body, of physical imperfection and of human unpredictability into the

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structure. It certainly will not be the final round, but it will inevitably drive us back to Borges as we seek new insight. Inevitably, too, as we interpret our new insight, we will likely determine that it was always already there.

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