Borges's Paradigmatic Library:
Search Engines, Hypermedia, and Headlines

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Introduction

"The Library of Babel", by Jorge Luis Borges, was originally published in 1941 in his collection of short stories titled *The Garden of Forking Paths*. The story describes the universe as a library composed of an almost infinite amount of hexagonal-shaped rooms filled with 410-page books. There are 25 orthographic symbols which may be arranged in every possible combination to mark the pages of these books. These combinations present an almost infinite number of books, so many, in fact, that the Library hypothetically contains the solution to every problem and the answer to every question that will ever exist. With such possibilities, the inhabitants of the Library spend all their time searching for the book that will supposedly give them personal fulfillment and meaning. However, all the numbers that the narrator mentions are arbitrary. The number of pages, number of lines in each book, and alphabetical characters that compose the books have no intended meaning.

Much like other contemporary critics, I wish to present a comparative analysis of Borges's Library with the great database of the internet. The question of whether or not the internet is a type of library remains in debate. Vicente Revilla argues in his article "Is Google (Babel) the Library of the Future?" that although Google shares some similarities with the library described in Borges's fictitious work, ultimately it is not to be considered an accurate representation of that or any library. I wish to contend with Revilla, arguing that the Library of Babel, though not a typical library in form or method, was perhaps a prophetic representation of the internet, an electronic database where users may seek knowledge and meaning. I will compare Borges's Library with the internet through various internet functions: search engines, hyper-media, and article headlines via social media. These methods of media consumption suggest that users construct personal narratives as they consume media in a nonlinear fashion. Just as the Library's inhabitants hunt in a nonlinear fashion for the book that essentially contains the meaning of their life, internet users, in a similar way, look for meaning. If we understand Borges's Library in this context, we gain a more contemporary understanding of his work, as well as an optimistic vision of how the internet can enable the human family's search for truth. Indeed, Borges's story is a type of pre-poststructuralist allegory of the human search for significance and meaning.

Before discussing the relationship between the Library of Babel and the internet, I wish to highlight some of the terms I will be discussing. For the purposes of this paper, I will use the term "internet" broadly, as I focus on the way we

search for information using Google and other search engines. I will also use the term "hypermedia," which, according to Perla Sassón-Henry, is a form of internet media which includes text "in the form of printed words, still images, video, and sound" (10). Hypermedia is not necessarily to be experienced linearly or sequentially, but in an order determined by consumer preference. Additionally, I wish to present Revilla's definitions of a library, which seem to be in line with Borges's personal quote, "I always imagined paradise to be a sort of library" (194). First, Revilla explains in his paper that a library is to be a physical place, where one encounters a "humanistic experience" and sociality is encouraged (120). Second, he claims that books themselves are what define the word literacy, which ultimately leads to the continuation of scholarship, academia, and the overall growth of human knowledge. He says, "Google is not a book or repository for books which is synonymous with library" (119). Third, he claims that the democratically free nature of a library becomes perverted when companies like Google, Yahoo, and Microsoft assume authority over the books in their digital library and offer the knowledge only in return for payment. Certainly, Revilla brings up contestable points; however, they are somewhat counterproductive to the current comparison to the internet, which I believe "The Library of Babel" anticipated.

Order and Chaos of Search Engines

Some would describe Borges's writing as "paradigmatic," a term meaning of or relating to paradigms. He cares more for paradigms, themes, and worlds than style, character development, or narrative. Though his prose is certainly erudite and bookish, the story focuses on world as a paradigm; a method rather than style or result. The Library is developed as universe and the way the unnamed characters respond to that universe in a non-linear form. The narrator of the story begins by describing the Library: "[It] is composed of an indefinite perhaps infinite amount of hexagonal galleries," which contain 4 bookcases, 5 shelves on each bookcase, 30 books on each shelf, 410 pages in each book, 40 lines on each page, and approximately 80 letters on each line (112–13). The narrator's obsessive description of the minute details of the library presents the limited and perhaps orderly nature of the structure of the Library. The repeated pattern "suggests order and the idea that a single intelligence had created the infinite structure" (Shaw). The way we consume knowledge and information via the internet is similarly structured, though not necessarily by some deity. The parallel is that the language of the internet, the language of code, is representative of the order and organization of the library. Code is a uniform system, a language which adheres to mathematical rules. The layers of code, of signification, though stratified and complex, are orderly on an internal level. But if code reacts to the users of the internet, it will plug in algorithms which translate information into the applicable human language. What we receive when we use a search engine to search for the meaning of perhaps a single word ("library," for example) is light gray lettering which indicates that our search has engendered 1.8 billion results, or answers, in 0.84 seconds. We are met with so many results that might be ordered in a linear way, but we consume them paradigmatically, or nonlinearly, through hyperlinks. Such behavior mimics the librarians and inhabitants of Borges's Library who, upon looking just past the superficial order of the Library's structure, discover chaos in the books and their incomprehensibly varying assemblies of letters. Thus, in the same way the Library's

inhabitants search endlessly in the chaos of the Library for the book which unlocks the secret to the Library, and therefore to their lives, we search the internet for a similar book, and likewise receive a frenzied network of billions of answers as a result.

Paradigmatic Consumption and Hypermedia

The paradigmatic consumption of information – as opposed to linear consumption – via the internet comes from the connectivity of hyperlinks, which allow users to move seamlessly across the web from page to page, consuming whatever the page offers. The process of moving from hyperlink to hyperlink could be defined by conceptual metadata, the internet's version of Jean Baudrillard's theory of the simulacra in which the signifier essentially only points to more signifiers. This database style of media consumption is especially prevalent in what is defined as "hypermedia," an immersive experience that can include text, images, sound, music, video clips, and more. Sassón-Henry's book *Borges 2.0* clarifies Borges's ability to create a hypertextual experience: "Borges's texts overflow the limits of print by allowing readers to envision the possibility of multiple worlds and endings in their own minds. It is the enigmatic game between the mind and the power of language that sets the foundations for Borges's metaphorical stories and their embedded hypertextual features" (23). Sassón-Henry seems to nod to Borges as a prefiguration of the internet, one who not only wrote richly complex stories, but invited readers to understand the paradigm of database consumption through the creation of unimaginable worlds. Borges's Library depicts its inhabitants consuming the literature of the Library in order to arrive at some higher, more personally fulfilling level of understanding. Yet, the narrator does not offer a method to read the books in a linear fashion. Sassón-Henry extrapolates: "The books in the library are not texts but intertexts [...] [where] each intertext could represent a lexia that relates to another lexia or intertext" (54). As "intertexts," the books are only linked by the orthographic symbols which compose them; nothing more. The absence of a catalog disparages the inhabitants from a sequential reading of the books which would assumedly assist them in arriving at some greater meaning in the connectedness of the books. Instead, the Library books act more like hypermedia, and are to be consumed non-sequentially, which "allows users to move back and forth as they create their own paths and establish new associations" (Sassón-Henry 12). Fortunately, the experiences that hypermedia creates are enlightening in their non-sequentiality, whereas those seeking truth in the books of the Library experience existential terror from an inability to find meaning amidst the chaos.

Donald L. Shaw writes, "But when the contents of the bookshelves are determined, the exactly opposite impression immerges: all is unintelligible chaos. This is, as the first two worlds in the tale tell us, Borges's vision of the universe: chaos with the teasing semblance of order" (37). Borges writes about the loss of order in the society of the library as its inhabitants search endlessly for the books that will answer their questions and deliver them from their existential bondage. He describes a vast number of greedy individuals, who, "spurred by their desire to find their Vindication,"

abandon their native hexagons and violently seek out the hypothetical books of personal significance. The inhabitants' responses are characterized by their inability to reconcile the conflict between searching for truth and the seemingly impossible act of actually finding it.

News Headlines and Discontinuity between Title and Content

The Library provides another example of the order and chaos complex. "There are letters on the front cover of each book," the narrator writes, but "those letters neither indicate nor prefigure what the pages inside will say" (113). The relationship between the body of each volume and the front cover (or spine, in other translations), is arbitrary, which only increases the already dizzying number of possible books in the library. Such a relationship is akin to the discontinuity between, for example, article headlines on social media sites (colloquially called "clickbait") that represent data and the actual data to which the hyperlink leads. The misleadingly labeled books in the Library are similar to the way we consume news media, for both lead to a type of disorientation that comes from the incongruity of the title and its contents.

The content we actually read and the way we understand it is very much determined by headlines. "How Headlines Change the Way We Think" from *The New Yorker* reads, "By now, everyone knows that a headline determines how many people will read a piece, particularly in this era of social media [...] more importantly, a headline changes the way people read an article and the way they remember it" (Konnikova). Revilla writes, "Nothing seems to work in Babel, yet, ironically all the answers can be found in its books. The catalogue doesn't work because no one in the Library understands the contents of these books. In effect, there is no 'card catalogue.' Librarians however continue to search frantically for the truth" (119). Here, Revilla's comments concerning the card catalog correspond with my argument of the discontinuity between title and content. The arbitrary title/content relationship is as disorienting to modern readers as it is to the Library inhabitants. The narrator of Borges's story suggests that, in order to understand the discontinuity between title and content, one need only "compare these crude trembling symbols which my fallible hand scrawls on the cover of a book with the organic letters inside" (113). The narration crudely implies, and perhaps misleadingly, that the librarians are the ones who wrote the titles on the books in order to catalog the works and imbue them with meaning, while some Creator is the one who wrote the symbols on the pages within.

The Problem with Language

The unfathomable number of languages in the Library fractures the librarians' attempts to simplify the search for meaning (by simply browsing bookcases by title). The narrator writes, "There is no combination of characters one can make [...] that the divine Library has not foreseen and that in one or more of its secret tongues does not hide a terrible significance. There is no syllable one can speak that is not, in one of those languages, the mighty name of a god" (117). We can assume that before the discovery of the discontinuity between the title and content, librarians spent time browsing only the spines or covers of books, hoping that the title would signify the desired content in a book. But Borges

presents the problem with language in relation to the Library. An attempt to speed up the process to find the books that could solve every world problem with an "eloquent solution" is hindered by the chaotic nature of language and infinite number of signifiers that exist in the languages of the Library. The word "Babel" from the title of Borges's story comes from the biblical story of the Tower of Babel (a reference both apt and cheeky) and subsequent confounding of languages. The mystery of the lack of correspondence between the words within and the words outside is therefore understood, but not fixed.

Preprint and Postprint, not Preprint vs. Postprint

Revilla argues, "Babel is an allegory of print libraries. A user of such a library can touch its books. Google is em-blematic of machines, in particular, the Internet" (119). With this statement, he seems to deny that a machine can be a library in our contemporary age. He problematically sets up a false dichotomy of print vs. electronic language, due to the dominance of internet database sources in modern print libraries. The internet database and electronic print libraries (like Google Print Library) do not constitute a library because they do not fit into his aforementioned paradigm. I argue that this point of view is extremely limiting and even anti-Borgesian. The dichotomy need not exist, for it schisms the very nature of the human journey portrayed in Borges's allegory. Information need not be polarized to two sources from which the human family can consume knowledge.

The Search for Meaning

If Borges is drawing a metaphor for the Library as universe, then the internet's correspondence with the Library is defined by their shared ability to encourage the ongoing search for existential meaning. The internet essentially has led to "man's insatiable hunger for Web-based knowledge in an environment where the search engine becomes a portal to man's inquiries and search for answers," writes Sassón-Henry, synthesizing this idea. In effect, Borges's story is a metaphor for the search for meaning, and though it prefigures the internet, in practice, epitomizes it. Internet users still pursue knowledge in all facets, whether it be political news, popular culture blogs, or weight loss articles. To reiterate what Revilla wrote, they "continue to search frantically for the truth" (119).

Then, we must ask: is Borges's presentation of the search for truth pointless, as interpreted by Revilla, Sassón-Henry, and Shaw? We consume truth in information in a paradigmatic way, moving from link to link, from signifier to signifier, in a cyclical pattern of searching, always searching, hungry for the knowledge that will satisfy, yet often not arriving at a conclusion or larger truth. The database of the internet steers us in circles, as we navigate through all forms of media, where signifiers just lead to more signifiers in an ever-deepening well of simulated meaning. Shaw mimics my argument, when he says, "The activities of the various inhabitants of the library symbolize the variety of human reactions to the problem of finding an explanation of existence, and to the difficulties of the quest" (39). From religious fanaticism, idealism, and mysticism, we see that the inhabitants of the Library react differently to the possibility of significance, despite its unattainability. Shaw's most hopeful conclusion is "At best one can have recurrence within limitlessness [...] so, either the 'solution' is self-contradictory, or because circular (like the library/universe itself), futile" (37). Simply put,

the librarians are "seeking a key to the labyrinth" (Shaw 39). But perhaps that key is the search for meaning itself, a sort of Nietzscheian "Eternal Return" (39). The narrator himself expresses hope in his final remarks, "If an eternal traveler should journey in any direction, he would find [...] that the same volumes are repeated in the same disorder – which repeated, becomes order: The Order. My solitude is cheered by that elegant hope" (118). The eternal traveler of the internet should likewise find that hyperlinks lead to more hyperlinks which may eventually lead the user back to where they started. The "semblance of order" may piece itself together while one combs through trillions of bytes of data that slowly give meaning to the consumers' eternal search for knowledge. internet should likewise find that hyperlinks lead to more hyperlinks which may eventually lead the user back to where they started. The "semblance of order" may piece itself together while one combs through trillions of bytes of data that slowly give meaning to the consumers' eternal search for knowledge.

Conclusion

In closing, I wish to reiterate my claim against Revilla; that Revilla's argument stands contrary to Borges's story. His methods of thinking are based on a perspective of world literacy, of book reading, and of the social and communal engagement that print libraries can foster. I am not saying that he is wrong about the value of print libraries. I am simply proposing that we look at Borges's story from a contemporary lens, recognizing the way most information is consumed and processed today. Search engines, hypermedia, online articles, and more sources help the internet to function as Borges's Library. Indeed, it is the primary source by which most of us receive information and have our questions answered. While we look for answers on the internet, Google can deliver more than a billion search options. In this way, we may parallel the Library of Babel with such a tool, hypothetically inserting the tool into the Library. If the Library's inhabitants indeed wished to find the book that contained all the answers to life's greatest questions, and they were presented the catalog of Google, they need only type in what they were looking for. Yet, therein lies the paradox: Google requires specificity for it to be able to hone down the search and find the most relevant results. The narrator writes of the inaccessibility of the accessibility to the exponentially large quantity of information. After learning that the Library contained every book, the inhabitants were joyous and hopeful. But "that unbridled hopefulness was succeeded, naturally enough, by a similarly disproportionate depression. The certainty that some bookshelf in some hexagon contained precious books, yet that those precious books were forever out of reach, was almost unbearable" (116). However, though the great questions to life may not be reachable through the internet, the unreachable nature of the books may be resolved if we recognize the value in the information we do have, and the value in the search itself for greater yet more evasive truths.

Ultimately, there is no order upon which the Library inhabitants can rely. The search engine of Babel is the legs upon which the inhabitants walk, the hands which pull the books down from shelves, and the eyes which scan the covers and the pages. However, there is meaning in this search for truth. We need to understand that the way we read information in our contemporary age is different than the way Borges did. The internet represents the New Library of

Babel, and as such, it is just as futile to find that single book which contains the answers to the meaning of life as it would be to consider one absolute truth. No number of articles will help us arrive at that, but the journey of searching for meaning is fruitful, and we do it through text – both electronic and print – hypermedia, social media, and every other page of data the web offers. "The similarities between preprint and postprint provide a space to introduce the attempts of some of the printed works to overcome the rigorous authority of its medium (Sassón-Henry 16). The internet is only a vehicle with which we can arrive at truth. Borges published a story in which the medium became the message. The search for truth itself is truth, whatever method of discovery we use.

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