I was contemplating “The Library of Babel” one night, considering how it treats language as a purely mechanical, combinatorial process, and thought—that would make a killer app. I created a website, libraryofbabel.info, that currently contains every possible page of 3,200 characters, using a character set of the twenty-six lower case letters, space, comma, and period. It has received some attention from the press, who tend to frame its existence as though technology has now made possible the reality of something that was previously only a fantasy. For example, the following appeared in a *Slate* article entitled, “Jorge Luis Borges’ ‘Library of Babel’ Is Now a Real Website. Borges Would Be Alarmed:” “But still: Borges intended his story to be ironic—haunting because it was impossible—so he would surely be alarmed to know we’ve moved a bit closer to its realization.” I remain skeptical of this interpretation that seems an outgrowth of the mystification of technology in our culture. As we considered in the previous chapter, Borges’s library failed to live up to its universal pretensions for essential, not accidental reasons (thus, libraryofbabel.info falls short as well). It’s also the case that the property of iterability or repeatability, belonging to or disrupting the essence of language, is what makes possible both his short story and the website. We will now turn to a consideration of this essence or non-essence of language as it reveals itself in Borges’s story, in its virtual avatar, and in the ever transforming contexts language both enables and subverts.
What would it mean for the universal library to exist? It was imagined as a container of all possible expression, a totality that nonetheless defies possibility. What should we make, then, of the effect it has on users? Borges’s librarians thought that they could only interact with language in the modes of repetition and discovery — invention was denied to them by the omniferousness of their library. Visitors to libraryofbabel.info often reach a similar conclusion about the deconstruction of the distinction between invention and discovery, saying that now everything has been written, that language is henceforth possible without us, and that I hold the copyright on every previously unwritten page of text, while also having violated every existing copyright. But language does not become repetition as a result of the exhaustion of possibility (something essentially forbidden); rather, iterability resides at its origin.

This principle is most visible when we witness our every possible thought, speech, or writing reproduced mechanically, without recourse to the intentions of an author. We should recognize not that some machine or program has displaced our intentions and their former necessity, but rather that language was always possible without us. Iterability is this capacity of anything that functions like a sign to be wrested from its motivating context, to replace its speaker, its recipient, and its referent for another or for none at all. This is an essential property of a signifier — to function as such, it must be recognizable in different contexts, from this or that speaker, in speech or writing, in different tones of voice, in different typefaces, from man or woman, etc. Still, we should not be seduced by the dream of philosophers, that a sign corresponds to a pure and separate meaning, eternal and unchanging, independent of the forms its expression takes. This language of the angels, communicating itself immediately to thought without signs, would allow for the saturation of possible expression were it itself possible. But the gesture toward the infinite that we make in recognizing and identifying different signs, like the tremulous handwriting of our narrator and the symmetrical writing of God, always straddles this divide, carrying with it some meaning from the context it is departing.
As Derrida says, marks remain “separable from their internal and external context and also from themselves, inasmuch as the very iterability which constituted their identity does not permit them ever to be a unity that is identical to itself” (“Signature Event Context” 10). Nor can we control a sign by constraining its context — the potential for context is inexhaustible, even if or perhaps because context in general is ineluctable.

For anything to function like a sign or mark, it must have this property of iterability, which means that for us to speak or write at all, we must express ourselves with signs that remain mechanically reproducible, and capable of citation, parody, etc. If language were somehow tied to its motivating context and literal reference, everything that departs from this, like imagination, irony, fiction, lies, and so on, would be impossible. Borges’s short story is thus not one among others, but the story of all literature, and with it all reality. This or that universal library, mine or Borges’s, may have its limits and constraints, but everything in principle sits on the shelf of the universal library that resides in the essence of language.

Of libraryofbabel.info, That It Perhaps Does Not Exist

Given its character set and dimensions, libraryofbabel.info contains $29^{3,200}$ unique pages, or about $10^{4,677}$. In comparison, the universe contains only $10^{80}$ atoms. It would require many universes of hard drives to store all its pages on disk. This raises some necessary questions about the possibility or actuality of its existence. In considering the algorithm used to circumvent this impossibility, our focus will be on raising the question of the virtual archive and how it complicates our notion of presence and absence.

When I first constructed the website, I stored randomly generated text files on disk because my programming skills were not sophisticated enough to do anything more complex. Every URL for a page of text contained the name of a text file on my computer, and when a page of text was requested, the server opened that file, retrieved the text, and sent it to the client. After gener-
ating one million text files, my hard drive was full, and I had to figure out a different method. I created an algorithm that could generate a page of text by taking the index number as an input, without needing to store anything. The index number was indistinguishable from the ones that used to refer to the name of a file stored on disk, and the result was the same — every time a user visited a “location” in the library (the indices contain hexagon name, wall, shelf, and volume number), they saw the same page of text there. The algorithm generating the text was a pseudorandom number generator that used the index as an input or random seed, meaning that as users progressed from one page to the next in the library, what they saw appeared random, just as it did before. In effect, nothing had changed, though underlying that, almost nothing existed.

To approach the ontological question of the presence or absence of this digital archive, it helps to compare it to digital forms with which we have more experience. Many users share the initial reaction that if nothing immediately resembling these pages of text is stored on disk, they must not exist. But consider a more typical digital archive, like a library’s electronic holdings. Its texts are stored in a binary form on hard drives, most likely with some compression, and only exist in a readable form once a file is opened, yet it would not occur to us to think that when we close a PDF it ceases to exist and that it comes into existence

For those interested in greater detail: imagine a function that could take any number and convert it into a form represented by the character set of the library. The number that resulted would be a base-29 representation of the input — so 1 would become a, 2 b, 3 c, 30 would be aa, and so on until you reached 29^{1,200}–1, which would be a page of 3,200 periods. This algorithm can generate every permutation of a page of text, and stores nothing on disk, but lacks the randomness essential to Borges’s library. To restore this irrationality, I created a pseudorandom number generator (PRNG) to randomize the relationship of index to text. The index number is used as the input of this algorithm, which outputs a number anywhere between 0 and 29^{1,200}. This random-seeming output is then converted into a page of text (a base-29 number). The PRNG algorithm I used is invertible, which means that one can take a page of text and run the formula backwards to calculate its index in the library. This is how a “search” is performed.
from nothing when we open it again. The algorithm making libraryofbabel.info possible does not perform any compression, because the index number, which is an equivalent amount of data, needs to be entered in order to retrieve a page of text. They are similar though, in that both make a vast amount of data available and ultimately present in this digital and virtual sense.

Let us play the game of accident and essence with this archive. For instance, if the random number generator were removed, and it created pages of text beginning with just the letter a, followed by b, then c, and continued to pages of enormous length, with its only limit the RAM of the computer converting number into text, would this be an archive of present text? What if there were no numerical indices, but instead a user requested a page by entering a block of text and that block of text was exactly the content of the page? Is this an archive? Then what about the blank page, which holds in potentia any and every possible page of writing? Should we say that space, or what the Greeks called χώρα, often translated as “place,” is an archive of all possible material permutations, and thus that they are all constantly present? After all, space can be shown to admit any possible contents.

We should conclude not that we can or must create rigorous criteria for being, but rather that presence and absence are deconstructible terms without absolute grounding. Virtual presences were a reminder of this instability long before they took a digital or computational form, when they were restricted, for example, to mirrors, streams, or dreams. As we consider the impossibility of totality or universality and complicate the possibility of novelty (the presence of the new), we should keep in mind that the meaning of being is also withheld.

Image and Text

When I completed the text library, I recognized that the code I created could be applied to any realm of experience, and my desire to permute grew. I began work on the Babel Image Archives (https://babelia.libraryofbabel.info), which now contain every
Fig. 6 — A randomly accessed image from babelia.libraryofbabel.info. Babelia #4973828821858677.
possible 4,096-color, 640 by 416 pixel image—about $10^{961,755}$ in total. The functioning of the image archive is almost identical. Rather than representing a number with a character set, the 4,096 colors represent the different values that can occupy each position—and the rows and columns of pixels, like the lines of text, are the sequential digits. Each image is essentially a base-4,096 number. The vast majority look like no more than colorful static (see Fig. 6).

This indistinctness is a function of entropy. Any representational image must have blocks of the same or similar colors, which would be as rare as finding a page at random in the text archive with only the letter $a$. Nonetheless, the image archives contain digital representations of every past and future artwork, photographs of every event that will happen in the future, and all those that won't. The extension of iterability into the visual field disrupts the classical representation of the distinction between language and experience. According to this tradition, language is a representation of reality, whereas sensory experience would provide more immediate access to things. The image archives deconstruct this distinction—a visual experience indistinguishable from the “real” one is nonetheless possible in the absence of any motivating context, including the presence of the thing it is meant to present or represent. Again, illusion, mirage, fantasy, dream, representational art, the mirror and all reflection are only possible because iterability inhabits the essence of visual experience.

Iterability generates seemingly discrete units, signs that can be repeated. The basic elements of language are letters or words—but what are the components of the visual? We shouldn’t make the mistaken assumption that iterability can only affect vision in its digital form, when an image is encoded as pixels, each containing definite color information. If there are limits to what can be represented in the Babel Image Archives, it’s not the case that what lies outside those limits also lies beyond the reach of iterability. We can recognize immediately that a reflection or photograph reproduces reality faithfully and often indistinguishably, and thus that the citationality of the visual
does not wait for the appearance of any technology, let alone the digital, but rather makes the technical prosthesis possible. We may disagree about whether scientific or everyday experience reveals a more fundamental layer of reality, but in either case we see the essential place of iterability. Everyday experience encounters a world of objects and, following an effort of abstraction, a world of color. Both of these realms of visual experience are divided by the concept, which is itself an iterable structure. Everything we said before of the sign is true of the concept — it must be recognizable across a potentially endless number of instantiations, despite transformations of context. The experiential world of color recognizes a similarly conceptualized field, in fact a field that is more differentiated or impoverished on the basis of the refinement of the observer's knowledge of color. Nothing changes with respect to iterability when we attempt to define this field scientifically. We can define color as the impression of an amount of energy constituting something that is both wave and particle only on the basis of the accessibility of such an entity to our knowledge or experience. Because a similar result follows from similar experiments (based on the receptivity of an experimenter or mechanical sensor), we can form a concept and mathematical law to define this entity. Repeatability is essential to its status as empirically verifiable and scientifically valid.

For anything to escape iterability, it is not sufficient to point out the contingent limits of our technical reproductions or current knowledge. There will always be shortcomings to our efforts to totalize, like the constraints of the character set and size of a page on libraryofbabel.info or the number of colors and the pixel dimensions in the image archives. But a new letter, word, or color can only be added to our verbal or visual languages if it can be recognized as such, and thus if it is open to repetition. Nonetheless, we can see that neither sensory experience nor language grants access to a fundamental ground. What conforms itself to our knowledge or perception, whether as verbal or visual reality, is a representative, at least one degree removed from the imagined immediacy of things. Its iterability attests to its lack of an absolute grounding — it is equally possible in the
absence of things. Yet, despite only having access to a world and a knowledge of things and concepts that is entirely unmoored, the finite depends on the infinite which transcends it. A universe of only marks would not be internally consistent, because nothing would motivate the continuous advent of arrival and change that we greet as the flux of the present moment. Our world of emissaries implies this realm of absolute things, but in order to communicate themselves to us they must conform to our sensory apparatus and conceptual structure. Thus our experience is dependent on what remains inaccessible to us.

**Atomism and Eternal Return**

There is a philosophical system that attempts to describe a universe of discrete elements, and one that Borges related explicitly to the idea of the universal library: the atomist tradition. According to the atomists, the great complexity of human experience is possible on the basis of the interactions of a small group of basic particles, which combine in different numbers and positions to form macroscopic structures. In “The Total Library,” the essay Borges wrote two years before “The Library of Babel” to trace the history of the idea that language is possible as a combinatoric process, he finds its oldest forebears to be the atomist philosophers. Among other reasons, this should interest us because, as was argued in the first chapter, this idea is more ancient than any of its instantiations (Borges denies authorship of it, and I certainly do as well). Given that the atomists are pre-Socratic philosophers, whose writings are lost and whose ideas are recorded only in fragments and testimonia from classical writers, we could say that this idea originates before the letter. As an analogy to their view of the interaction of atoms accounting for sensory experience, they described language as a system where the permutations of a basic set of elements (the letters) account for the entire complexity of possible meaning. As we explored in the previous section, nothing that presents itself to our visual or verbal experience can escape the atomistic structure; nonethe-
less, our thesis will be that if there is anything like invention or novelty, it is dependent on the divisibility of the atom.

It’s also in “The Total Library” that Borges mentions explicitly the relation between the universal library and the eternal return. He writes, “it [the Total Library] is a typographical avatar of that doctrine of the Eternal Return which, adopted by the Stoics or Blanqui, by the Pythagoreans or Nietzsche, eternally returns” (214). Though we may associate the thought of eternal return with Friedrich Nietzsche, the idea has a much older history and in its most ancient formulation is based on atomistic presuppositions (though its oldest attribution, according to Borges, is to the Pythagoreans). The principles of atomistic eternal return are as follows:

1. Given a finite set of atoms, or an infinite universe (τὸ πᾶν) divided into worlds (κόσμοι) composed of finite sets of atoms,
2. an infinite time,
3. and a universe determined exclusively by mechanistic causality,

While Kane X. Faucher in “The Effect of the Atomist Clinamen in the Constitution of Borges’s ‘Library of Babel,’” relates the short story to the atomist tradition, he neglects the theme of eternal return that underlies all of Borges’s references to atomism. Faucher identifies the letter as the atom of textuality, but claims that the clinamen of the atom would be the source of the library’s permutations. This Lucretian idea accounts for the presence of chance and even freedom in the universe, and thus contradicts the mechanistic and combinatoric premises of the eternal return. His identification of an infinite, cyclical universe as “Aristotelian” (143) is also a misattribution. If one does not look too closely, one could make Aristotle resemble the atomists on this point, but the former explicitly rebuked the atomistic doctrine, because it posited the mere appearance of teleology without any intentionality. Though he is correct to question the verifiability of our narrator’s universal pretensions, Faucher’s conclusions that the library’s texts have “a truth value of nil” and his advocacy of a “hyper-linguistic,” “anagogical” reading method by which “the rise above of spirit in relation to text” overcomes the latter’s “absolute lack or vacuity,” demonstrates a greater ideological mystification on his own part (145).
then the atoms composing our world will necessarily exhaust their possible permutations and will begin to repeat. Because there is no intelligible causality (free will or divine intervention) which could alter the course of events, the entirety of natural and human history will repeat endlessly in the same order. We should hear echoes in this of the form of repetition we referred to as iterability and its relation to discrete units, atomic elements.

We should not make the mistake of thinking that the natural philosophy of ancient thinkers presents an outmoded way of thought and that our science has superseded or refuted these theses. The atomist philosophy developed in response to an essential problem of thought, and one that science has yet to answer definitively. It was considered in the first chapter, under the heading of Kant’s antinomies of pure reason, as the necessary struggle of reason between the need for a simple substance and the impossibility of anything indivisible appearing in an infinitely divisible time and space. A simple substance, or element that cannot be further divided (an *a-tom*, that which cannot be cut), responds to an essential need of thought. The ancients looked at the basic materials of their world — for example, wood — and found a problem: no matter how much they subdivided this matter, they found at the end — smaller wood. If this process could continue endlessly, there would be no basic substance out of which wood and its properties could be built up; the stability of all macroscopic experience is drawn into question if there is no simple substance. The solution of the atomists was to simply posit (or assume) that indivisible atoms underlie all experience; these atoms’ only properties were shape, position, and size, and all properties of all objects developed from the different arrangements and orientations of these simpler objects. We can already notice a problem in this theory — for atoms to have shape and size, they must be at least ideally divisible, and it would be possible, for example, to speak of the corners of a triangular atom, etc. (Waterfield 165–66). It’s not at all the case that this theory was confirmed in the early twentieth century when “the atom” was first modeled by physicists. The fact that we now compose
the universe not simply of atoms but of sub-atomic particles would make an Ancient Greek (or, as Borges puts it, a philologist) laugh. The essential property of the atom is not that it is microscopic but that it is indivisible — and it remains a question whether it would ever be possible for something indivisible to present itself to empirical investigation, or whether the best we can ever do is to reach a layer of reality that our technology and knowledge are no longer sufficient to divide.

To approach Borges’s thoughts about the eternal return, it’s helpful to go by way of Nietzsche. Certain tendencies in Borges’s fleeting, playful discourse will be more intelligible when we have explored a similar technique in his predecessor. Perhaps the most important trait shared by the two authors is a capacity for self-contradiction that we have already seen at work in the interplay between Borges’s fiction and non-fiction. Nietzsche, too, engages in this practice which draws into question the most fundamental assumptions of the philosophical tradition: that reason is a universally sovereign unity of thought and that rational discourse implies a rational subject with the same incapacity for self-contradiction. The difficulty becomes, across this gap of ironic distance, discerning the contours of an author who may be multiple, mutable, or nowhere at all.

Nietzsche

To understand Nietzsche’s writings about the eternal return, it would be helpful if one could fit them within an architectonic in which they dovetailed with the other major concepts of his philosophy. However, such an approach would begin by betraying him. His fragmentary style seethes with internal contradictions and irreconcilable principles to such an extent that one can only form coherence of it by denying and doing violence to parts of the text. The mania for division and denial in Nietzsche criticism, to create periods of his thought that consist of single works or even portions of a text, to dismiss individual sentences or aphorisms as products of madness, or to deploy the difference between published and unpublished work is ultimately an
effort to divide and conquer a corpus already in the process of dividing and doing battle with itself.³ None of these categories can ever be secure, especially in a body of work whose basic mode is internal strife. My preference is to attempt to embrace or at least to think through as many of these conflicting fragments as possible. What Nietzsche writes of the subject is just as true of the supposed author of his fractured discourse:

³ By no means would I belittle the philological work that sorts out the dates of Nietzsche’s scattered corpus and attempts to place in order drafts, revisions, and redactions. This is important scholarship from which Nietzsche criticism can benefit. It only goes astray if it pretends that its goal is to compile a polished body of work free of contradiction, to validate or exclude fragments on the basis of agreement or dissonance with a supposed published doctrine.

One typically dismisses a draft, an early work, a late recantation, etc., if it seems to contradict what is understood as the dominant tendencies of the body of an author’s work. Of course, the construction of that dominant interpretation is not neutral and depends on the very acts of exclusion that it is supposed to justify. But it is all the more paradoxical to perform such an operation with a body of work defined by its self-contradictions. The greatest absurdities come when madness is invoked as grounds for exclusion. There is no mark that distinguishes the discourse of the mad from the sane. Moreover, the aspects of Nietzsche’s fragments thought to be indicative of madness are those most characteristic of his style, which made a sport of hubris and self-overcoming. Walter Kaufmann is right to defend much of Nietzsche’s work (everything from Thus Spake Zarathustra to Ecce Homo) from critics who would dismiss it as products of madness. However, he makes two related gestures that undermine this defense: a) He argues not for the undecidability of sanity and madness, but for the sanity of Nietzsche’s work on the basis of an “organic unity” inimical to his corpus (Kaufmann 70), and b) he is still willing to invoke madness to discredit a fragment that conflicts with his critical or editorial positions (455–57). His strange argumentation in this case merits being studied in full, along with all the places where he reads madness on the grounds of a lack of “inhibition” in Nietzsche. For example, Nietzsche’s signing a letter “Dionysius” is attributed to madness breaking down his “inhibitions” (Kaufmann 33). This play with the signature is a sign of madness only if all literature is mad—was the one who wrote the name “Zarathustra” a decade earlier mad? What about the eighteen-year-old whose autobiography began, “As a plant, I was born close to the graveyard” (qtd. in Köhler i)?
The body and physiology as the starting point: why? — We gain the correct idea of the nature of our subject-unity, namely as regents at the head of a communality (not as “souls” or “life forces”), also of the dependence of these regents upon the ruled and of an order of rank and division of labor as the conditions that make possible the whole and its parts [...]. The relative ignorance in which the regent is kept concerning individual activities and even disturbances within the communality is among the conditions under which rule can be exercised. In short, we also gain a valuation of not-knowing, of seeing things on a broad scale, of simplification and falsification, of perspectivity. (Will to Power 271).

Underneath a body or corpus we place the unity of a subject only at the expense of the dissimulation of these “disturbances within the communality.”

The eternal return can to some extent contribute to the revaluation of all values, Nietzsche’s response to nihilism. He offers a genealogical explanation of nihilism, deriving it from the Platonic and Christian traditions which placed all value and truth in a transcendent, immutable realm. Atheism denied the existence of this realm, but it took hold in Europe without questioning the first premise of Christianity — that our world was worthless. As Nietzsche explains, “A nihilist is a man who judges of the world as it is that it ought not to be, and of the world as it ought to be that it does not exist” (318). The eternal return can contribute to the overcoming of nihilism by subverting some basic Christian assumptions. Christianity foretells a final judgment at the end of this existence, which places a final seal on the value of our actions and existence by determining if we are worthy of admittance into the eternal immutability of heaven. But according to the theory of the eternal return, there is only this world endlessly, and thus finding a value in this existence cannot be deferred or cast off into a transcendent realm. Aphorism 341 of The Gay Science, the first explicit mention of the eternal return in Nietzsche’s work, suggests that from the point of view of nihilism the repetition of this life is a great burden, but poses
the question, “how well disposed would you have to become to yourself and to life to long for nothing more fervently than for this ultimate eternal confirmation and seal?” (194–95).

Other aspects of the revaluation of values place in question some of his statements about the eternal return. The highest truths, according to the classical tradition that Nietzsche sees as the seed of nihilism, are those which are true universally, independent of the time and space in which they are tested and of the observer holding them true. The logical categories are seen as highest, according to this tradition, because of their independence from the particulars of this life—they apply to everything equally, as nothing can be without substance and accident, quantity and quality, and so on. Even if they may be, according to Aristotle, dependent on the existence of substance, they are not dependent on this or that substance, but rather nothing can be without being as a substance and without each of these categories applying to it. Nietzsche inverts this transcendentalism and places the categories in the service of life:

The inventive force that invented categories labored in the service of our needs, namely of our need for security, for quick understanding on the basis of signs and sounds, for means of abbreviation:—“substance,” “subject,” “object,” “being,” “becoming,” have nothing to do with metaphysical truths. (277)

What was understood to have a value because of its independence from life is recast as having a value exclusively for the sake of life.

This revaluation complicates many of Nietzsche's later statements about the eternal return. These often sound as though they are traditionally atomist in form (though he substitutes “centers of force” for atoms):

If the world may be thought of as a certain definite quantity of force and as a certain definite number of centers of force—and every other representation remains indefinite
and therefore useless — it follows that, in the great dice game of existence, it must pass through a calculable number of combinations. In infinite time, every possible combination would at some time or another be realized; more: it would be realized an infinite number of times. (549)

This argument relies on necessary chains of cause and effect, one of the logical categories Nietzsche has claimed is a superimposition on and falsification of the play of forces. As we try to understand what would be left over if we strip the categories from our conception of things, we must remember that we are not dispelling ideology to access an underlying truth. The measure of our interpretation can no longer be its truth, which is not a value in itself, but rather its relation to the will to power: “The criterion of truth resides in the enhancement of the feeling of power” (290). Nietzsche refers to the world without cause and effect as a mutual struggle of forces, the difference being that there is no substance underlying the changes and gathering them in a unity of identity. Without substance or cause and effect, all knowledge and all temporal progression are impossible — from one moment to the next, there is a recurrent mass of identity-less and formless forces. Nietzsche often debunks teleology with the argument that “if the world had a goal, it must have been reached” (546). This can be understood as an atomist argument: given the infinitude of time, any ultimate state it could tend toward would have been reached already. But Nietzsche always presents this diktat without anything like a logical argument or sufficient ground. It sounds to my ear, or my will to power, like an expression of the mutual struggle of forces: were it possible for becoming to reify itself as being, that would happen in the first instant, and remain so forever more. As this does not happen, we are left with an eternal return of the same in every moment, the constant advent of an undifferentiated field of forces in the new moment of becoming.

There is one last contradiction we should consider in Nietzsche’s writings on the eternal return, one which deals with everything we have been discussing regarding the possibility of
novelty and its relationship to the divisibility of the atom. We already heard the atomistic premises which at times he combines with his thought of eternal recurrence: “a certain definite number of centers of force.” How, then, should we interpret aphorism 617 from *The Will to Power*, which brings the eternal return in explicit dialogue with the idea of will to power: “to impose upon becoming the character of being — that is the supreme will to power […]. That *everything recurs* is the closest approximation of a world of becoming to a world of being: — high point of the meditation” (330, my emphasis), and seems to relate novelty to an explicit contradiction of his earlier atomistic premises: “Becoming as invention […]. Instead of ‘cause and effect’ the mutual struggle of that which becomes, often with the absorption of one’s opponent; the number of becoming elements not constant” (331). This “number of becoming elements” can only be what was earlier held to be definite in number — the centers of force. It would be possible, as I mentioned before, to claim these fragments belong to different periods of thought and represent a change in Nietzsche’s thinking (they were, according to Walter Kaufmann, written about five years apart). But any such gesture relies on the untenable position that a contradiction should not occur — in this discourse rife with them, and which places in question the value of truth and the principle of contradiction. Why then express himself by means of this contradiction? Because there is a certain world-without-us, infinite or absolute quality to the struggle of forces without identity or teleology, and it is the burden and possibility of a finite consciousness to overcome it by a knowledge Nietzsche celebrates for its falsehood: “Knowledge-in-itself in a world of becoming is impossible; so how is knowledge possible? As error concerning oneself, as will to power, as will to deception” (330). The possibility of something like novelty depends on the fallibility the narrator of “The Library of Babel” complained of when viewing his tremulous, imperfect penmanship — it depends on this very difference-from-self of the mark.
Borges

Despite the complexity of Nietzsche’s writing on the subject, Borges attributes unambiguously to his predecessor the atomistic form of the eternal return, criticizes this view, then posits a version that is closer to the one we unearthed in Nietzsche. It is not at all the case that Borges is a careless reader, and, given his habit of blending truth and fiction, one can never discredit the possibility that he has played a game with us, perhaps pretending to supersede Nietzsche to let his Will to Power as Will to Art forge a seeming novelty out of the eternal return of the same. Ultimately, we can find a similar expression of the impossibility of novelty at every moment in Borges, coupled with a similar contradiction focused on the divisibility or indivisibility of the atom. Again, our task will be the interpretation of a text at odds with itself.

Borges’s explicit writing about Nietzsche and eternal return comes in two essays included in Historia de la eternidad, “The Doctrine of Cycles” and “Circular Time.” The former offers an interesting demystification of the origin story Nietzsche offered for his central doctrine. In Ecce Homo, Nietzsche claims the inspiration for Thus Spoke Zarathustra (and much else besides) struck him while passing a pyramidal boulder4 by the Lake of Silvaplana, which he jotted down on a page signed with the

4 The pyramid makes its appearance often enough in the course of our study to produce a sort of paranoia, or at least to merit further consideration. In addition to this mächtigen pyramidal aufgetürmten Block, we have already crossed paths with “O time, thy pyramids,” a citation that multiplies across the pages of past and future texts. For Nietzsche it seems to be a symbol of the very eternity of the eternal return, perhaps with reference to the ancient and monumental Egyptian structures. For Shakespeare it is a symbol of the frivolity of finitude, which attempts to dress up as novel an enduring, unchanging sameness. Perhaps Shakespeare and Borges have the same monuments in mind, but emphasize their aspect as tombs, disguising a central absence? While a full contemplation of this theme would need to take into account Hegel’s semiology and the a of differance, we will break off merely by observing that “Perhaps universal history is the history of the various intonations of a few metaphors” (Borges, “Pascal’s Sphere” 353).
phrase “6,000 feet beyond men and time” (119). But Nietzsche was a classicist and couldn't possibly have been ignorant of the atomist tradition from which his idea originated or returned. Regardless, Borges in this essay attributes a rigorously atomist form of the eternal return to Nietzsche and claims to refute the latter by invoking the principle of uncountable infinity from Cantor’s set theory — that is, the infinite divisibility of time and space, and thus the impossibility of the atom. Though such a criticism should eliminate the possibility of repetition, Borges ends by upping the ante of eternal return: “If Zarathustra’s hypothesis is accepted, I do not understand how two identical processes keep from agglomerating into one. Is mere succession, verified by no one, enough?” (122). Such a question is much closer to Borges’s typical mode of investigation than the mathematical and scientific invocations he relies on to refute Nietzsche in the rest of the essay. The idea that all experience reduces itself to a single basic form, as well as all art and all time, repeats so often throughout his work (often in identical words and passages) that he could only have chuckled to himself every time he allowed it to return. “I tend to return eternally to the Eternal Return,” he acknowledges in the first words of “Circular Time,” and even this witticism appeared two years earlier in “The Total Library.” In the conclusion to “Circular Time,” Borges considers the principle that “universal history is the history of a single man” and concludes that “the number of human perceptions, emotions, thoughts, and vicissitudes is limited, and that before dying we will exhaust them all” (228). The patriarchal language in this formulation (“de un solo hombre”) is perhaps symptomatic of the abstraction necessary to make such a claim — it may be that gender difference, among others, prevents the formation of such a universal representative.

This immanent version of the eternal return has its textual avatar as well. In addition to his many comments about the single destiny of “man,” Borges is also led by his skepticism and idealism (denying the appearance of difference and reducing it to the unity of an idea) to treat all authorship as a unitary act, writing the same book endlessly. In a poem depicting the
burning of the Library of Alexandria, “Alexandria, 641 A.D.” its persona, the Islamic general Omar, whom Borges tells us in a note is “a projection of the author” (Noche 203, my translation), affirms the eternal return: “The vigils of humanity engendered / the infinite books. If not a single one / of that plenitude remained / They would be engendered anew, each leaf and each line” (Noche 167, my translation). The narrator of “The Library of Babel” offered us references to both forms of eternal return as well. His final affirmation of the infinity of the library is a traditionally atomist version. He offers as premises the infinity of space (i.e., of hexagonal rooms with shelves of books) and the finite number of possible texts, and posits with his typical dogmatism: “The Library is unlimited and Cyclical” (Labyrinths 58). His conclusion is a faithful rendering of the relation of chance and necessity in atomist thought: “If an eternal traveler were to cross it in any direction, after centuries he would see that the same volumes were repeated in the same disorder (which, thus repeated, would be an order: the Order)” (58). The eternal return we identified as Nietzshe’s, and which Borges’s idealism approaches, also has its parallel in the cabbalistic text described by the narrator: “These phrases, at first glance incoherent, can no doubt be justified in a cryptographical or allegorical manner […] I cannot combine some characters dhcmrlchtjd which the divine Library has not foreseen and which in one of its secret tongues do not contain a terrible meaning” (57). We are again in a position where we can learn from Borges’s narrator, despite his ideology. If the number of possible languages bestowing a potential meaning on anything resembling a phrase is nonfinite, and if a cryptographic formula is possible by which any phrase, page, or book could be transformed into any other, and if the literal meaning (as though this distinction were secure) of that ciphered or deciphered text could be transformed metaphorically or allegorically into any possible meaning, then it appears as

5 The method of interpretation favored by our narrator is one Borges has elsewhere referred to as Kabbalistic; he has called any text subjected to it “a mechanism of infinite purposes” (“Kabbalah” 86).
though every text is capable of every possible meaning. Like the world of formless and identity-less forces that repeats at every moment, we have in this case the eternal return of the same text, one admitting all possible meanings and interpretations and constantly transforming into every other text with indifference.

Just as Nietzsche before him, Borges presents the experience of a finite creature as a contradiction to the premises of any eternal return. In “For Bernard Shaw,” Borges considers in unison the thinking machine of Ramon Llull, which combined subject and predicates combinatorially, J.S. Mill’s fear that we would run out of novel musical compositions, and Lasswitz’s “chaotic library.” In typical fashion, Borges suggests that each of these ideas, including the universal library that formed the subject of one of his most haunting fictions, “may make us laugh” (*Inquisitions* 163). Beyond the dismissive tone, we also find his most profound criticism of these fears of exhaustibility: “Literature is not exhaustible, for the sufficient and simple reason that a single book is not” (164). We have returned to the property of difference-from-self, which guarantees that the purported atoms of a textual eternal return will in fact be divisible. He defines a book as “the dialogue with the reader” and asserts that “That dialogue is infinite” (163). Our finite, fallible knowledge guarantees something like novelty, as impossibility of the saturation of context or meaning.

The universal library is itself the locus of this dialectic. Its every instantiation has a precursor, to the point where we located its essence in iterability, a property residing in the essence of language and existing before the letter. Nonetheless, a pure repetition without difference is never possible, as Borges reminds us when he says that two events without difference would be indistinguishable. Thus, every instantiation of the library brings something like novelty with it, precisely because it fails to realize the totality or universality of its ideal. While Borges’s librarians searched for the justification of their existence and arcana for the future and found mostly lines resembling surrealist juxtapositions, the visitors to libraryofbabel.info
are just as likely to search for internet memes or ASCII art. The infinite dialogue continues.

Both Nietzsche and Borges show a sly self-assurance when expressing themselves by means of contradiction, drawing power from both sides of the polemic they straddle. In Nietzsche, this tendency shows an affirmation in the face of the impossibility of totality, which can neither be reduced to the forgetting of Being nor embedded in a unitary history and project of metaphysics issued forth from Being itself. Borges’s elusive acknowledgement of his own openness to contradiction is spoken in the voice of an artist and philosopher; he calls it his “tendency […] to evaluate religious or philosophical ideas on the basis of their aesthetic worth and even for what is singular and marvelous about them. Perhaps this is an indication of a basic skepticism [escepticismo esencial]” (189). Both authors express the possibility of a transcendence of limitations that can only be partial and unconfirmed, without absolute grounding. For there to be experience at all, things must conform to the form of iterable concepts and signs, which Nietzsche refers to as a tool of survival. Nonetheless, it is the ineluctable incompleteness of our knowledge (or the essential property of the iterable sign) that makes something like novelty possible. If there is always discovery in invention, as our creations always conform to the forms of possible knowledge and expression, there is still an invention in discovery, as even our greatest efforts toward fidelity rely on the unstable and never self-identical atom. Borges and Nietzsche opt for one of the possible modes of expression of this conflict, the affirmation that hides and elides a negation.

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6 See Derrida’s “Interpreting Signatures (Nietzsche/Heidegger): Two Questions” for the preliminary indications of a deconstruction of Heidegger’s Nietzsche, whose project to treat Will To Power and Eternal Return as the names of essence and existence in a metaphysical project betrays Nietzsche by attempting to totalize his thought.