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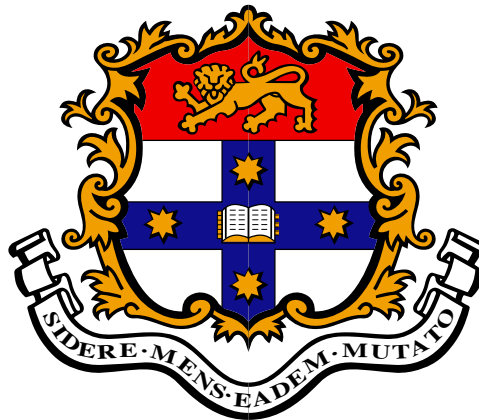
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Borges and Mathematics

Los juegos con el tiempo y con lo infinito

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A thesis submitted in fulfilment of the requirements for the degree of
Master of Arts (Research)
Faculty of Arts
University of Sydney
22 May, 2015

Abstract

My thesis concerns Jorge Luis Borges' recurrent fascinations with mathematics. I am interested in relating a series of nonfiction works dealing with mathematics and philosophy, written between 1929 and 1952, to the collection, *Ficciones*. In the first chapter, I look at conceptions of infinity in *Ficciones*, and show how they undergird the notion of 'unreality'—a name critics use for the illogic engendered by *Ficciones*' philosophically-structured worlds. I argue that Borges sees set theoretical thinking and the mathematics of 'endlessness' as means to understand philosophical variations on the self in "*tiempo vivo*."["living time."] Unreality and paradox occur in *Ficciones* because the terms of its narrative worlds are figured totally by some such mathematical-philosophical system; they are experimental texts, and function as fictionalized *reductiones ad absurdum*.

I then show how Borges' idea of *tiempo vivo* is mathematically and philosophically derived, and, in the second chapter, how these ideas are linked to reading and perceptual experience in Borges' first fiction. I examine "The Approach to al-Mu'tasim" and "Pierre Menard, Author of the *Quixote*," as well as nonfiction essays from *Discussion* and *A History of Eternity*, arguing that Borges saw mathematical thinking in philosophy as, fundamentally, a way of understanding perceptual experience in time, and thereby 'the reader.' The experience of reading, a reader's recognition of similarity and difference between texts, is the central problem motivating Borges' earliest fictional works. Borges understands language in literature, I argue, as mediating the importation of a writer's past into the reader's present—perceptual experience coded in one 'present' and decoded, differently, in another—evoking some composite perceptual experience, which he in turn thinks of in analogy to a mathematical series.

Finally, I use these ideas to offer a reading of "A New Refutation of Time." I suggest that the essay's summary negation of time is sophistical, but that the reasoning it draws on is not. I think the real purpose of the essay is to argue against understanding time perceptually, the self temporally, perception itself as a mathematical series of percepts, and so, ultimately, against conceiving of the self as the sum of what is experienced over time. In closing, I argue that the "refutation of time" refers instead to the power of the written word to evoke in the reader its own 'present,' and suspend all others—the *tiempo vivo* Borges refers to throughout his works.

Chapter 1

It is astonishing how much the word *infinitely* is misused: everything is infinitely more beautiful, infinitely better, etc. The concept must have something pleasing about it, or its misuse could not have become so general.

—Georg Christoph Lichtenberg, *Aphorisms*

Eternity is ample,
And quick enough, if true.

—Emily Dickinson,
Fr.#“352”

Introduction

I want to begin by placing Borges in some kind of context. Due to the way his work entered the Anglosphere, most transactions between critics tend to consider only his short fictions, the source of his fame and canonical poetics. This is Borges according to Bloom: Borges *qua* books, mirrors, and labyrinths. Though deeply patterned by the weight of many readings and readers, this figure is at best incomplete. Borges was a man of letters, in the *fin de siècle* sense: he wrote book and film reviews; he wrote polemics against Argentine Germanophiles during World War Two; he wrote literary biographies when given a column in the Argentinian equivalent of *Better Homes and Gardens*. Little of Borges’ nonfiction has been considered by Anglophone critics, which I think has skewed readings of the author and his influences. I want to briefly sketch the critical trajectory of Borges’ writings, foregrounding the development of this bias of selection. What concerns me in the present paper is a particular constellation of works in this heterogeneous nonfiction output: those dealing with mathematics and paradox.¹ These essays were written during Borges’ most

¹When discussing Borges’ nonfiction I refer (except where indicated) to the multi-volume Spanish language collection of Borges’ published works, *Obras completas 1923–1972*, ed. Carlos V. Frías (Buenos Aires: Emecé editores, 1974); *Obras completas 1975–1985* (Buenos Aires: Emecé editores, 1989). I am principally interested in the short story collection *Ficciones*, in *Obras 1923–1972*, by Jorge Luis Borges, ed.

productive period, from 1929 to 1951, which produced the short story collection, *Ficciones* (1944), arguably his most famous work.

Borges' interest in mathematics is well known,² but what is missing is a critical appreciation for the subtlety of his philosophical thought. I had initially hoped that looking at these essays would provide some hints of (mathematical) influence, which could then be identified in *Ficciones* (1944). Instead, I found in Borges' work a far more ambitious project underway: the resolution of a question posed at the end of the first of these essays,

Carlos V. Frías (1944; Buenos Aires: Emecé editores, 1974), pp.427–530, and essay collections, *Discusión*, in *Obras 1923–1972*, by Jorge Luis Borges, ed. Carlos V. Frías (1932; Buenos Aires: Emecé editores, 1974), pp.177–286 and *Historia de la eternidad*, in *Obras 1923–1972*, by Jorge Luis Borges, ed. Carlos V. Frías (1936; Buenos Aires: Emecé editores, 1974), pp.351–423. The essay collections appear in expanded second editions published by Emecé Editores in 1957 and 1953, respectively. I cite the short stories in the English translations which appear in *Ficciones*, trans. Anthony Kerrigan (New York: Grove Press, 1994) and *Labyrinths: Selected Stories and Other Writings*, ed. Donald A. Yates and James E. Irby (London: Penguin, 2000) in-text, and refer to the Spanish language edition of *Ficciones* in *Obras 1923–1973* for block quotations. Very few of Borges' essays have appeared in English translation. The most complete collection, *The Total Library: Non-Fiction 1922–1986*, ed. Eliot Weinberger (New York: Penguin, 1999), includes translations of the essays I refer to here. The best summary of the (fittingly byzantine) publication history of Borges' works I have been able to find is that in *Labyrinths: Selected Stories and Other Writings*, ed. Donald A. Yates and James E. Irby (New York: New Directions, 1964), pp.237ff. Note that the Penguin reissue of *Labyrinths* lacks the additional bibliographic information.

²Well known, but infrequently and only generally discussed. Two books by mathematicians have been written on Borges: William Goldbloom Bloch, *The Unimaginable Mathematics of Borges' Library of Babel* (New York: Oxford University Press, 2008); Guillermo Martínez, *Borges and Mathematics*, trans. Andrea G. Labinger (Lafayette: Purdue University Press, 2012). The first is a work of mathematics popularisation, using mathematical references in Borges' stories as points of departure for mathematical exposition. Bloch's work provides a useful and illuminating census of mathematical references in Borges' writings, placing them in the broader sweep of mathematical thinking in the nineteenth and twentieth centuries. The second work is a collection of essays—its editor a mathematician-cum-novelist—ruminating on literature, science, and affinities between the two. These are the only book-length studies of mathematics and Borges, but two other works, N. Katherine Hayles, *The Cosmic Web: Scientific Field Models and Literary Strategies in the Twentieth Century* (Ithaca: Cornell University Press, 1986) and Floyd Merrell, *Unthinking Thinking: Jorge Luis Borges, Mathematics, and the New Physics* (Lafayette: Purdue University Press, 1991) devote sections to the topic. The first three chapters of Merrell's book frame Borges' appeals to mathematics in terms of the Realism-Nominalism debate in the philosophy of language, before foundering in an attempt to draw parallels between Borgesian narrative worlds and (Merrell's own misunderstood account of) quantum physics, DNA, and the mathematics of fractals. Hayles' work was the first to point to the mathematical concepts of series and sequence in *Ficciones* and *History of Eternity*, and does so rigorously—without immaterial digression. She notes their recurrence throughout Borges' fiction and non-fiction, and sees them as part of a larger rhetorical or literary strategy of “subversion,” “aimed at revealing the “crevasses [sic] of unreason” . . . that make manifest the fictionality of . . . holistic reality.” *Cosmic Web*, p.161. In addition to these works, there are a handful of articles on mathematics in Borges: Maurice Blanchot, “Literary Infinity: The Aleph,” in *The Book to Come*, trans. Charlotte Mandell (1953; Stanford: Stanford University Press, 2002), pp.93–6; Emir Rodríguez Monegal and Roberto González Echevarría, “Borges and La Nouvelle Critique,” *Diacritics* 2, no. 2 (1972): 27–34; Colin Butler, “Borges and Time: With Particular References to ‘A New Refutation of Time’,” *Orbis Litterarum* 28, no. 2 (1973): 148–161; Juan Antonio Hernández, “Biografía del infinito: la noción de transfinitud en George Cantor y su presencia en la prosa de Jorge Luis Borges,” *Signos Literarios y Lingüísticos* 2, no. 2 (diciembre 2000): 131–139; J Andrew Brown, “Borges's scientific discipline,” *Hispanic review* 72, no. 4 (2004): 505–522; Martin Johnston, “Games With Infinity: The Fictions of Jorge Luis Borges,” *Variaciones Borges*, no. 5 (1998): 177–202. Most critical literature treating mathematics in Borges' works is concerned with the rhetorical strategies used in the deployment of the author's references to mathematicians or mathematics. Packaged with this mode of analysis is the assumption that Borges' appeals to mathematics serve primarily a rhetorical purpose, which I reject. At the very least, such analysis is blind to what Borges actually *does* with mathematics he references. This is my concern, and so I depart from the problematics in most of the literature on Borges and mathematics.

on the paradox of Achilles and the tortoise: “Would this bit of Greek obscurity affect our concept of the universe?—my reader will ask.”³ His tone is jocose, but I think betrays an anxiety. Borges is haunted by the *existential import* of all this mathematics and philosophy. I read these essays as part of a common project, and as a kind of literary-philosophical scratch paper. Mostly unread or taken at face value, these early essays are discursive, serial forays into abstraction. Later, in *Ficciones*, Borges fictionalizes these otherwise untethered abstractions—as literary thought experiments—so that they might be made to account for experience.

Providing some kind of (critical) context for my discussion of *Ficciones* is made problematic, though, by the rather strange reception history of the writings of Jorge Luis Borges. The first part of this history concerns his early work—those poems and literary prose pieces written between 1920 and 1935. (Borges produced no fiction until 1936’s “The Approach to al-Mu’tasim,” and even this was presented as a hoax rather than a short story.) This period is dominated by Borges’ obsession with his Argentinian identity; with José Hernández’s epic poem *Martín Fierro*, about an Argentinian *gaucho*; with “*las calles de Buenos Aires*”[“the streets of Buenos Aires”] and “*las mitologías del arrabal*”[“the mythologies of [its] outskirts”]⁴—“local color sketches,” or *criollismo*, a blanket term for Latin American regionalism in the early twentieth century. Though largely unread in the Anglosphere, these early writings and their regionalist poetics helped secure Borges the acclaim of his contemporaries in Latin America,⁵ which led bilingual critics to begin to translate Borges into French. The flood of Borges criticism in French in the late sixties began as a trickle in the forties, with the translation of a few poems, stories, and essays. However, it was the translation of *Ficciones* into French in 1951 that proved decisive for Borges’ international reputation. The cause of his rise in popularity in France in the fifties was also cause for criticism in the Latin world: after a period of convalescence in 1938 following a head injury, Borges had abandoned the poetics of *criollismo* for what he would

³“La perpetua carrera de Aquiles y la tortuga,” in Borges, *Discusión*, p.248. This was revised and republished as “Avatares de la tortuga” in the 1957 reissue of *Discusión* by Emecé Editores. Both are included in the edition of *Discusión* collected in *Obras 1923–1973*. Weinberger erroneously states that “Avatares” appears in *Otras Inquisiciones* in the notes to *Total Library*, on p.529.

⁴Jorge Luis Borges, *Fervor de Buenos Aires*, in *Obras 1923–1972*, ed. Carlos V. Frías (1923; Buenos Aires: Emecé editores, 1974), pp.17ff.

⁵Borges, though producing as many essays, was noted primarily as a poet amongst his contemporaries in Argentine literary circles. On this aspect of his influence, see essays by Marta Morello-Frosch, “Borges and Contemporary Argentine Writers: Continuity and Change,” in *Borges and His Successors: The Borgesian Impact on Literature and the Arts*, ed. Edna Aizenberg (Columbia: University of Missouri, 1990); Ana María Barrenechea, “On the Diverse (South American) Intonation of Some (Universal) Metaphors,” in Aizenberg, *Borges’ Successors*. The collection in which these essays appear, though the most exhaustive study of Borges’ global influence during his own lifetime, doesn’t feature the early nonfiction works I consider, *Discusión* and *Eternidad*, the contributors preferring instead to study the propagation of tropes from later collections, especially *Ficciones*, from Latin America to Europe, thence North America. This is presumably due to the limited circulation of *Discusión* and *Eternidad*: “[Borges’] influence [in the thirties] did not extend beyond a small circle in Buenos Aires: *Eternidad*, for example, sold exactly thirty-seven copies in its first year.” *Total Library*, pp.528-9

later call “*los juegos con el tiempo y con lo infinito*”[“games with time and the infinite”]. Spanish American critics after World War Two began preaching the Sartrean dogma of a (socially) “engaged literature”—Borges, found wanting on this account, was excoriated for his “sins.” Meanwhile, another French movement, this time in France, embraced Borges. To call these critics “Structuralists” is perhaps a bit post hoc, and too broadly resonant. They shared an interest in Borges’ newfound poetics: here was a writer whose practice exemplified their theories. Among this group are figures such as Michel Foucault, Gérard Genette, and even Jean-Luc Godard. The support of the French establishment was responsible for Borges being awarded, together with Samuel Beckett, the 1961 International Publisher’s Prize. This brought Borges, really for the first time, to the attention of the English speaking world. As French critical thought gained currency in the Anglosphere, the pronouncements of the French were picked up and placed into an English language context. This half-century long process of cultural transmission is best represented in English by the critical anthology *Jorge Luis Borges*, edited by Harold Bloom.



For now, I want to mention an early interpreter of *Ficciones*, Ana María Barrenechea. A Spanish language critic heavily influenced by French critical currents, Barrenechea wrote the first major scholarly monograph on Borges, *La expresión de la irrealidad en la obra de Jorge Luis Borges* (1957), which has been particularly influential in the Anglosphere.⁶ She argues for ‘unreality’ in Borges’ works, defined as the subversion of reality, “[t]he process of dissolution of concepts on which Man’s belief in the concreteness of his life is founded—cosmos, personality, time. . .” The source of this unreality is, for Barrenechea, the philosophical melange one encounters in the collection *Ficciones*. She constructs from this theoretical assumption a picture of Borges as a mature writer reacting against the social realism, the *criollismo*, of his youth—a writer led thereby to the poetics of the labyrinth and paradox. There remains, however, the question of the purpose of Borges’ fictionalisation of philosophy. How to respond to the weight of knowledge, the ever-present ‘oppression of the past,’ is a question that runs through Borges’ later fiction. This consciousness of tradition and the question of the obligation of the author seems to me to have led Borges to philosophy; he considers himself “neither a thinker nor a moralist, but simply a man of letters who turns his own perplexities and that respected system of perplexities we call philosophy into forms of literature.”⁷ But there is an unacknowledged normative

⁶I cite the translation, Ana María Barrenechea, *Borges, the Labyrinth Maker*, trans. Robert Lima (New York: New York University Press, 1965).

⁷Ronald J. Christ, *The Narrow Act: Borges’ Art of Allusion* (New York: New York University Press, 1969), p.ix.

assumption in Barrenechea's conception of Borges as "an admirable writer pledged to destroy reality and convert Men into a shadow,"⁸ which is amplified in the readings of later critics who take her poetics as given. Frances Wyers Weber, for example, reads Borges' fictionalization of abstraction as "signify[ing] a nihilistic stance towards reality."⁹ I think that these and like readings misconstrue the role of philosophy in Borges' art—or of mathematics and abstraction more generally, as in Maurice Blanchot's 1953 discussion of "the infinite" in Borges. Before I get to Blanchot, I want to set my own readings of two stories from *Ficciones* against Barrenechea's Borges.

Ficciones is a collection organized into two parts: A, "The Garden of Forking Paths," and B, "Artifices." In the prologues to each part, Borges himself offers no thematic justification for the division, except to say that the stories of the second half are "less torpidly executed than those of the first half."¹⁰ Parts A and B represent two extremes, two instantiations of "unreality." One of the most striking contrasts to be found is that between "The Library of Babel" and "Funes the Memorious," in Parts A and B respectively. These stories explore two different philosophical subversions of meaning, in both cases due to worlds which teem with irrelevant, unusable detail. In "The Library" and Part A, the external world overwhelms, while in B and "Funes" it's the internal.

The stories of Part A are all in some sense concerned with the representation of knowledge. The structures of the narrative worlds of "The Library of Babel" and "Tlön, Uqbar, Orbis Tertius" in particular invite comparison. The Library is in some ways an idealistic construction—a fictional universe in which Platonic or Berkeleyan ideals are made concrete, in which immanent ideals are made emanant. The world of Tlön, by contrast, is an affair of the mind. "The men of this planet conceive the universe as a series of mental processes,"¹¹ which appear to be able to encroach upon whatever physical extent the world has, in the form of "hrönir"—objects created first by "distraction and forgetfulness," but later created deliberately and used to render the past "no less plastic and docile than the future." Borges describes philosophy in Tlön as a kind of conscious sophistry: "The metaphysicians of Tlön. . . judge that metaphysics is a branch of fantastic literature. They know that a system is nothing more than the subordination of all aspects of the universe to any one such aspect."¹² The Librarians of Babel are, by contrast, a step removed from their ideals. These ideals are encoded, as sequences of twenty-five letters in books, each of which "is. . . four hundred and ten pages; each page, of forty lines, each line, of some eighty letters which are black in colour," distributed throughout "an indefinite and perhaps

⁸Barrenechea, *Borges, the Labyrinth Maker*, p.144.

⁹Frances Wyers Weber, "Borges' Stories: Fiction and Philosophy," *Hispanic Review* 36 (1968): 124–141.

¹⁰Borges, *Ficciones*, p.105.

¹¹Jorge Luis Borges, "Tlön, Uqbar, Orbis Tertius," in *Labyrinths*, p.33.

¹²*Ibid.*, p.34.

infinite number of hexagonal galleries, with vast air shafts between, surrounded by very low railings.”¹³ The story takes the form of a testament, written by one of the Librarians of Babel, the sole group of inhabitants of this universe. Their *telos* is the search for meaning. In Tlön—a society “congenitally idealist”—the world “is not a concourse of objects in space; it is a heterogeneous series of independent acts,” each of which literally creates and modifies. Knowledge defines such a world, and yet is what makes it essentially protean. In the Library there is a disjunction between text and context: everything is coded, seemingly, but there is no key; in Tlön, text is determined by context: anything can be decoded in any way. I read the world of Tlön as an allegorical representation, perhaps a caricature, of mathematical or logical reasoning. The philosophers of Tlön, the “secret society of astronomers, biologists, engineers, metaphysicians, poets, chemists, algebraists, moralists, painters, geometers. . . ,” function within a formal system of their own creation; thought alone defines the bounds of their world. They do not deal with meaning, but in the production of (dubiously) logical consequents from the axiomatic foundation of idealism. That anything is possible within Tlön, that philosophical works which “[do] not contain [their] counterbook [are] considered incomplete”¹⁴ indicates unreason is at its core. So the world of Tlön is brought about by the Principle of Explosion, whereby the affirmation of $P \wedge \neg P$ may be used to deduce the truth—and in Tlön, the existence of—any proposition.

The world of the Librarians is far more dire: “The certitude that everything has been written negates us or turns us into phantoms”; the narrator tells us that merely to speak “is to fall into tautology.”¹⁵ So the Librarians’ function is necessarily curatorial; unable to create, they search instead for order. Naomi Lindstrom notes that “[t]he perspective of the story’s readers is unlike that of the librarians, in that the former have no vested interest in the proposition that the library makes sense.”¹⁶ This distance between the narrator and the reader makes apparent the distinction between mere order and meaning. The basic premise of purposiveness is never questioned by the Librarians; much of the conflict within the Library concerns the realization of this purpose, the proper method of deriving order.

Over time, the narrator tells us, it was realized that the infinitude of the Library meant that there must exist books of prophecy, books containing a “clarification of humanity’s basic mysteries” and “a book which is the formula and perfect compendium of *all the rest*.” The conflation of order and meaning means that, in the Library, hermeneutical and ontological debates run together. The narrator relates another theory of the book-to-explain-all-books, conjured in mystic ecstasy: “a circular chamber containing a great circular book, whose spine is continuous and which follows the complete circle of the walls.” The narrator doubts the testimony of the mystics, and rightly so: there is a trick

¹³Jorge Luis Borges, “The Library of Babel,” in *Labyrinths*, p.78.

¹⁴Borges, “Tlön,” p.37.

¹⁵Borges, “The Library,” p.84ff.

¹⁶Naomi Lindstrom, *Jorge Luis Borges: A Study of the Short Fiction* (Boston: G.K. Hall, 1990), p.33.

being played here. Such a circular book, continuous with its chamber walls, could not be opened. If “[t]his cyclical book is God,” then it’s the Berkeleyan God—the unobserved, or, here, the *unobservable* observer; that which simultaneously generates and is removed from the world of meaning the Librarians seek.

The narrator believes in the significance of everything in the Library; to believe otherwise he considers heresy: “The impious maintain that nonsense is normal in the Library and that the reasonable (and even humble and pure coherence) is an almost miraculous exception.” Even a random collection of characters must have some meaning in one of the Library’s “secret tongues,” and “[n]o one can articulate a syllable which is not filled with tenderness and fear, which is not, in one of these languages, the powerful name of a God.” Where Tlön represented a formal system, a logic unto itself, the Library is an infinite shelf of such logics. Truth is a mere triviality, since any and every utterance can “no doubt be justified in a cryptographical or allegorical manner; such a justification is verbal and *ex hypothesi*, already figures in the Library.”¹⁷ Again the narrator has conflated truth—in this case, mere existence—with significance, worse, with meaning.

His purpose in authoring the testament is theological, the document itself a catechism. He seeks to save the divine infinitude of meaning in the Library, through the institution of some (universal) order. The narrator must affirm the temporal and spatial infinitude of his universe; he sets out to “say that the Library is unending.” He considers axiomatic the proposition that “[t]he Library exists *ab aeterno*.”¹⁸ The spatial infinity of the Library is harder to deduce; the narrator recognizes that the fixed format of each book means that the number of possible books is limited, but considers “absurd” the idea that the Library can come to an end. He “venture[s] . . . this solution to the ancient problem: *The Library is unlimited and cyclical*,”¹⁹ and takes solace in the putative existence of such an order. Were this true, the Library would not be infinite in its physical extent, but the Library’s “secret tongues,” and other hermeneutical contrivances, would guarantee an infinitude of texts.

The second part of the collection, titled “Artifices,” plays counterpoint to the stories of the first part. Ideal realms give way to another kind of narrative world—sensate worlds of salient detail, built from experience and memory. Borges the writer-cum-philosopher is at work here too, though in a different mode; the unrealities of the second part are those created and experienced by the individual. In “Funes the Memorious,” the titular character is an autodidact, possessed of an innate sense of the passage of time, and, after a fall which renders him quadriplegic, an eidetic memory. Funes’ apprehension of the world is remarkable: “Two or three times he had reconstructed a whole day; he never hesitated, but each reconstruction had required a whole day.” Note the uncertainty in the statement; we

¹⁷Borges, “[The Library](#),” p.82ff.

¹⁸[Ibid.](#), p.79.

¹⁹Emphasis in original. [Ibid.](#), p.85.

can be sure this is due to the narrator rather than Funes. Indeed, throughout the story we find that the narrator ‘recalls,’ while Funes ‘knows.’ Funes grasps intuitively the forms of “the stormy mane of a pony” or “the changing fire and its innumerable ashes,” as we would those of “[a] circle drawn on a blackboard [or] a right triangle.” The narrator, by contrast—whom we are meant to identify with Borges himself—remembers only episodically, and he admits he cannot recall a few central details, or that his memory is indistinct. And yet, the narrator’s memory is also quite remarkable: he recalls orthographic specifics of Funes’ handwriting; he recalls the image of Funes “behind the iron grating of the window, which emphasized his condition as a perpetual prisoner”; and he recalls the image of Funes reporting the time against “an enormous slate-coloured sky” from above him, running along a “narrow and broken path as if it were a narrow and broken wall,” though he noted it only when pointed out to him by his cousin.²⁰ The narrator recalls the specificity of Funes’ actions, but only when they are coupled to percept—the sharp outlines of his handwriting; his motionlessness behind the iron grating; the precision of his footfalls along the raised path. Crucially, and unlike Funes, the narrator’s memory depends on evocative perceptual detail—primarily visual—as an aid; in the dim light before dawn he can only “recall the intermittent glow of [Funes’] cigarette.”²¹

There is an abrupt change in the narrator’s reporting of detail after this, half-way through the story, when he “arrive[s] at [its] most difficult point.” The narrator reports a conversation with Funes in the predawn darkness; here, perceptual detail and recalled imagery are murky, and so can’t be relied upon as mnemonic aids. The philosophical bulk of the story consists in this half, and the narrator takes on aspects of the authorial voice. This change illustrates a more general point about narrators in *Ficciones*. Much attention has been paid to ‘the narrator’ in Borges’ stories, sometimes as a proxy for the author himself,²² but usually while assuming ‘the narrator’ is a unitary and coherent entity throughout the story or text. This is rarely the case. The stories which take mathematical or philosophical ideas as scaffolding or conceit usually retain a conspicuous narrator’s voice for part of the text, either to construct the scaffolding, or to tear it down. The narrator in “Pierre Menard, Author of the *Quixote*” (1939) follows this pattern, as I’ll show next chapter. In “Funes,” the narrative voice in the first part of the story introduces Funes the man, who is depicted as a series of vivid mental images and subjective impressions. The voice that takes over in the dark introduces Funes the mind.

In the second part, this voice, the authorial voice, relays Funes’ own reflections, and

²⁰Jorge Luis Borges, “Funes the Memorious,” in *Labyrinths*, p.88ff.

²¹*Ibid.*, p.91.

²²The equation of narrator and author is assumed in much early psychoanalytic criticism, most notably Barrenechea’s *Borges, the Labyrinth Maker*. Edwin Williamson too, for example, in *Borges: A Life* (New York: Viking, 2004) reads Borges himself into the narrative voice present in many stories, often disingenuously. See the review, “Borges on the Couch,” in *Both Flesh and Not*, by David Foster Wallace (New York: Little, Brown & Company, 2004).

we start to see the hell in which the man lives because of his mind. Funes alighted, says Borges, on a Lockean system of signification, which assumes a one-to-one correspondence between words and ideas: “Locke... postulated (and rejected) an impossible language in which each individual thing, each stone, each bird and branch would have its own name; Funes once projected an analogous language, but discarded it because it seemed too general to him, too ambiguous.” Funes’ desired system would have each signifier bound to its signified, and therefore enumerable: “an infinite vocabulary for the natural series of numbers, a useless mental catalogue of all the images of his memory.” The reference to the natural numbers, the numbers used for counting, $\mathbb{N} = \{0, 1, 2, 3, \dots\}$, bespeaks the mathematical undergirding of *Ficciones*. Locke rejected the language, but retained its germ—that “Words, in their primary or immediate Signification, stand for nothing, but the ‘Ideas’ in the Mind of him that uses them, how imperfectly soever, or carelessly those Ideas are collected from the things, which they are supposed to represent.”²³ ‘Ideas,’ according to Locke are “the immediate object[s] of Perception,”²⁴ and are the atoms of his epistemology; the abstract objects from which our experience, and minds, are constructed. Funes’ excessive perspicacity makes him an avatar of experience—a Lockean mind unable to forget, or to process Ideas without recourse to a Leibnizian unconscious, or *calculus ratiocinator*, a means for organization, deduction from, and reduction of information. In the prologue to part B of *Ficciones* Borges writes that “Funes the Memorious” is a long metaphor of insomnia. Funes’ insomnia seems to be a consequence of his apprehension—and retention—of multiplying detail: “it bothered him that the dog at three fourteen (seen from the side) should have the same name as the dog at three fifteen (seen from the front).”²⁵ These details saturate his brief existence, and yet “he was, let us not forget, almost incapable of ideas of a general, Platonic sort.”²⁶ If Funes is a Lockean mind, he is capable of the collection of “Ideas from the things which they are supposed to represent,” but no more: he is powerless to manipulate or to forget Ideas, and so to imbue anything in his world with meaning. This notion, of the necessity of forgetting to the process of thought, is in some sense the central fact of the story. But Borges is also offering us a critique of Locke’s theory of knowledge. To think isn’t merely to accumulate percepts on a *tabula rasa*, one must also have synthesis and analysis; procedures which lend meaning to Lockean ‘Ideas.’

Lacking these, Funes is quite literally inundated by Ideas—at the end of the story the narrator reports Funes’ death in a one line obituary: “Ireneo Funes died in 1889, of congestion of the lungs.”²⁷ ‘Drowning’ deaths also figure in the Library. Five hundred years

²³John Locke, *An Essay Concerning Human Understanding*, ed. Roger Woolhouse (1690; London: Penguin, 1997), Bk.III, Ch.ii, §2.

²⁴*Ibid.*, Bk.II, Ch.viii, §8.

²⁵Borges, “Funes,” p.93f.

²⁶*Ibid.*, p.93.

²⁷*Ibid.*, p.95.

ago, the narrator relates in a footnote, “there was a man for every three hexagons. Suicide and *pulmonary diseases* have destroyed that proportion.”²⁸ These early librarians, lacking the cryptographic and hermeneutical devices of their descendants, were overwhelmed by the manifold texts they could not make sense of, by signifiers that would not signify.

Essential to this subversion of meaning in “The Library” is what is left out—the subjective components of experience. The Librarians have a profusion of texts, but lack the experience which might lend such texts significance and meaning. They are Moderns, possessed of methods of generalization, and are able to make cryptographic and allegorical judgments, unlike their forbears. The subversion of meaning in “Funes the Memorious” is effected by a profusion of signifiers. Funes lacks generalization and drowns in experience, in percept. The Librarians have exactly the opposite problem. Theirs is an intensification of the ancient problem; signifiers that would not signify would now signify everything and nothing. So both Funes and the Librarians are faced with *infinita regressuum*, which appear lurking near Lockean and Berkeleyan poles of abstract excess. Taken together, these two stories are a dialogue between two epistemological positions, fictionalized *reductiones ad absurdum*, which make plain traces of unreason in each system of thought. I’ll return shortly to this conception of “unreality” as the territory near ‘poles of unreason.’ I want to leave hanging this idea of narrative’s role, and return to it along with Funes and the Librarians, but at a remove. For now, and as a bridge, I want to consider Beckett.

The inaugural award of the Publisher’s Prize in 1961 to both Borges and Beckett was an interpretive act on behalf of the (international) critical community. I am not interested in the event so much as I am in using the pairing it established as a point of departure—I’m interested in the basis of this elective affinity between the two authors. Its provenance is hazy and has much to do with the reception history I described, but both Beckett and Borges belong to the generation after Joyce. They were both writing “at a late stage of linguistic and formal civilization in which the expressive achievements of the past seem to weigh exhaustively on the possibilities of the present, in which word and genre seem tarnished,”²⁹ both inheritors of a tradition which had taken detail as far as it could go. Steiner laments that “perhaps there have been no genuine successors to Joyce in English. . . [because] there can be none to a talent so exhaustive of its own potential.”³⁰ John Barth, writing soon after Steiner in 1967,³¹ speaks also of “exhaustion,” though his often misread essay is an attempt to read the prospect of renewal into the works of Borges and Beckett. Barth considers the two “technically up-to-date artist[s]” because of

²⁸My emphasis. Borges, “The Library,” p.81.

²⁹George Steiner, *Language and Silence: Essays 1958-1966* (London: Faber & Faber, 1967), p.68.

³⁰*Ibid.*, p.51.

³¹John Barth, “The Literature of Exhaustion,” in *Critical Essays on Jorge Luis Borges*, ed. Jaime Alazraki (Boston: G.K. Hall & Company, 1987).

their shared apprehension of this problem. In Steiner's terms, they aren't unsettled by "exhaustion"'s forced "retreat from the word"; they embrace it.

Borges considers the "composition of vast books. . . a laborious and impoverishing extravagance": "better. . . to pretend that these books already exist, and then to offer a resumé, a commentary."³² The retreat into concision, though of a different sort to Beckett's minimalism, is the affinity I mention above. At the core of the affinity is shared purpose, then, but behind it lies a difference. If the Modernists distorted Stendahl's mirror to render certain fictive elements salient, or portentous, Borges turns the mirror on itself. Beckett's minimalism acts to fragment the Modernist project: the effect is that of a broken glass interposed between mirror and audience; as his texts become sparser, specious images—and voices—abound. Consider this excerpt from the opening passage of Beckett's *The Unnamable* (1953),³³ the final volume of his *Trilogy*, where the relations between the narrator and reality, the narrated, have fallen away:

Where now? Who now? When now? Unquestioning. I, say I. Unbelieving. Questions, hypotheses (call them that). Keep going, going on (call that going, call that on). Can it be that one day (off it goes), that one day I simply stayed in (in where?) instead of going out, in the old way, out to spend day and night as far away as possible? (It wasn't far.) Perhaps that is how it began. *You think you are simply resting* (the better to act when the time comes, or for no reason) *and you soon find yourself powerless ever to do anything again. No matter how it happened.* (It, say it, not knowing what.) *Perhaps I simply assented at last to an old thing.* (But I did nothing.) I seem to speak (it is not I) about me (it is not me). These few general remarks to begin with.³⁴

The narrator, the eponymous *Unnamable* (as we are left to presume by the end of the novel), appears fractured at the outset of the novel. The parenthetical voice, N_2 , offers a commentary on the primary, N_1 , and in each case forces the focus outside of the text—"call *them that*": the personal and demonstrative pronouns are here an abstract residue of some more complete narrative. N_1 is by contrast distinguished by its particular use of the pronoun pair I/you. In the passage above, the two lines italicized are configured so as to suggest that the "I" and the "you" mentioned are one and the same. N_1 passes from particular to general—abstracting—but stops short, leaving the possibility that "you" refers to the reader. In either case we have here the germ of the conflict between N_1 and N_2 : N_1 is attempting, through language, through a morphism between "I" and "you," to find something constitutive of self within the text itself: a 'bootstrap problem.' N_2 's remarks

³²Borges, *Ficciones*, p.15.

³³Samuel Beckett, *The Beckett Trilogy: Molloy, Malone Dies and The Unnamable* (London: Pan, 1979).

³⁴My emphasis. *Ibid.*, p.267.

are, then, those due to that “vice-exister”³⁵ who acts to frustrate this attempt at the establishment of an “I.” The, or (by that point) some, narrator uses this term in reference to the voices of “generations”: “Before him there were others, taking themselves for me.”³⁶ In my toy formalism, some “vice-exister,” some N_i , speaks of N_{i-1} and N_{i+1} ; the narrator before, and that still to emerge, for whom he must “take himself.” The hyphen leads me to read the term more or less literally, ‘one brought about by some defect or fault.’ The two voices I discuss here are the first of these “vices,” the first cracks propagating a fissure, $\{N_1, \dots, N_i, \dots, N_n\}$.³⁷ So N_1 ’s attempt is an act of violence against those N_i to come, for it would arrogate the “I”—“sin against the silence that unfolds us.”³⁸ The “I” is continually destabilized, context removed, and “generations” birthed. This is the abstractive force present in Beckett’s later minimalism: “I realized that Joyce had gone as far as one could in the direction of knowing more, [being] in control of one’s material; you only have to look at his proofs to see that. I realized that my own way was in impoverishment, in lack of knowledge and in taking away, in subtracting rather than in adding,”³⁹ and in the fashioning thereby of an unfolding silence.

It’s perhaps no surprise, then, that this kind of abstraction, which selects only the necessary, should place two narrative voices in contention over selfhood. If his “own way [is] in impoverishment,” then part of Beckett’s art is in the selection of what should remain, which entails placing fictive elements in mutual contention. Like Funes and the Librarians, N_1 and N_2 face a problem of ‘constitution’ mediated linguistically, but one which appears explicitly in the text itself. The two attempts at constitution are therefore subtly different. Borges’ characters’ attempt, or fail, to constitute a self from an excess of referents; theirs is invariably a problem of or with meaning. Beckett’s N_1 and N_2 spring from a lack and so don’t even get this far—theirs is a more basic problem, a problem of self. If Beckett’s world, such as it is, is patently “unreal” then it is because of this self-lessness. Even by the final lines of the novel the N_i haven’t got purchase on the self: “It will be I? It will be the silence, where I am? I don’t know, I’ll never know: in the silence you don’t know.” Stripping away *mise en scène* piecemeal, Beckett lays bare with silence a problem that Borges’ constructed worlds mask in excess, in noise. Ask a question of meaning, and the invariable next is: “to whom?” Addressing ourselves to Funes, we might get another: “when?” (beyond which we never progress). From a Librarian we might get an affirmation of some Order (and an injunction to more pious thoughts). Behind each answer there is

³⁵Beckett, *Trilogy*, p.289.

³⁶*Ibid.*

³⁷On fragmentation of the narrator in Beckett, see Paul Davies, “Three novels and four *Nouvelles*: giving up the ghost to be born at last” in John Pilling, ed., *The Cambridge Companion to Beckett* (Cambridge: Cambridge University Press, 1994), p.43.

³⁸Beckett, *Trilogy*, p.345.

³⁹Samuel Beckett quoted in James Knowlson, *Damned to Fame: The Life of Samuel Beckett* (London: Bloomsbury, 1997), p.352.

a willful “I,” but one overwhelmed. And so if Funes and the Librarians fail or founder in the pursuit of meaning, then perhaps we should ask a question of self.



My usage of “unreality” has migrated somewhat from Barrenechea’s narrow sense of a “process of dissolution.” I described it earlier as the result of the fictionalization of a philosophical *reductio ad absurdum*—a ‘pole of unreason’ made plain by narrative. The stories of Part A, like “The Library of Babel,” locate this pole externally, while those in B locate it internally, such as in the mind of “Funes the Memorious.” I want to shift my focus, while staying fixed on this notion of polarity. Consider the adjective ‘Borgesian.’ Like any author’s epithet, this term has rather a diffuse meaning in practice, which has of course shifted over time.⁴⁰ But at least when used in scholarly contexts, it encodes some of the more prominent readings of the author. In distinguishing the usage of “Borgesian” in the two excerpts below, one produces a similar sort of polarity to that just described.

1. “Stories now tend to be either Chekhovian or Borgesian; only rarely are they both. Borges’s Collected Fictions insist always upon their self-conscious status as artifices, unlike Chekhov’s impressionistic glances at the truths of our existence.”⁴¹
2. “. . . we felt as if we had undertaken to write some Borgesian monograph on the whole of human knowledge. Objectivity [scientific objectivity, the subject of the book] seemed endless.”⁴²

Bloom in (1) treats ‘the Borgesian’ in terms of the poetics of ‘books, mirrors and labyrinths’ I mentioned earlier, *qua* ‘the artificial.’ I mean this last literally: the narrative worlds we encounter in Borges are configured by, and depend for their existence on, in Borges’ phrase, some *artifice*, some “system of perplexities.” Their status as representations of reality, or better, experience— their “Chekhovian” elements, as per Bloom above— seems at best emergent, as a construction over and above the philosophical structure upon which they depend. Parts A and B of *Ficciones* are distinguished by the operation of this conceit. The stories in Part A concern themselves with ontology, the narrative world *itself* is unreal; characters seem fungible, and plot is little more than explication. In Part B, Borges concerns himself more with character. In these stories, a character without volition is swept along by the dictates of plot; this is the unreality of the second half of *Ficciones*, a dreamlike loss of agency. Common to both is his “persistent dissolution”⁴³ of

⁴⁰One can track its usage history [using Google’s ngram viewer](#).

⁴¹Harold Bloom, *How To Read and Why* (New York: Scribner’s, 2000), p.57.

⁴²Lorraine J. Daston and Peter Galison, *Objectivity* (New York: Zone, 2010), p.10.

⁴³Weber, “[Fiction and Philosophy](#).”

character and reality. But the mode and variation of this dissolution marks Borges apart from other writers of philosophical fiction. It's achieved in Part B usually by the death or injury of central characters; a sudden waking from the dream-state. Another story from B will serve to illustrate my point. In "The Shape of the Sword," Borges, character and narrator, relates the story of an Irishman, "one of the many who were conspiring for the independence of Ireland" in "the fall of 1923," with a scar across his face in "a nearly perfect arc." His story is of his betrayal, by "an affiliate from Munster. . . : one John Vincent Moon," a young and doctrinaire Marxist, who used "dialectical materialism to put an end to any discussion whatever." Taking shelter with a wounded Moon in "General *Berkeley*'s" country house, the Irishman overhears Moon selling him out by telephone. The Irishman pursues the informer, before "[carving] into his face forever a half moon of blood" with a crescent-shaped scimitar. The narrator stops short, before sobbing to Borges, "I have told you the story thus so that you would hear me to the end. I denounced the man who protected me: I am Vincent Moon. Now despise me." But one can read the facts of the account to the conclusion that the narrator is *both* Moon and the Irishman of the story. The Irishman is from Dungarvan, a town in Munster; when he leaves Berkeley's house after attending to a frightened, wounded Moon, he was "mortified. . . as if I were the coward, not Vincent Moon. Whatever one man does, it is as if all men did it. . . Perhaps Schopenhauer was right: I am all other men, any man is all men, Shakespeare is in some manner the miserable John Vincent Moon." The enigmatic reference to Shakespeare, via Schopenhauer, perhaps suggests that the Irishman's story is a dramatization, and that its characters are composites. So the story can also be read as a distant and distorted recollection of war, with names changed and agency distributed to protect the innocent, or naïve. Borges initially attempts to make the Irishman's acquaintance, mistaking him for an Englishman, by extolling as "invincible. . . a country with such spirit as England's." The Irishman agrees, but adds with a smile that he is not English. The patriotism, the Marxist dream-narrative of the Irishman Moon is broken when "[o]n the tenth day the city fell definitely to the Black and Tans"⁴⁴ and his dream turns to nightmare—he wakes when marked by a crescent-shaped sword, with which Hermes slew dreaming Argus in Ovid's *Metamorphoses*, its watchful eyes overcome by his tales and wiles. Leaving the dialectical materialism, the political idealism of his youth, is effected by his betrayal, and signified by his flight from Berkeley's house, the House of Idealism. One can read the executed "*maniqui*"["dummy"] as a comrade of the Irishman Moon's or a literal effigy, but in either case, at heart a *philosophy* has been betrayed and its systematized perplexity has been laid bare, the experience lived inside its bounds now apparently dream stuff.

In A, in the Library and in Tlön, the dissolution is built into the narrative world itself: an 'inherent vice' acts to lead the artifice into paradox—usually some self-referential

⁴⁴Jorge Luis Borges, "The Shape of the Sword," in *Labyrinths*, pp.96–101.

conundrum in which the narrative world, now revealed as artifice, is left to falter. Some philosophy or system is dilated and realized with narrative, then made to account for all the experience its world would contain. This is the case also in “The Lottery in Babylon,” a society whose “customs are saturated by chance”: every social function is decided by lottery, drawn by a secretive organization referred to as “the Company.” “Babylon” is an extension, a *reductio*, of the lottery-based system according to which Athenian public officials were selected, the rule of chance “the supreme expression of the democratic principle of the absolute equality of all citizens”⁴⁵: “Like all men in Babylon, I have been proconsul; like all, a slave. I have also known omnipotence, opprobrium, imprisonment...” The narrator concludes by relating a “vile” conjecture: “it is indifferent to affirm or deny the reality of the shadowy corporation, because Babylon is nothing else than an infinite game of chance.”⁴⁶ This is the sense in which Daston and Galison use the term in (2) above, though *mutatis mutandis*, and indirectly. They refer to Borges’ tendency to invoke secret texts, never-ending books such as Ts’ui Pên’s incomplete work, *The Garden of Forking Paths*, from which the story takes its name. If these texts are endless, impossible, it’s because they appear in worlds which aren’t themselves endless, but incomplete—littered with inaccessible poles of unreason. By what lot has the narrator been led to pen this testament? Ask too many questions of a system—scientific objectivity or the machinations of the Company—and it starts to produce too many or too few, meaningless, answers. Borges’ *reductiones* do their work exactly when his worlds produce ‘monsters,’ endless objects or paradoxical worlds.

The endless and the paradoxical seem natural enough bedfellows, but this isn’t enough; the connection between the two that Borges exploits is ultimately mathematical in origin. Maurice Blanchot, writing in 1953, was the first to comment on mathematics in Borges’ works. He identifies the notion of the infinite as a recurrent theme, and “suspect[s] Borges of having acquired the infinite from literature.” Blanchot continues:

This is not to suggest that he has only a calm knowledge of it drawn from literary works, but to assert that the very experience of literature is perhaps fundamentally close to the paradoxes and sophisms of what Hegel, to distance it, called the “evil” infinite.

This “evil” infinite is a sequence (of events, places, ideas, people) in which points of reference, start and end points, have disappeared. Think of Funes, drowning in ideas, signifieds, or of the Librarians beset by text, signifiers. According to Blanchot, the experience of this “evil” infinite is such that

⁴⁵Norman O. Brown, *Hermes the Thief: The Evolution of a Myth* (Madison: University of Wisconsin Press, 1947), p.101; cited in Lewis Hyde, *Trickster Makes This World: Mischief, Myth, and Art* (Edinburgh: Canongate, 2008).

⁴⁶Jorge Luis Borges, “The Lottery in Babylon,” in *Labyrinths*, p.55.

[b]efore having begun, already one begins again; before having finished, one broods, and this sort of absurdity (consisting of returning without ever having left, or of beginning by beginning again) is the secret of “evil” eternity, corresponding to “evil” infinity, both of which perhaps contain the meaning of becoming.⁴⁷

This particular conception of the infinite indeed appears in Borges’ work, but it’s one of several. One can hardly fault Blanchot for this. I take issue with Blanchot’s *negative* reading of infinity, his identification of Borges’ “literary infinite” with Hegel’s “evil” infinite. This we found also in Barrenechea’s reading of abstract structure in Borges—“an admirable writer pledged to destroy reality and convert Men into shadow.” This idea—call it “*horror infinitum*”—recurs throughout the later critical literature. But I don’t think that Borges’ use of “system[s] of perplexities” necessarily entails Blanchot and Barrenechea’s *horror infinitum*. I like the Latin *horror* for its primary meaning: a bristling, as of hairs standing on end in a chill; the sense is thus a visceral one of something endlessly impending. I don’t reject the idea that *horrores* of abstraction are at work in Borges’ fiction—this is true enough, as we have seen with Funes and the Librarians. But a negative reading of all abstraction fails to account for the complexity of Borges’ philosophical thought, much less the concerns with self that lurk in its substratum. What Barrenechea would call a “dissolution,” I want to read instead as the failed constitution of self. If the ‘self’ is to be read as the ‘I’ which we decompose—abstracting as we proceed—Borges gives us two, polar, extremes at which its establishment fails. In both cases “dissolution” turns on ‘meaning.’ Funes fails to sum pullulating percept into a self, something capable of processing into meaning the experience in which he eventually drowns. The failure of the Librarians is exegetical or hermeneutical; the link between the self and the narrative world has also to do with this quest for meaning. Dichotomizing in this fashion is analytically very nice and clean, but my mention of other stories makes it clear that the details of such ‘polarities’ are ‘local,’ the result of the juxtaposition of particular stories, and therefore contingent. If polarity is the local manifestation of unreality, what can we say about Borges’ poetics more broadly? In both Parts, these philosophical poles come about because the terms of the narrative world are figured totally by some philosophical account of the world: in B, the ‘interior world’ of Funes is made to figure in Lockean terms; in A, the ‘exterior world’ of the Librarians consists of (materially encoded) Berkeleyan ideals. Both systems, Lockean and Berkeleyan, are implicated by the fictionalization of their principles, and both are shown to be inadequate for sustaining experience. I want to understand this, the ‘global’ unreality of *Ficciones*, as a dialogue between poles so established.

⁴⁷Blanchot, *The Book to Come*, pp.93-4.

An example of Borges' own use of the word "unreality"["*irrealidad*"] is, I think, instructive. The word does occur elsewhere in Borges' nonfiction, but I choose this example because here, and in his 'polemics against Argentine Germanophiles,' Borges displays an urgency; he seems sincere, though still gnomic. Describing his joy at the liberation of Paris by Allied forces on the 23rd of August, 1944, Borges relates a conception of Hell due to Johannes Scotus Erigena, "who denied the substantive existence of sin and evil and declared that all creatures, even the Devil, will return to God." He concludes that

Nazism suffers from *unreality*, like Erigena's hell. *It is uninhabitable*; men can only die for it, lie for it, wound and kill for it. No one, in the intimate depths of his being, can wish it to triumph. I shall risk this conjecture: Hitler wants to be defeated. Hitler is blindly collaborating with the inevitable armies that will annihilate him, as the metal vultures and the dragon (which must have known that they were monsters), collaborated, mysteriously, with Hercules.⁴⁸

The question now is: what does mathematics have to do with these poles of unreason? Why are Borgesian monsters mathematical? I want to turn to that constellation of essays I mentioned earlier, in which Borges discusses various iterations of 'the infinite.' Critics have left largely unspecified the conceptual categories on which "unreality" supposedly depends: yes, among these categories are paradox, and the infinite, but *which* paradoxes and *which* conceptions of the infinite also matter, as does the manner in which Borges *himself* understands these ideas. I mention above two stories in which Greek myth or culture appears central because I think it underscores a point I want to make about Borges' philosophy. Most of Borges' early sources and philosophical preoccupations were Greek; attempts to read much more or later mathematics into his work are *post hoc*, and tendentious, until this is accounted for. A comment on usage will suffice to make my point. That Borges uses a *single* phrase throughout his collected fiction and nonfiction in reference to infinite regression, "*y así hasta lo infinito*,"["and so on to infinity,"] is telling.⁴⁹ Contemporary standard mathematical (and lay) usage would have been "*va al infinito*"["[it] goes to infinity"]; the former phrase usually finds use in philosophical contexts.⁵⁰ There is a very slight difference between the two: the latter seems to invoke infinity as a point or value taken by some parameter, while the former doesn't have this ring, and signifies only an unending progression. In the first case, 'infinity' indexes the iterations of some thing or process that is 'unending'—it's appealed to as a concept that allows us to think

⁴⁸My emphasis. English translation taken from Borges, *Total Library*, p.211.

⁴⁹I determined this by applying [open-source optical character recognition \(OCR\) software](#) to digital copies of Borges' *Obras Completas*, and converting to [.djvu](#), which allows for fast and efficient OCR text searching.

⁵⁰One can get a sense of this by [searching](#) for the phrase "*y así hasta lo infinito*" in Google Books, then removing all results in which the word "Borges" occurs. The phrase "*va al infinito*" does occur in philosophical contexts, [as one can see](#), but, importantly, is (and was) standard usage in reference to the *mathematical procedure* of infinite regression.

of some series or pattern continuing without end. In the second, there is some variable—distance, time, velocity—that itself *becomes* infinite. The *Oxford English Dictionary* and the *Diccionario de la lengua española* both distinguish the two senses, the Spanish word and the English word deriving from *infinitus*. The second mentioned sense is older, and denotes an unbounded quantity; the first sense denotes unending, serial continuation, and derives from the Latin *ad infinitum*. I'll return to the variations on the idea of infinity in Borges' works later, with reference to his essays on Zeno's paradox, but for now the point is that we must proceed with caution—do the two phrases lead to the same *horror infinitum*? Do they even invoke the same *infinitum*? These questions require us to turn to his essays, the 'scratch paper' in which these considerations first appear. These essays reveal a writer who delights in thinking philosophically with mathematical abstractions: one who *delights* in philosophical *aporia*. I want to use the word "aporia" to capture, without negative resonances, the sense of the "Hegelian infinity" Blanchot discusses. In his work on the myth of the trickster, Lewis Hyde glosses the word thus:

Just as the Greek *poros* is a passageway, a hole in the skin, so *aporos* is an impassable place, something that cannot be seen through. What Thlókunyana or Coyote [*Yoruba and Native American trickster figures*] do is to turn an escape route into a trap, a hole into a snare, a *poros* into an *aporos*, a clear medium into an *aporia*.

In rhetoric and logic, "aporia"—the English word derived from *aporos*—means a contradiction or irreconcilable paradox. To experience *aporia* is to be caught in a tunnel with a line at each end, to be bewildered by clouds of ink or encircled by a net of bubbles.

While I don't want to insist on the problematization of Borges—himself or his works—as a "trickster figure" in Hyde's sense, I think this provides an appropriate point of departure. Hyde continues:

No matter how many times you reverse yourself, you're still caught. *Aporia* is the trap of bafflement. . . ⁵¹

This frustration at bafflement, at those paradoxical problems of philosophy which, in their ability to resist or to *elude* solution seem almost to have a kind of agency—*this* is what fascinates Borges about mathematics, and leads him to write of the paradox of Achilles and the tortoise:

The implications of the word *jewel*—precious little thing, delicate though not necessarily fragile, easy to transport, translucency that can also be impenetra-

⁵¹Hyde, *Trickster*, p.43f.

ble, flower of the ages—make it pertinent here. I know of no better qualification for Achilles’ paradox, so indifferent to the definitive refutations which have been nullifying it for over twenty-three centuries that we can already declare it immortal. The repeated tours of the mystery proposed by such endurance and the fine ignorance it has visited upon humanity are generousities we have no choice but to accept gratefully. Let us revive it once more, if only to convince ourselves of its perplexity and arcane intimations.⁵²

The experience of aporia requires us to have a stake in a particular “system of perplexity,” a philosophy: a way of cutting up and understanding the world. But if the problem is that of self, then we must fragment the ‘I’—make a fickle pronoun into something, if not whole, at least stable. This is the problem that interests me:

How does Borges take the “arcane intimations” of paradox and make them metaphysically fraught? How is it that mere “*juegos con el tiempo y con lo infinito*”⁵³ can come to “signify a nihilistic stance towards reality”?⁵⁴

I think that this is partly an issue of influence. Borges’ readings in philosophy included Bertrand Russell, with whom he credits his “first inkling of the problem of infinity.” He writes: “around 1921, I discovered in one of Russell’s works an [...] invention by Josiah Royce, who postulates a map of England drawn on a portion of the territory of England: this map—since it is exact—must contain a map of the map, which must contain a map of the map of the map, and so on to infinity.” This recursive path to infinity—or call it a *mise en abîme* if you prefer—is the Hegelian “evil” infinity Blanchot discusses, and it appears in Russell’s *Introduction to Mathematical Philosophy*. Russell functioned as a touchstone for Borges; the philosopher’s opinions on every topic are sought out and considered in the essays. I think that Russell also shaped the way Borges approaches mathematics and philosophy: the former writes in the preface to *Mathematical Philosophy*:

It is to be hoped that some readers may be sufficiently interested to advance to a study of the method by which mathematical logic can be made helpful in investigating the traditional problems of philosophy. But that is a problem with which the following pages have not attempted to deal.⁵⁵

To Borges, this would have seemed a curious respite, between two stretches of prose characteristic of Russell’s books—written with an “inhuman lucidity, unsatisfactory and in-

⁵²My translation of the Spanish original, Borges, “[La perpetua carrera](#),” p.244

⁵³Jorge Luis Borges, *El hacedor*, in *Obras 1923–1972*, ed. Carlos V. Frías (1960; Buenos Aires: Emecé editores, 1974), p.808.

⁵⁴Weber, “[Fiction and Philosophy](#).”

⁵⁵Bertrand Russell, *Introduction to Mathematical Philosophy* (London: George Allen & Unwin, 1919), p.vi.

tense.”⁵⁶ I want to stress the influence of the spirit of Russell’s words, and to argue that Borges took them as an invitation. He achieved his aporias through a mapping of the “problem of self” onto the “problem of infinity”—through a link between felt tensions in one’s ‘inside knowledge,’ and the tensions and paradoxes which seem to lurk in reality, in our ‘outside knowledge.’ In other words, one has to see Borges’ appeals to mathematical ideas in terms of this ‘Russellian project,’ this mathematized attempt on “the traditional problems of philosophy.” One such problem—and the subject of these essays, really—is time, and the question of its infinitude. For Borges, as for Kant, the self and time are ineluctably linked; to say something about the latter’s expanse is to delimit and specify the constitution of the former. This much is established when, in “The Duration of Hell” (1929), Borges reviews three arguments in favor of an eternal Hell:

Now the third argument looms over me. It may perhaps be written thus:
Heaven and Hell are eternal, because the dignity of free will requires them to be so: either our deeds transcend time, or the “I” is a delusion. The virtue of this argument is not logic, it is much more: it is entirely dramatic.”⁵⁷

This third argument is the only one which Borges doesn’t attempt to refute: significantly, this is a condition on the self derived from a conception of time. Other essays treat time differently, using other conceptions of “infinity”—though I think “endlessness” is a better term here, really—and arrive at different conditions on the self. When I say that these essays are a kind of literary-philosophical scratch paper, I mean that they are investigations in Russellian “Mathematical Philosophy,” and that they function as a kind of proving ground for possible mappings between the problems of self and ‘things without end.’ (Think of the Librarian of Babel, consoling himself with the hope that the Library is not infinite but circular, periodic—and therefore ordered; think of Funes, inundated by a ceaselessly growing, nonperiodic infinity of perceptions, and unable to think or reflect.)

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⁵⁶Borges, *Discusión*, p.246.

⁵⁷Emphasis in original. My translation, original from Jorge Luis Borges, “La duración del infierno,” in *Discusión*, p.237f.

I want to show how mathematical ideas—in the case which follows, *mistaken* mathematical ideas—become connected to philosophical ideas in these early essays. In his first essay invoking mathematics, “The Perpetual Race of Achilles and the Tortoise” (1929), quoted above, Borges contrasts various refutations of the paradox, which he states as follows:

Achilles, symbol of rapidity, must catch up with the Tortoise, symbol of sluggishness. Achilles runs ten times faster than the tortoise and so gives him a ten meter advantage. Achilles runs those ten meters, the tortoise runs one; Achilles runs that meter, the tortoise runs a tenth of a meter; Achilles runs that tenth of a meter, the tortoise runs a hundredth of a meter. . .

Working from Russell’s reading of the paradox, Borges develops the idea that the “limit” of Zeno’s series is never reached: “The limit[“*límite*”] of the sum of this infinite geometric progression is twelve (more accurately, eleven and a fifth; more accurately, eleven and three twenty-fifths), but it is never reached.”⁵⁸ He considers the steps Achilles takes a collection of parts whose combination never results in a whole. But, mathematically speaking and *pace* Borges, this idea is false. The infinite series

$$S = 10 + 1 + \frac{1}{10} + \frac{1}{100} + \dots + \frac{10}{10^{n-1}} + \dots \quad (1.1)$$

can in fact be summed, using the following trick. Let us divide this series by ten

$$\frac{S}{10} = 1 + \frac{1}{10} + \frac{1}{100} + \dots \quad (1.2)$$

The series now looks as though we’ve simply removed the first term from (1.1). But both S and $\frac{S}{10}$ still consist of an infinite number of terms: we have not changed anything other than the magnitude of each term by dividing by ten. Let us introduce the notation S_∞ for (1.1), to indicate this. Now, if we subtract (1.2) from (1.1), all but the first of the terms in (1.1) cancel

$$S_\infty - \frac{S_\infty}{10} = 10 + (1 - 1) + \left(\frac{1}{10} - \frac{1}{10}\right) + \dots \quad (1.3)$$

$$= \frac{9S_\infty}{10} = 10 \quad (1.4)$$

The value of S_∞ , the sum of the series (1.1), is therefore

$$S_\infty = \frac{100}{9} = 11\frac{1}{9} \quad (1.5)$$

⁵⁸My translation of the Spanish original, in “[La perpetua carrera](#),” pp.244ff. Note that the published English translation of this essay, in [Total Library](#), p.44–7, incorrectly translates the parenthetical statment, “(*más exactamente, once y un quinto; más exactamente, once con tres veinticincoavos*),” as “(plus, exactly eleven and one-fifth; plus, exactly eleven times three twenty-fifths).” *Más exactamente* should instead be read as “more accurately,” and *con* as “and,” since Borges is specifying more accurate values for the sum of the series (1.1).

Borges doesn't know how to sum this series, and instead places an upper bound on its sum. In mathematics, the sum of all the terms in a series is referred to as the "limit of a series"; one says that the sum "converges to a limit." The reason for the word "convergence," and the idea of an *approach* to the value of S_∞ can be seen if we consider summing a finite series of terms, so-called "partial sums." For example,

$$S_3 = 10 + 1 + \frac{1}{10} = 11\frac{1}{10} \quad (1.6)$$

$$S_4 = 10 + 1 + \frac{1}{10} + \frac{1}{100} = 11\frac{11}{100} \quad (1.7)$$

Each partial sum, S_N , is incrementally closer to the value of S_∞ , (1.5). The sense in which Borges uses the word "limit" is at subtle variance with my definition above. He appears to read "limit"—having likely picked up the term from Russell—literally, as an upper bound, a point beyond which the series will never creep. Calculating this point, S_∞ , depends on two realizations, or, as I would rather call them, 'pieces of intuition': notions necessary for the formulation of a problem in mathematically soluble terms. The first is required for the 'trick' step, (1.4): that two infinite sets have the same number of terms, if they can be put in one-to-one correspondence. Borges demonstrates knowledge of this fact further on in "The Perpetual Race." The second is recognizing that one should even go about calculating the value of S_∞ ; implicit in this is the intuition that the value (1.5) is meaningful. This is what Borges appears to doubt. He says that this "limit is twelve," but says that "it is never reached." Borges seems to understand that as we add more terms, as we consider larger partial sums, the value we calculate will never cross some given threshold, which we can calculate to given degrees of accuracy. But he would appear to think that the value of S_∞ itself is undefined, "never reached." I hinted earlier at this thread of skepticism, when indicating the manner in which Borges refers to infinite regression, "*y así hasta lo infinito*." He seems doubtful that the sum of an infinite collection of terms can have any meaning, and is led by extension to (mistakenly) conceive of an infinite set as a collection whose parts cannot all combine to form a (meaningful) whole. The approximate values for the "limit" Borges gives, "eleven and one fifth" and "eleven and three twenty fifths," indicate that his method of approximation likely was not calculating partial sums as above. He conceives of S_∞ as a point, a value, but one that is never *realized* in the literal sense of the word. The "descent into minute precipices" in Zeno's series represents for Borges the descent, by degrees, into unreality. His frustration with the addition of more and more minuscule terms is a frustration with recursive diminution, "*la pululación de abismos*," pullulating, infinitesimal abysses of abstraction. Past a certain point—and Borges is a modern, diameter-quoting atomist⁵⁹—he knows that nothing real is

⁵⁹Borges was aware of the recent experimental demonstration of the atom's physical reality from Sir Arthur Eddington's *The Nature of the Physical World* (1928), which discusses Rutherford's 1911 discovery of the atom's nucleus, and Bohr's introduction of quantized energy levels two years later. He first cites

intended by the series' terms. So when Borges writes that "those linked precipices corrupt space and, more dizzyingly, living time [*tiempo vivo*]," he refers to a sense of the abstract intruding on the ken of the real, opening up what he calls in "Avatars of the Tortoise"—the 1939 revision of "The Perpetual Race"—"crevices of unreason" in the architecture of a world we have dreamt.⁶⁰

The question at the end—"Would this bit of Greek obscurity affect our concept of the universe?"—is therefore not merely rhetorical. In the final paragraph, Borges writes "The paradox of Zeno of Elea, as James indicated, is an attempt not only on the reality of space but the more invulnerable and sheer reality of time," and later, "If we accept idealism, if we accept the concrete growth of the perceived then we shall elude the *mise en abîme* [*la pululación de abismos*] of the paradox."⁶¹ In this latter statement Borges prefigures the argument of "A New Refutation of Time" (1944)—his attempt, with the assistance of the metaphysics of David Hume, on the "invulnerable and sheer reality of time." To "accept the concrete growth of the perceived" is to accept the Humean prescription for the problem of self, which insists that the 'observer' is merely a "bundle or collection of different perceptions."⁶² What is left is a "series... of imaginary acts and... errant impressions,"⁶³ which, taken together, constitute the Humean self, such as it is. Significantly, Borges derives a conception of self from a paradox—he is led to Hume's picture of the self in flight from the *mise en abîme* he finds in the story of Achilles and the tortoise.

The point is that, in these early essays, we find something endless twinned with a conception of self. After 1940, after Borges has moved on from Russell to more technical expositions of mathematics, we see the appearance of these endlessness:self pairs at work in concert. In 1940, four years before (Part A of) "A New Refutation," Borges encounters *Mathematics and the Imagination*, a rather unique work of mathematics popularization which presents mathematical intuition alongside technically sophisticated exposition. After reading this book—which Borges added to his personal library—the two categories of "endlessness" crystallize, as one can see from his review:

Eddington in "The Doctrine of Cycles" (1936), an essay in *A History of Eternity*, but only for Rutherford's measurement of the "solar-system model" of the atom. I can find no textual evidence of Borges having consulted Eddington's later chapters, on Bohr's "old quantum theory," and Schrödinger's wave mechanics, or the early chapters on relativity and gravitation. He does, however, use Eddington's chapter on thermodynamics in part III of "The Doctrine of Cycles." See Borges, *Obras 1923-1973*, p.385 for Rutherford and p.390ff for Borges using thermodynamics, oddly, contra Nietzsche.

⁶⁰From my translation, "*Nosotros (la indivisa divinidad que opera en nosotros) hemos soñado el mundo. Lo hemos soñado resistente, misterioso, visible, ubicuo en el espacio y firme en el tiempo; pero hemos consentido en su arquitectura tenues y eternos intersticios de sinrazón para saber que es falso.*" ["We (the indivisible divinity which operates within us) have dreamt the world. We have dreamt it durable, mysterious, visible, ubiquitous in space, and solid in time; but we have allowed in its architecture tenuous and eternal crevices of unreason which tell us that it is false."], Jorge Luis Borges, "Avatares de la tortuga," in *Discusión*, p.258.

⁶¹My translation of the Spanish, from Borges, "La perpetua carrera," p.248.

⁶²David Hume, *Treatise of Human Nature*, Bk.I, Ch.IV, §2, as cited in Jorge Luis Borges, "A New Refutation of Time," in *Labyrinths*, p.256.

⁶³*Ibid.*

Its four hundred pages lucidly record the immediate and accessible charms of mathematics, those which even a mere man of letters can understand, or imagine he understands: [the endless map of Brouwer](#), the fourth dimension glimpsed by More and which Charles Howard Hinton claims to have intuited, [the mildly obscene Möbius strip](#), [the rudiments of the theory of transfinite numbers](#), [the eight paradoxes of Zeno](#), [the parallel lines of Desargues that intersect in infinity](#), the binary notation which Leibniz discovered in the diagrams of the *I Ching*, [the beautiful Euclidean demonstration of the stellar infinity of the primes](#), [the problem of the tower of Hanoi](#), the equivocal or two-pronged syllogism.⁶⁴

The topics Borges is drawn to fall rather cleanly into the two categories I have mentioned: the [periodic or recursive](#) as well as the [infinite and transfinite](#); each endlessness twinned with a conception of self. The two senses in which Borges refers to conceptual infinity I mentioned earlier, an unbounded quantity and an unending serial progression, originate in the latter kind of endlessness. The titular enigma in “The Aleph,” a point in space which maps all other points onto it, belongs to the former category; an all-to-one map that allows the narrator to see that vertiginous series of images, anything anywhere whenever.⁶⁵ The Library, “a sphere whose exact center is any one of its hexagons and whose circumference is inaccessible,” can be viewed either way: its stairways and hexagons may have some global periodic structure, as the narrator hopes, or—if he is wrong—an unbounded space, whose identically and infinitely repeating “shelves register all the possible combinations of the twenty-odd orthographical symbols” many times over, randomly, without end or repeating structure. The narrator in “Library” doesn’t entertain the last possibility; “the impious” who “maintain that nonsense is normal in the Library” perhaps would. In “A New Refutation of Time,” Borges uses these pairs, to articulate a particular conception of a self: one which isn’t separable into faculties or perceptions in the manner of Hume, but constituted by acts of self reflection: an apperceptive self. In the next chapter, I try to understand the emergence of these pairings and this self as a consequence of Borges’ thinking about *tiempo vivo* [living time], soon after he first began to write fiction. I look at readers’ and writers’ experience as it figures in Borges’ earliest short stories, “The Approach to al-Mu’tasim” (1936) and “Pierre Menard, Author of the *Quixote*” (1939), and show that mathematical thinking, in particular mathematical series like Equation (1.1), provided analogical means to structure Borges’ thinking about experience in time. I use this connection between series and experience later to offer a reading of “A New Refutation of Time” (1944–7).

⁶⁴Emphasis mine. English translation taken from Borges, *Total Library*, p.249.

⁶⁵Jorge Luis Borges, *El aleph*, in *Obras 1923–1972*, ed. Carlos V. Frías (1949; Buenos Aires: Emecé editores, 1974), pp.533–630.

Chapter 2

Where shall we take our stand, to view the infinite & un-
bounded ?

—William Blake, “Night IX,” *The Four Zoas*

Introduction

I ended the last chapter with one of Borges’ attempts to understand time mathematically and the self temporally, in order to map problems of time onto problems of the self—to constrain what can be said about the self by mathematizing the *tiempo vivo* [living time] from (and in) which it’s constructed. I pointed to Bertrand Russell’s *Introduction to Mathematical Philosophy* (1919) as the likely motivation for these attempts to use mathematics as an aid to philosophical understanding. This chapter begins on a different tack, towards a similar end: I want to understand the *literary* concerns motivating Borges’ interest in *tiempo vivo* as he began to produce fiction, after a head injury in 1938. In “A New Refutation of Time,” Borges places the mathematical conception of *tiempo vivo* I sketched last chapter—derived in relation to the paradox of Achilles and the tortoise—in conversation with a literary counterpart, and attempts to synthesize the two. The bulk of the second and last chapter deals with the development of this idea of literary *tiempo vivo* in Borges’ first fictional pieces, and, later, its parallel mathematical-philosophical development in the essay collections, *Discussion* and *A History of Eternity*.

I’m drawn to these early ideas because of *tiempo vivo*’s particular manifestation much later in Borges’ career, in a few works written shortly after he became effectively blind, in 1955, and lost interest in paradox and the ‘Russellian’ project—of which “Refutation” is the principal product. This was a sudden shift: the last time Borges writes explicitly about mathematics is in *History of Eternity*. By 1960, his frustration with “*los juegos con el tiempo y con lo infinito*” [“games with time and the infinite”] is evident. I take this phrase from “Borges and I,” a short prose piece published in *The Maker* (1960), in which

the author reflects on the potent sense of estrangement he feels from his earlier work, and its author. He writes:

I shall remain in Borges, not in myself (if I am indeed someone), but I recognize myself less in his books than in many others, or in the laborious strumming of a guitar. Years ago I tried to free myself from him, and went from mythologies of the outskirts to games with time and the infinite, but those games are Borges' now and I'll have to come up with other things. So, my life is a flight and I lose everything, and everything belongs to oblivion, or to the other.¹

I see “Borges and I” as confessional, in a specific sense. It is an *askesis*, generally, work one does for oneself, or according to Foucault’s usage, “not a disclosure of the secret self but a remembering.” Viewed in a biographical context, the piece makes plain something latent in the works of Borges’ middle period, his early mathematical essays and *Ficciones*: his interest in narrative accounts of sensory and temporal experience, their mediation by language. Foucault would call the device in play above a Stoic *technique de soi*. [“technology of the self.”] The latter term appears in Foucault’s analysis as a kind of “truth game,” which are “specific techniques that human beings use to understand themselves,” “technologies,” of which Foucault distinguishes four types: technologies of production, which have to do with the manipulation of things in the world; technologies of sign systems, “which permit us to use signs, meanings, symbols, or signification”; technologies of power, political or social constructs which “determine the conduct of individuals and subject them to certain ends or domination”; and technologies of self, means of “individual domination,” by which one effects certain changes in the subject or self.² The sense of depersonalisation in Borges’ writing during this period, the lack of recognition he feels for his earlier work, is epitomized in the extract above. But so also is hope.

The auditory reference at the end of the first sentence is enigmatic but suggestive. After 1955, Borges could no longer read unaided, and—as he would never learn Braille—was read to by his students. He recalls this period in one of a series of lectures given in 1977, “Blindness,” first published in the collection, *Siete Noches* (1980). Borges had begun

¹My translation from the Spanish in Borges, *Obras 1923–1973*, p.308.

²Clearly, and as Foucault acknowledges, these aren’t independent categories; certainly the third and maybe the fourth are necessarily composites of the first and second. (Political propaganda is an example: it must be produced according to some semantic “technology”—written—but also physically instantiated—made.) The interdependence of these categories is also partly due to the French *technique*, which means both ‘technology’ and ‘technique.’ Most translators don’t distinguish the two in reference to the kinds of “truth game” Foucault identifies. ‘Technology’ is perhaps more familiarly applied to the first two categories, and ‘technique’ to the last two, but in his exposition Foucault intends both. (“Technologies of sign systems” would therefore refer to both to the material facts of a semantic system, things straightforwardly ‘technological,’ such as orthography, as well as those things we might call ‘techniques’ in English, like rhetoric.) However, since I’m only interested in the last category, I won’t attempt to distinguish “technologies” and “techniques,” and use the now standard term, “technologies of self.” Michel Foucault, “Technologies of the Self,” ed. Luther H. Martin, Huck Gutman, and Patrick H. Hutton (London: Tavistock, 1988), p.19ff.

to lose his sight in his thirties, and, by his late fifties, could see only through one eye, in blurry shades of blue, green, and yellow. From 1977's vantage, his blindness seems like "a slow twilight that has lasted more than half a century,"³ and he describes his lost sight in an elegiac register. He speaks of his friendship with yellow, and his loss of *le rouge et le noir*; red, he says, was especially dear to him, and is common motif in his stories. He considers his a "modest blindness"—modest, "because it is not the perfect blindness people think of, and, secondly, because it deals with me." A pause, then Borges continues: "For the purposes of this lecture, I ought to find an awful moment. Let us say... when I knew that I had lost my sight, my reader's and writer's sight. Why not fix the date, so worthy of remembrance, in 1955. I do not refer to the epic rains of September; I refer to a personal circumstance." This is a reference to the Argentinean *Revolución Libertadora*, the September 1955 uprising against the regime of Juan Perón. Borges was a vocal opponent of Perón, and, with the fall of his regime, was appointed Director of the National Library of Argentina.⁴ Then, two years later, he was made Professor of English and American Literature at the University of Buenos Aires, due to his growing fame and his support for *La Revolución Libertadora* and its military backers. (He would later face criticism for his support of the coup.) Under Perón, Borges had been humiliated by a "promotion" to inspector of poultry and rabbits at a municipal meat market. Now, gaining lost honor and losing his vision, Borges tells us: "little by little I came to realise the strange irony of events. I had always imagined Paradise as a kind of library. Some think of a garden, others may think of a palace. There I was. I was, in a way, the center of nine hundred thousand books in various languages. I found I could barely make out the title pages and the spines."⁵

The change in his sensory experience forced a change in his interests: having "lost the visible world," Borges, aided by his students, decided to learn Anglo-Saxon and "recover another, the world of [his] remote ancestors."⁶ His output reduced, and he shifted away

³I cite the Spanish transcript of the essay and quote my own translation. All Borges' lectures after 1955 were given extemporaneously. A recording of the lecture is available on YouTube. *Siete noches*, in *Obras 1975-1985*, by Jorge Luis Borges (1980; Buenos Aires: Emecé editores, 1989), pp.276-286

⁴For Borges and Perón see: Williamson, *Borges: A Life*, p.311-26; Borges, *Total Library*, p.540f.

⁵His fate's irony is in fact so complete that it's the conceit of an episode of *The Twilight Zone*, fittingly titled "Time Enough at Last" (1959). Henry Bemis, bespectacled protagonist, a bank-teller and bookworm, castigated by the opening narration as a "member of the fraternity of dreamers," takes his lunch break in the vault of his bank, where he may read uninterrupted. From outside the vault, Bemis hears a loud explosion and is knocked unconscious. When he regains consciousness, he finds the world outside a wasteland—and himself the last man alive. Contemplating suicide, Bemis sees the ruins of the public library, and discovers the books it contains intact. Flanked by the piles he's collected and sitting in front of a large clock, Bemis leans forward to grab a book but slips, and his glasses fall from his face and shatter. Borges (all the more so his blindness) was essentially unknown in the English-speaking world until he was awarded the International Publisher's Prize in 1961, so the correspondence is likely only uncanny. Though note just how well Borges fits to type: "As his income... was paltry, in 1937 Borges took a job as a low-level bureaucrat in an unimportant municipal library; he would finish his work in an hour and then disappear into the basement for the rest of the day to read and write." Borges, *Total Library*, p.534.

⁶Borges, *Siete noches*, p.280.

from short stories to poetry and compressed prose pieces; forms he could keep in working memory or recite. He devotes himself to this project after 1960's *The Maker*, and it gives him a new literary identity, distinct from that other Borges concerned with mathematical-philosophical games and time. This the second of the two thematic breaks Borges mentions in the quotation from "Borges and I" above; taken together they periodize his oeuvre. The break caused by his blindness around 1955 is notable for the rejection of the themes and literary figures for which he later became famous, and which he adopted after an earlier transition, away from "the mythologies of the outskirts." Ion Agheana has written about the importance of sensory experience in Borges' prose, and Florence Yudin's work shows that blindness made Borges conscious of the power of the spoken word in Anglo-Saxon and Norse literature; its ability to import past times into the present, and recover lost experience. I think that, since changes in Borges' sensory experience gave rise to and determined a change in his idea of literary *tiempo vivo* after 1955, we should pay attention to ideas about the representation of perceptual experience in his earlier work: to the particular details and structure of verbal accounts of 'perceiving.' Agheana links chromatic and perceptual experience in Borges' fiction and essays with the perceiving "Yo"—the self, that which *experiences* in what he calls "live time"["*tiempo vivo*"], the experienced 'present.'⁷ I think Borges was approaching the problems of perceiving and representing in *tiempo vivo*—the problems associated with the sensate self in literature—using the mathematical philosophy he experiments with in the essays I mentioned last chapter. After the loss of his sight, the games with time and the infinite had to be abandoned (and were perhaps even no longer 'his'), at least in part due to the impact of changes in his perceptual experience on his conception of *tiempo vivo*. I'll use this connection between mathematics and perception later, to structure my reading of "A New Refutation of Time."



In this chapter, I want to understand *tiempo vivo* as it appears in Borges' first fiction, produced as part of a transition away from *gauchismo* and towards unreality—the "*concepto de la literatura*" that dominates his middle period, 1939–1953, bounded by "Pierre Menard, author of the *Quixote*" and *History of Eternity*. Though I'm interested in the thematic changes in Borges' work during periods of transition, in the years just before 1939 and just after 1953, my primary interest is in identifying the literary concerns continuous

⁷For Agheana on experience and perception in Borges' prose, see Ion T. Agheana, *The Meaning of Experience in the Prose of Jorge Luis Borges* (New York: Peter Lang, 1988), pp.199ff; On blindness, see Florence L. Yudin, *Nightglow: Borges' poetics of blindness* (Salamanca: Universidad Pontificia de Salamanca, 1997).

across these breaks. My aim is to understand the constitution of the author's literary identity on the other side of the first break: what in his *concepto de la literatura*⁸ could be kept, or discarded? What had to be created or remade? My purpose in briefly examining this transition is to allow this project's genesis to bear on its interpretation.

This first break occurred in 1938, when Borges had hallucinations and a high fever, even temporarily losing the ability to speak, after a head wound became septicemic. When he recovered he worried for his mind:

I wondered whether I could ever write again. I had previously written quite a few poems and dozens of short reviews. I thought that if I tried to write a review now and failed, I'd be all through intellectually but that if I tried something I had never really done before and failed at that it wouldn't be so bad and might even prepare me for the final revelation. I decided I would try to write a story. The result was "Pierre Menard, Author of *Don Quixote* [sic]"

The above points towards a more interesting transition in this recovery period that's more than thematic. His injury and convalescence gave him the opportunity to experiment: doubting his powers, he worried about his ability to produce something as good as his past work. But eo ipso, the barrier to trying something new was lowered. Before his head injury and "Pierre Menard, Author of the Quixote," first published in the Argentinean literary magazine *Sur* in 1939, Borges had never written a piece he classified as a 'story.' He had written a few works with fabricated content—the biographies of criminals in *A Universal History of Infamy* (1935) and "The Approach to al-Mu'tasim," in *A History of Eternity* (1936)—but these were *fiction* literally, only insofar as they were forgeries or literary hoaxes.

In this early period, Borges approached fictionality only by degrees, experimentally, and via nonfiction. He began in *History of Infamy* by "[reading] up on the lives of known persons and then deliberately [varying] or [distorting] them according to [his] own whims"; by keeping the genre fixed, biographical and so nonfictional, and varying constituent details. The next experimental piece, "The Approach to al-Mu'tasim," goes further, and reviews a fabricated novel by a fictional author. "Pierre Menard" does something similar, posing as commentary on the eponymous author's attempt to rewrite *Don Quixote* by recreating the lived experience, the *tiempo vivo* [living time], of a seventeenth century Spaniard. The frame in both is still nonfictional, but the content isn't. What separates the two stories, if they're both still "halfway house[s] between the essay and the true

⁸Borges uses this phrase in the epilogue to *The Maker* (1960), where he explains that he has included unpublished "past pieces" ["*piezas pretéritas*"] in the collection without having tried to amend them, as he wrote them with another "*concepto de la literatura*" ["concept of literature."] Borges, *Obras 1923–1973*, p.854.

tale”?⁹ I think what leads Borges to classify the latter a ‘story’ is that in “Pierre Menard” the nonfictional frame is obvious almost immediately. The conceit behind this piece’s frame narrative—that a(n also fake) French Symbolist poet decided to “produce a few pages which would coincide—word for word and line for line—with those of Miguel de Cervantes”¹⁰—is really quite funny, and Borges allows the piece to turn on this humor to great effect:

The first method [Pierre Menard] envisaged was relatively simple. Know Spanish well, recover the Catholic faith, fight against the Moors or the Turk, forget the history of Europe between the years 1602 and 1918, *be* Miguel de Cervantes. Pierre Menard studied this procedure (I know he attained a fairly accurate command of seventeenth-century Spanish) but discarded it as too easy. Rather as impossible! my reader will say. Granted, but the task was impossible from the very beginning and of all the impossible ways of carrying it out, this was the least interesting.¹¹

The thing as a whole becomes clearly fictional as soon as Borges declares that “Menard’s fragmentary Quixote is more subtle than Cervantes’” and goes on to quote two *identical* passages from Menard’s *Quixote* and Cervantes’ original, and to compare them in deadpan critical prose: “The contrast in style is also vivid. The archaic style of Menard—quite foreign, after all—suffers from a certain affectation. Not so that of his forerunner, who handles with ease the current Spanish of his time.” It’s this straightfaced insistence on the apparently obviously ridiculous that marks “Pierre Menard” as fiction-proper: the story’s details are jokes that cue the reader to the fabricated nature of its frame. We know that the piece is fiction as soon as it becomes clear that to believe otherwise would be to think either its author credulous or Pierre Menard mad—possibly both.

“al-Mu’tasim” by contrast doesn’t have to insist on anything. Its conceit is merely that Bombay barrister Mir Bahadur Ali brought out a second edition of his *The Approach to al-Mu’tasim*, retitling it *The Conversation with the Man Called al-Mu’tasim: A Game with Shifting Mirrors*, and that Jorge Luis Borges, frequent contributor to the Buenos Aires literary journal, *Sur*, is reviewing it as part of his *History of Eternity*—which ‘fact’ is carried by the bibliographic and textual details confected to form the bulk of the ‘review.’ Unlike in “Pierre Menard,” the fabricated details aren’t inherently unbelievable and don’t undermine the review’s authenticity as they accumulate. As long as the reader considers the text a review, these details act to hold the frame in place; they have no cumulative effect

⁹Jorge Luis Borges and Norman Thomas di Giovanni, *The Aleph and Other Stories 1933-1969* (New York: Bantam, 1973), p.171.

¹⁰Jorge Luis Borges, “Pierre Menard, Author of the *Quixote*,” in *Labyrinths*, p.66ff.

¹¹My emphasis. Translation mine, from the Spanish original, “Pierre Menard, autor del Quijote,” in Borges, *Obras 1923-1973*, p.447.

on the reader like the jokes in “Pierre Menard.” But as soon as it becomes obvious that “al-Mu’tasim” is a hoax—however this happens¹²—these same details support fictional readings. The frame then becomes a narrative device, and the review itself becomes an artifact or a document, which instantiates a fictional world whose extent is set by the text’s factual assertions.

Both texts are structured with an audience, a group of readers, in mind, but the difference between the two consists in their management of the reader’s recognitions. “al-Mu’tasim” works simply in this respect: fiction is used to forestall any recognition, and to maintain the reader’s belief in the review’s authenticity. “Pierre Menard,” though an obituary, published in *Sur*,¹³ is structured comically (Borges calls it a joke), and therefore to manipulate the reader in a graded fashion. It starts with an alphabetized list of the author’s “visible works” (Menard took care that his *Quirote* manuscripts “should not survive him”), “enumerated” here on the occasion of the author’s death, to correct “omissions and additions perpetrated by Madame Henri Bachelier in a fallacious catalogue which a certain daily, whose *Protestant* tendency is no secret, has had the inconsideration to inflict upon its deplorable readers.” René de Costa observes, in his delightful little book, *Humor in Borges*, that there is an ironic distance between the “hysterically effete”¹⁴ narrator’s pretensions and what the reader infers about him and his purpose in authoring Menard’s obituary. This is the set-up: we are distracted by the author’s supercilious tone, or wondering about his ulterior motives. Since he hadn’t told the editors it was a story, “Pierre Menard” was published (in Borges’ own name) as an article in the back pages of *Sur*, where it appeared

with all the seriousness and perhaps some of the tediousness of an article as well. So lots of people took it seriously, because no one thought of me then as a fiction writer, but rather as an essayist. And, it was taken seriously!¹⁵

The fact that the piece is fiction is hinted at textually, though. De Costa notes that the aristocratic connections the narrator adduces in support of his authority to comment on Menard—the “Baroness de Bacourt” and a “Countess de Bagnoregio”—are actually the

¹²It’s important to note that when “al-Mu’tasim” was published in 1936, it would have taken quite a bit of work to determine that neither the book nor the author reviewed actually exists. Borges said the book was published by Victor Gollancz, a real publisher, with a preface by the crime writer Dorothy L. Sayers. One of his friends even ordered a copy from London. He acknowledged the hoax (bibliographically) in 1942, by placing it in the collection *El jardín de senderos que se bifurcan*, which appears in English translation as Part A, “The Garden of Forking Paths,” of *Ficciones*. See Borges and Giovanni, *The Aleph and Other Stories 1933-1969*, p.167f; and Williamson, *Borges: A Life*, for biographical context.

¹³For more on the context of “Pierre Menard”’s reception, and contemporaneous intellectual life in Buenos Aires, see John King, *Sur: A Study of the Argentine Literary Journal and its Role in the Development of a Culture, 1931-1970* (Cambridge: Cambridge University Press, 1986), pp.90ff.

¹⁴René De Costa, *Humor in Borges* (Detroit: Wayne State University Press, 2000), p.50f.

¹⁵Jorge Luis Borges and Antonio Carrizo, *Borges el memorioso: conversaciones de Jorge Luis Borges con Antonio Carrizo* (Ciudad de México: Fondo de Cultura Económica, 1998); cited in De Costa, *Humor in Borges*, p.50f.

“Baroness of the Public Toilet” (*Bas court*[public toilet]) and the “Countess of the Royal Bath” (*Bagno regio*[royal bath]). But the reveal, the point at which the text cues the reader to its fictionality, comes two paragraphs after the list of Menard’s visible works, when Borges clarifies, as narrator, that Menard “did not want to compose another *Quixote*—which is easy—but the *Quixote* itself.” While this isn’t a punch line per se (it’s not inherently funny nor does it end the piece), it is the point at which Borges, as author and comedian, appears to wink: to invite us to suspect a ruse.

In calling the piece a joke, however, I don’t mean that it’s trivial, or significant only as a first and experimental attempt at fiction. (And if it was a joke, few of the people it had been intended for got it: one “Ernesto Palacio,” part of the Buenos Aires literary circle centred around the journal, *Sur*, “told [Borges] that he already knew all about Pierre Menard. . . who must have been a real nut.”¹⁶) My point in calling it a joke is to highlight the way in which the piece is predicated, like any joke, on a well placed observation.

Consider the passage from “Pierre Menard” I quoted earlier, which continues:

. . . this was the least interesting. To be, in the twentieth century, a popular novelist of the seventeenth century seemed to him a reduction. To be, in some way, Cervantes and reach the *Quixote* seemed less arduous to him—and, consequently, less interesting—*than to go on being Pierre Menard and reach the Quixote through the experiences of Pierre Menard.* (This conviction, we might say in passing, made him omit the autobiographical prologue to the second part of *Don Quixote*. To include that prologue would have been to create another character—Cervantes—but it would also have meant presenting the *Quixote* in terms of that character and not of Menard. The latter, naturally, declined that facility.)

Why does Borges take such care to distinguish Menard’s “*método inicial*”[“first method”] (“*be Miguel de Cervantes*”) from that in the italicized line? There’s a particular irony in calling what’s really a quasi-monastic regimen for the regulation and reformation of the self a ‘*método*’[‘method’ or ‘system’], as if a means to predictable or reproducible results. The second line provides a reason, “seemed to him a reduction,” but this parses strangely, even in the original—the Spanish *disminución*[reduction] indicates a decrease, but the lack of an attached prepositional phrase means it’s not clear what makes Menard’s preferred method categorically harder.

This, however, seems even less like a ‘method’ than the first. Menard wants to find within himself the pieces of lived experience, the *tiempo vivo*, from which (he supposes) the *Quixote* was written, and use or reassemble them—depending on how far away from mere experience we want to place his creative act—to produce a “few pages” of the *Quixote*. He

¹⁶Borges and Carrizo, *Borges el memorioso*.

supposes that this is harder than the first method, and perhaps it is. Menard is attempting to *empathize* with the work of Miguel de Cervantes, so literally that the English word's older German cognate, *Einfühlung*, or "feeling into," seems closer. The word originates in the thought of the German Romantic philosophers, for whom it signified the fusing of the subject and the object in aesthetic apprehension. Theodor Lipps, whose work formed the basis for the English word "empathy," described it as an iterative process: perceiving some formal element in the object in front of us (Lipps wrote about the Doric columns and the aesthetics of space) provokes an emotional response, a corresponding change in the subject, which causes us to see the object differently, so that it in turn forces a further change in us, the subject, causing us to see it still differently—this progresses asymptotically, towards the fusion of subject and object.¹⁷

Menard's innovation is to take this asymptotic point as that at which perfect mimesis becomes possible; that at which Menard is able to *simulate* the *Quixote*. The first method would have Menard simulate *Cervantes* himself, and so by assumption also the *Quixote*. But to "be Miguel de Cervantes" is to no longer be Pierre Menard, and, according to the parenthetical lines quoted above, it seems this is what Menard would avoid. The distinction between the methods, therefore, has to do with individual identity. Menard wants to remain Menard, to use his own experiences, structured by "his general recollection of the Quixote, simplified by forgetfulness and indifference" (which he takes as "equal [to] the imprecise and prior image of a book not yet written") to produce the *Quixote*. When Menard writes in a letter to Borges (the narrator) that he "should only have to be immortal" to carry out the second method, he observes that this method is random; or at least that it forces him to surrender his project to the caprices of his own life. In the second method, the *Einfühlung* interaction, the asymptotic approach of subject and object, Menard and the *Quixote*, proceeds only when experiences in Menard's life happen to accord with those in Cervantes': when there is some identity or equality existing across time and space between the *tiempo vivo* of Miguel de Cervantes and the *tiempo vivo* of Pierre Menard.¹⁸

¹⁷For the contribution of the Romantics, and the phenomenological and hermeneutical schools of German philosophy, to the idea of *Einfühlung*, see Magdalena Nowak, "The Complicated History of *Einfühlung*," *Argument: Biannual Philosophical Journal*, no. 2 (2011): 301–326; For Theodor Lipps and *Einfühlung* see Jørgen B Hunsdahl, "Concerning *Einfühlung* (empathy): A concept analysis of its origin and early development," *Journal of the History of the Behavioral Sciences* 3, no. 2 (1967): 180–191; Gustav Jahoda, "Theodor Lipps and the shift from 'sympathy' to 'empathy,'" *Journal of the History of the Behavioral Sciences* 41, no. 2 (2005): 151–163.

¹⁸There are potentially deeper connections between Menard's idea and the history of *Einfühlung*, perhaps most significantly with Hermann Lotze's work on empathy and aesthetics. Lotze appears in "A New Refutation of Time," as well as in "Avatars of the Tortoise," though in a different context, and cited as quoted by William James. But since similar ideas also appear in the context of Anglophone poetics, with which Borges was arguably more familiar, the provenance of the hermeneutic ideas in "Pierre Menard" remains rather hazy. See Richard Harter Fogle and Jeffrey Barnouw, "Empathy and Sympathy," in *The New Princeton Encyclopedia of Poetry and Poetics*, ed. Alex Preminger and T. V. F. Brogan (Princeton: Princeton University Press, 1993), p.331f for *Einfühlung* and empathy in English criticism.

(As an aside, this kind of reasoning about the likelihood of a random process producing an ordered result—“the infinite monkey ‘theorem’”—appears frequently in Borges’ work. He traces the history of this idea in the 1939 essay “The Total Library,” taking the title from the German science fiction writer Kurd Lasswitz’s short story, which anticipates and, Borges says, supplied the conceit of “The Library of Babel” (1941). He quotes Sir Arthur Eddington’s observation “that a half-dozen monkeys provided with typewriters would, in a few eternities, produce all the books in the British Museum,”¹⁹ and generalizes it: he observes that “strictly speaking, one immortal monkey would suffice.” Note that nowhere in the story does Borges, the writer, say why Menard attempted “an undertaking which was exceedingly complex and, from the very beginning, futile.”²⁰ Borges, as writer, forces the mortal Menard to play the part of that immortal monkey, as a thought experiment, in fiction.)



The first method has Menard seeking out these experiences, rather than relying on happenstance in the course of his own life, though at the cost of subordinating his authorship of the *Quixote* to Cervantes’; if he becomes Cervantes to write the *Quixote* then it, the copy, cannot be held to have been written by Pierre Menard. Hence also Menard’s decision to omit the autobiographical prologue, so as to be able to claim authorship over the whole text. One can go on to problematize this interpretation (most interesting to me is a variation on what is called in philosophy of mind “multiple realizability”: can a completely different ‘set’ of experiences—one disjoint with Miguel de Cervantes’ ‘set’ of experiences—also give rise to the same *Quixote*?), but I won’t. Instead, I want to return focus to the issue of *tiempo vivo*, and its mediation in language.

The ‘well placed observation’ I mentioned doesn’t inhere in these literary philosoph-

¹⁹Borges cites Eddington’s *The Nature of the Physical World* (1928) for this remark, in “The Doctrine of Cycles.” The essay itself is rather strange. Eddington appears because Borges wants to show that the number of possible configurations of even a small number of atoms is so large that the chance of any one state repeating itself, reappearing, is prohibitively small. He argues this against a rather tendentious misreading of Nietzsche’s eternal return—or “Friedrich Zarathustra”’s, as he’s referred to by the end of the essay—but allows Nietzsche to retort that so long as the number of configurations isn’t actually infinite, eternal return is still a possibility. Borges appears to interpret eternal return oddly, literally, as the atomic scale return to a particular state of matter. He grants Nietzsche the objection. But next he uses Cantor’s transfinite numbers to allow space to be indexed recursively, and so itself uncountably infinite. This would make a self that persists in time, exact and unchanged—the self, Borges says, of eternal return—impossible, the possibility “computable as zero.” The use of mathematics to negate *whole* conceptions of the self, which persist in or over time is a major feature of this essay, as is Borges collecting another ‘piece of intuition’: that every (real) number is already the result of an infinite subdivision (technically, has measure zero. Roughly, ‘measure’ is a formalization of the idea of a mathematical object’s width on a number line). Borges, *Total Library*, p.214ff.

²⁰Borges, *Obras 1923–1973*, p.450.

ical speculations but rather in the theory of reading that Menard's undertaking moves Borges to suggest; Menard's ironically and literally quixotic task is used as a foil, that allows Borges to introduce his own insight into reading and influence. The passage above continues:

Shall I confess that I often imagine he did finish it and that I read the Quixote—all of it—as if Menard had conceived it? Some nights past, while leafing through chapter XXVI—never essayed by him—I recognized our friend's style and something of his voice in this exceptional phrase: "the river nymphs and the dolorous and humid Echo." This happy conjunction of a spiritual and a physical adjective brought to my mind a verse by Shakespeare which we discussed one afternoon:

Where a malignant and a turbaned Turk...

The quote is from *Othello*²¹ and so might hint at Menard's suicide. But I think the reference to Shakespeare here is more significant if considered an incipient form of the famous remark in "Tlön, Uqbar, Orbis Tertius" (1940), that "all men who repeat a line from Shakespeare, are William Shakespeare."²² Borges reads Menard into Cervantes' *Quixote*, and finds them both again in Shakespeare. Both of these references to Shakespeare in Borges' fiction exaggerate the point made in the 1964 lecture, "The Enigma of Shakespeare." The titular enigma is the authorship question. Among the contenders, Borges seriously considers only Marlowe, but argues for a fundamental difference between the playwrights' works, which leads him to side with Shakespeare. He notes that Marlowe's plays are peopled by one dominant character—think of Faustus, or Tamburlaine—with most others given ancillary roles (literally, and perhaps most hilariously, in the case of those "pampered jades of Asia," kings he's conquered, whom Tamburlaine lashes to his chariot and has haul him to the next battlefield). Shakespeare, however, Borges says, gives the most minor characters a breathtaking degree of interiority: he cites the apothecary in *Romeo and Juliet* who says when selling poison to Romeo, "My poverty, but not my will, consents." The point is that lines like this invite us into the interior lives of Shakespeare's characters in a way that Marlowe's often don't. Almost all of the staged action in *Doctor Faustus* acts to figure the central character and not really any of the others—even Mephistophilis, the demon Faustus conjures up early in the play, never develops independently of Faustus, and is throughout his projection. (Contrast this with V.I.4 from *Romeo and Juliet*,

²¹ OTHELLO And say besides, that in Aleppo once,
Where a malignant and a turban'd Turk
Beat a Venetian and traduced the state,
I took by the throat the circumcised dog,
And smote him, thus.
[Stabs himself] (V.II.66)

²²My translation. Borges, *Obras 1923–1973*, p.438.

where, although the scene is Romeo's, its terms are set by the apothecary's words: Romeo replies, "I pay thy poverty and not thy will," and insists that in doing so *he* is dispensing the true poison, gold.) The authorship question turns on the fact that Marlowe's central characters are sustained by the ages they're written into, and the others around them serve only to support their lived experience, while "history," Borges says, "did not exist for Shakespeare"—all of the latter's characters enact the present in which he was writing, even if they do so (ostensibly) in other times. Period provides plot, in Shakespeare, but doesn't often constrain character,²³ which is more nuanced for it. Put otherwise, "Shakespeare had the power to multiply himself,"²⁴ and so his plays capture *tiempo vivo* as it's lived by many, whereas Marlowe's capture that of a single character, who's presented as embodying his time. Borges suggests that Shakespeare's authorship is doubted because of another, deeper enigma ("which is perhaps the enigma of all literary creation"²⁵): how such universality in literary art is possible to begin with. He cites Coleridge's thesis, that "Shakespeare was what Spinoza calls '*natura naturans*,'²⁶ creative nature: the force that takes all forms. . . [and] reaches its consciousness. . . in us, in mankind, the '*natura naturata*.'²⁷" Borges thinks of Shakespeare (bardolatrously) as an avatar—of literature's power to capture the life of other minds—and it's because of this associative connection with simulation that he includes the line from *Othello* in "Pierre Menard."

Shakespeare allows us to linger at the end of the paragraph, but the lines are marked as parenthetical, and potentially significant, by the way they are introduced. What is Borges "confessing" to above? The narrator seems to be only posturing, "confessing" insipidly to Menard's genius, and the profundity of his project, then playing sycophant. However, Borges seems to be making a point here—as writer, not narrator—that is more oblique and significant than this. Importantly, (and as per Lipps) it is a formal feature of Menard's style, a "conjunction of a spiritual and physical adjective,"²⁸ that Borges recognizes in the *Quixote*. To recognize["*reconocí*," from *reconocer*] (rather than to just *find*) elements of one author, *B*, in another's, *A*'s, style is to say that *B* *influenced* *A*—absurd if *A* preceded *B*. But this is exactly what Borges tells us in the final paragraph: "Menard (perhaps without wanting to) has enriched, by means of a new technique, the halting and rudimentary art of reading: this new technique is that of the deliberate anachronism and the erroneous attribution."²⁹ Taking Menard seriously suggests the possibility of recognizing, impossibly,

²³Most of the exceptions belong to Shakespeare's earliest period. Compare, for example, the Romans in *Titus Andronicus* with those in *Coriolanus*.

²⁴"The Enigma of Shakespeare," Borges, *Total Library*, p.463–73.

²⁵*Ibid.*, p.470.

²⁶"What is in itself and is conceived through itself. . . God, insofar as he is considered as a free cause." "Ethics," in Benedictus de Spinoza, *A Spinoza Reader: The Ethics and Other Works*, ed. Edward Curley (Princeton: Princeton University Press, 1994), p.29.

²⁷"Whatever follows from the necessity of God's nature, or from God's attributes." *Ibid.*

²⁸Borges, "Pierre Menard."

²⁹*Ibid.*

elements of the *Aeneid* in the *Odyssey*, or, generally, of looking for pieces of any one text in any other, as if anything was written by anyone at any time. I want to read the passage from “Pierre Menard” above against its analog in “al-Mu’tasim”.³⁰

The story’s outline is now plain: the tireless search for a human soul through the barely perceptible reflections cast by this soul in others. . . The nearer to al-Mu’tasim the men [the main character] examines are, the greater is their share of the divine, though it is understood that they are but mirrors. A mathematical analogy may be helpful here. Bahadur’s teeming novel is an ascendant progression whose last term is the foreshadowed ‘man called al-Mu’tasim.’ al-Mu’tasim’s immediate predecessor is a Persian bookseller, an exceptionally happy, courteous man; the one before him, a saint.

When Borges recognizes Menard’s style in the *Quixote*, he is seeing, anachronistically, Menard’s “barely perceptible reflection” in Cervantes’ opus; both of whom in turn reflect Shakespeare. Contrary to that in “Pierre Menard,” however, the schematic account of influence presented in “al-Mu’tasim” above is still causal, since the main character is trying to find the ‘man called al-Mu’tasim’ by first finding those others who, *having been* influenced by him, *approximate* al-Mu’tasim to some degree—each person the main character finds is a ‘term’ whose ‘value’ is incrementally closer to al-Mu’tasim’s. I’ll return to these mathematical ideas shortly, but for now note that it’s the contact with al-Mu’tasim—direct, causal influence—that renders each precursor his approximation. In the case of Menard’s ‘technique,’ all that’s required to assert ‘influence’ is similarity, or, more concretely, the reader’s *perception* of similarity: in asserting *A*’s influence on *B*, the requirement that *A* precede *B* is dropped, and the distinction between ‘influential’ and ‘influenced’ collapses. ‘Influence,’ then, conceptually, becomes just the assertion that both *A* and *B* have drawn upon the same cultural resources; or were themselves similarly influenced by some other prior author, *C*, as yet unread by—and therefore imperceptible to—the reader, and so not part of the picture; or any other reason why the reader might find correspondences between *B*’s work and *A*’s. “Deliberate anachronism and. . . erroneous attribution” are the means by which we might discover these hidden affinities between texts. So the two stories serve to distinguish ‘influence’ as a phenomenon that shapes the writer, in the case of “al-Mu’tasim,” and, in “Pierre Menard,” ‘influence’ as a reader’s diachronic recognition of similarity and difference between impressions evoked by texts—or, in other words, they differentiate ‘influence’ as *experienced* and as *perceived*. No one reads literature chronologically, so one’s recognition of resemblances between works is in practice achronological. Read the *Aeneid* before Homer, and, given no other information, you might see Virgil in the *Odyssey*. Some such resemblances are causal (in the previous example, obviously,

³⁰Borges, *Ficciones*, pp.37–44.

causality runs the other way), and we authorize and seek to explain these, but other, spurious connections—like that between Cervantes’ Spanish and Shakespeare’s English—we ignore.

But what if we don’t? ‘Causal’ and ‘acausal’ are both judgments that are constructed *ex post facto*, after a connection has been perceived by the reader. They aren’t immediately distinguishable categories, since when we read we intuit such connections, but not necessarily (or immediately) whether they’re significant. Noticing the *Iliad* and the *Odyssey* in the *Aeneid* (in whatever capacity) is prior to an explanation of the connection. It isn’t the same thing: a resemblance, a reader’s ‘recognition’—in the Aristotelian sense, involving a change from ignorance to knowledge—is really an *explanandum*, in and of itself. The question then becomes: what, in terms of readerly experience, is (a) recognition? What kind of ‘knowledge’ is gained when a reader recognizes? Any answer to this is complicated by Steiner’s problem, that “the expressive achievements of the past seem to weigh exhaustively on the possibilities of the present,”³¹ or, equivalently, that “our speech, that is, all our utterances (including our creative works), is filled with others’ words,”³² since “language is not a neutral medium that passes freely and easily into the private property of the speaker’s intentions; it is populated—overpopulated—with the intentions of others.”³³ Trivially, we can ‘find’ elements of anyone’s style in Shakespeare’s, if we ignore the post hoc fallacy. As per Bakhtin, so many of anyone’s words are, however murkily, Shakespeare’s, because he has priority over so much. And, moreover, if we consider resemblances between figures as simple as “a spiritual and a physical” adjective used together, as Borges does, we will likely generate an outsized list of authors. Some of these authors may have taken from their predecessors, but the rhetorical turn itself is simple enough to have come about in the work of any one author just by chance or invention. (I’ll pass over the question of ‘evidence’ in such judgments.) Which means that many of the recognitions produced in examining this corpus will be spurious, and any that aren’t would be prohibitively difficult to validate—imagine considering the lines of influence connecting all authors in English and Spanish who have ever conjoined “a spiritual and a physical” adjective. Imagine discovering (or even defining) those lines of influence.

The overarching point is that the first step in justifying a recognition, validating a putative resemblance—‘considering . . . all authors in English and Spanish’—is an enormous undertaking, even considering some canonical subset of authors and texts. This isn’t to say that it’s impossible or pointless (etymologies and historical thesauruses attempt part of a similar task), though it is fraught. One can *represent* stylistic relationships between

³¹Steiner, *Language and Silence*, p.68.

³²Mikhail M. Bakhtin, *Speech Genres and Other Late Essays*, ed. Michael Holquist and Caryl Emerson, trans. Vern McGee (Austin: University of Texas Press, 1986), p.89.

³³Bakhtin, *The Dialogic Imagination: Four Essays*, ed. and trans. Michael Holquist and Caryl Emerson (Austin: University of Texas Press, 1992), p.294

authors in terms of associations founded on recognitions, *A* conjoined “a spiritual and a physical” adjective and so did *B*, but the set of all such associations, the ‘genealogy,’ still can’t be used, properly, to *explain* anything. Miss a link, or mistake a random one for something significant, and you will produce a genealogy that supports a different set of arguments; the process is not fault-tolerant, not robust against error, which is to say that unless we know what information is missing, we can’t check or correct any answer we give as to how a particular idea or rhetorical device passed from *A*’s text to *B*’s. The fact that those authors are associatively connected is *itself* a phenomenon requiring explanation; it can’t be part of the explanation, the *explanans*, for some other phenomenon. However, explaining this is different, in kind, to explaining ‘influence’—per se and conventionally considered. Associative connections, if they’re predicated on recognition, are a matter of the reader’s perception. Borges makes this point explicitly in “Kafka and his Precursors” (1951), where he proposes a highly eclectic list of texts, all of which take as conceit or content various aporias or impossible worlds. I read the use of ‘precursor’[‘*precursor*’] instead of ‘predecessor’[‘*antecesor*’] as intentional: the word in Spanish as in English means (etymologically) ‘forerunner,’ and used here suggests each of the candidates presaged Kafka’s work somehow, and didn’t merely occupy the same cultural office, as it were. But the point of the essay is not to advance a list of Kafka’s precursors, so much as to raise a point about such lists. Borges writes, in the concluding paragraph:

If I am not mistaken, the heterogeneous pieces I have enumerated resemble Kafka; if I am not mistaken, not all of them resemble each other. This second fact is the more significant. In each of these texts there is Kafka’s idiosyncrasy to a greater or lesser degree, but if Kafka had never written, **we would not perceive** this quality; that is, **it would not exist**. [...] The fact is that every writer *creates* his own precursors. His work modifies our conception of the past, as it will modify the future. In this correlation the identity or plurality of the men involved is unimportant.

[Si no me equivoco, las heterogéneas piezas que he enumerado se parecen a Kafka; si no me equivoco, no todas se parecen entre sí. Este último hecho es el más significativo. En cada uno de esos textos está la idiosincrasia de Kafka, en grado mayor o menor, pero si Kafka no hubiera escrito, **no la percibiríamos**; vale decir, **no existiría**. [...] El hecho es que cada escritor *crea* a sus precursores. Su labor modifica nuestra concepción del pasado, como ha de modificar el futuro. En esta correlación nada importa la identidad o la pluralidad de los hombres.³⁴]

³⁴First published in *La Nación*, 7 October 1951. Italics in original; boldface and translation mine.

The keystone here is the reformulation of Berkeley’s dictum, *esse est percipi*: “*Si no percibiéramos [la idiosincrasia de Kafka], no existiría*”: “if we wouldn’t perceive [Kafka’s idiosyncrasy], it wouldn’t exist.” Note also that Borges’ variation makes no positive statement: “the idealist doctrine”³⁵ is introduced by a counterfactual—“had Kafka never written”—and the verbs, ‘to perceive’ and ‘to exist,’ are wrapped in the conditional mood. The chain of reasoning is as follows:

Define Let \mathbb{K} be “Kafka’s idiosyncrasy”

P1 Assume Kafka had never written

P2 We would not perceive \mathbb{K}

P3 \mathbb{K} would not exist

What is the relationship between **P2** and **P3**? Which is prior, our perception of \mathbb{K} , or its existence? We can permute their order, $\{\mathbf{P3} \Rightarrow \mathbf{P2}\} \mid \mathbf{P1}$, and still describe the counterfactual world in which **P1** is true. As soon as we assume **P1**, \mathbb{K} is null, empty, and **P3** is implied: “Kafka’s idiosyncrasy” describes, for those who didn’t personally know him, literally nothing—as a literary analytic category (which I intend broadly), it would not be formulable. Therefore we *couldn’t* perceive it. In fact, it doesn’t matter which of **P2** and **P3** is the logical consequent. The words “that is”[“*vale decir*”] after the second semicolon invite us to read the two as equivalent, logically, $\mathbf{P2} \equiv \mathbf{P3}$, and therefore to treat \mathbb{K} as a readerly abstraction, produced by the experience of reading Kafka. Had he never written, we couldn’t *recognize* him.

Call the epistemological object produced when readers recognize similarities between texts a ‘recognition’; this is the product of using \mathbb{K} to ‘sound’ a text. Recognitions attach to something shared by two or more texts: a rhetorical device, a figure of speech, plot, form—in general, the ‘fixed points’ of literary expression: those patterns which turn up often enough that we give them a name and come to accept their existence in ‘outside knowledge.’ Things in outside knowledge are transferable. If I explain some literary figure to you, you can go out and recognize it in someone’s text; the mental object can be passed from person to person without much change in form. Is that recognition part of outside knowledge, too? I think Borges intimates that we’d be wrong in saying ‘yes, necessarily’; wrong in according the same epistemological status to a ‘recognition’ as to a literary figure, just because the former supervenes on the latter. If I ask you to *give* me metaphors, you’ll give me examples. If I ask you to give me chickens, you’ll also give me examples. But a difference between the two (there are a few) is that, in the latter case, even if I know nothing about the husbandry of poultry, and I only recognize the animals with the aid

Included in Jorge Luis Borges, *Otras inquisiciones*, in *Obras 1923–1972*, ed. Carlos V. Frías (1952; Buenos Aires: Emecé editores, 1974), pp.710–6.

³⁵Borges refers to the principle as “*la doctrina idealista*” in “A New Refutation of Time,” *ibid.*, p.760.

of, say, a picture book, I will do so immediately—I won't need to 'evaluate' each chicken individually. You may have slipped me a ptarmigan, which I'd miss at first pass, but in principle identifying chickens is easy; it's automatic. Reading and cognizing a metaphor is a much more complicated process than fowl observation, and the objects it produces (I've been calling these 'recognitions') are not tangible, though their existence depends on the fact that I read some physical text. The existence of 'chickens,' however, as they're represented (typologically) in the picture book, doesn't inhere in my observations of the tokens you've provided. The animals will associate, breed, and *be*, irrespectively; my observing a chicken doesn't constitute it. Not so with literary figures. People—readers—preexist their knowledge of texts. Until I see the picture book, I preexist my knowledge of chickens, but not the birds themselves.

I've written "Kafka's idiosyncrasy" as a set, \mathbb{K} , as if it's composed of distinct and distinguishable elements, those 'fixed points'; this is a first-order approximation, which is only often true. Literary figures are created (to use the quotation's sense of the word) in readerly experience, in 'inside knowledge,' by observation *and* evaluation. They only become 'fixed points' when they are specified, as in conversation, or criticism—when we are able to trade on the inside knowledge of others and so solidify our own. Cliché metaphors may trigger recognition immediately, so that even if we don't know what a metaphor is, we'll recognize the utterance in question as at least not literally true. Individual readers, in comparing notes, might be expected to agree upon these: a glutton is a pig; a coward is a chicken; any comparison in which there is a natural mapping between intensional qualities of the tenor and those of the vehicle: "stars and eyes; women and flowers; sleep and death."³⁶ A metaphor is essentially an analogy not presented per se, which means that if we don't see the analogy, we don't 'see' the metaphor. Conversely, "once articulated," and once they're recognized widely, metaphors based on analogy may become cliché, "worn threadbare," until the "collocations are reduced to mere platitudes." One can consider a different sort of metaphor, "verbal objects" recognized initially as *simply* collocations, "which stand in splendid isolation," Borges writes, "like a crystal or a piece of silver jewelery"—by which he almost instantiates his point about metaphor, but I think means really to say that the objects produced are inert, not subject to vital forces. He cites a few examples drawn from Snorri Snorrulson's glossary of metaphor in Icelandic poetry ("blood-red swan," "blood-thirsty eagle") and reads them as "the result of a mental process that does not perceive correspondences but instead combines words." A swan isn't blood red and can't be; the mapping is constrained by what "may have the power to impress the reader" rather than anything in the world or in people. Some of these are impressive—"Licofronte, the Alexandrian Greek poet and playwright, called Hercules "the lion of the three-fold night" because the night during which he was conceived by Zeus lasted

³⁶The following quotations are my translation from "La metáfora," in Borges, *Eternidad*, pp.382-4

for three”—but even still they strike us as would curios, from a distance and as dissimilar to most other metaphor. There is an austerity to this kind of metaphor; one regards them, like silver or crystal; they preserve themselves. These objects are configurations of words—the first word drawn from the category, ‘impresses the reader,’ the second, the category of ‘animal’—picked not randomly but for effect, rather than as analogy, and there seems to be nothing entirely satisfactory one can infer from them. Not least if we actually imagine a list of metaphors generated by randomly pairing tenor and vehicle. Some of these would be pleasing, surely, and one could anticipate that each such metaphor would be unique somehow, perhaps like Borges’ examples conjuring an interesting play of significations. Hence, maybe, their power and opacity, oddity barring copious repetition and the resultant blurring of intension. But they don’t light up anything new—they aren’t constrained or determined by anything in life. The store of metaphor based on natural mapping, however, with its starry eyes and eternal slumbers, is subject to shifts in intension, either in the tenor or the vehicle: think of death as rigor mortis and rot, and the analogy with ‘sleep’ won’t hold. (Think of sleep as unrestive and fitful, and the analogy fails on the other end. The phrase is still metaphorical, of course, but, misunderstood or misconstrued, its intension is out of the hands of its originator.) Even though these categories aren’t disjoint, typological judgements serve to illustrate the broader point that, for the reader, any literary figure becomes fixed by a process of learning, acculturation, assimilation—apperceptive interaction with a text, ‘outside knowledge,’ and the knowledge of others. Both kinds of utterances that Borges mentions are, in outside knowledge, metaphor, but they’re different in readerly experience because they invoke what we know and what we’ve learned differently. What we observe—words, sentences, texts—is ‘outside knowledge,’ but what we generate upon evaluation—‘recognition’—is not. Hence Borges’ emphasis above. Kafka ‘creates’ the image of his own precursors *in us* because reading his work endows us with a filter, \mathbb{K} , a sense of ‘the Kafkaesque’—the possibility of recognizing something at once more specific and inchoate than a metaphor. Had he never written, we could never *learn to recognize* “the barely perceptible reflections cast by” his work in others’.



The excerpt above is from a later collection, *Otras Inquisiciones*—published in 1951, well after “al-Mu’tasim” (1936) and “Pierre Menard” (1939)—and “Kafka” itself is presented as literary criticism. I see the shift that occurs in Borges’ thinking about literary resemblance and recognition between those two stories in the terms set by the (later) ideas above. The ideas in Borges’ early ‘hoax’ pieces are experimental, in that they’re fictional variations on some underlying theme—Agheana reads “Pierre Menard” as an “esthetic version of [the]

philosophical point” raised in the quotation above: that the present “does not modify the past, only our concept of it.”³⁷ This is the observation I mentioned earlier. We are meant to see the text of the *Quixote* differently for Menard’s having taken Cervantes as his “complacent precursor”[“*complaciente precursor*”]; this is why Borges, as narrator, can cite two identical passages from the work of each and comment on their “vivid contrast.”³⁸ The introduction of this idea in “Menard,” that the reader’s inside knowledge is prior to outside knowledge in textual interpretation, is the signal difference between it and “al-Mu’tasim.” There’s an interesting correspondence between the former piece’s hoaxical form and its aesthetic-philosophical point—outside knowledge alone (the fact that it was published in *Sur*, and the fact that its author is an essayist) would lead us to mistake the text, while inside knowledge (our impression of its ridiculous premise and the pretentious narrator’s tone) hints at its real purpose and nature. So the piece’s ‘joke’ depends on this observation. Borges includes his ideas about recognition and resemblance in a text that manipulates the reader into misrecognition for the sake of a joke (at Ernesto Palacio’s expense), but also to introduce—fictionally, and so pointedly—the experience of reading as a central writerly concern. In other words, I see “Pierre Menard” as generated by a “concept of literature” that takes as its central epistemological object a reader’s sense of recognition. In “Kafka,” recognition is refigured as a matter of perception.

Let’s return to the first few lines of the excerpt from “Kafka”—each of Kafka’s candidate precursors resembles him; they don’t all resemble each other. Why? And why does Borges flag the second observation? The last lines offer a way in, but are rather opaque, partly due to the adverbial phrase, “*En esta correlación. . .*”[“In this correlation. . .”]. The identity and number of a given author’s precursors are irrelevant, Borges seems to be saying, since that writer’s labor in fact induces the relation between himself and each ‘precursor’—in our readerly experience. “*Correlación*” may also be read as “interrelation” or “interrelationship,” in reference to the association between the author and his precursors. I read the last two lines as an abstruse formulation of the idea that if we think of recognitions as inside knowledge, *only* the ‘interrelation’ between Kafka and any given precursor exists, epistemologically. Not all of “the heterogeneous pieces” Borges has enumerated resemble Kafka because we have taken the latter as our lens—we’re not able to apprehend the interrelations between the precursor texts since we see them only to the extent that, and if, they are resolved by \mathbb{K} . So these two lines evince realization—even if they don’t constitute a proof—of the fact that a series of authors, each considered in terms of some other author’s idiosyncrasy, is a particularly contingent kind of abstraction, because the work of each writer modifies the past in which such a series, such a genealogy, inheres. Because, in “Kafka,” each author is only related by affinities, recognized due to

³⁷Agheana, *Experience in the Prose of J.L. Borges*, p.41f.

³⁸Borges, *Obras 1923–1973*, p.448–9.

\mathbb{K} , a thing in inside knowledge, whose intensional content is unclear and may be modified without our cognizance as we read other texts, we cannot go looking for Kafka's true precursors with \mathbb{K} in hand. \mathbb{K} and the recognition it enables are both determined by our own associations as a reader, and the extent to which they're shared by a community of readers whose impressions act to fix ours, which means that relationships between texts in inside knowledge, impressions, are distinct from relationships between texts in outside knowledge, conventionally considered influence—that in some later text which we perceive as 'Kafkaesque.' There is a sociological flavor to all of this: we might say that \mathbb{K} inheres in *collective knowledge*, so that the knowledge gained when one text resonates (for a given reader) with another isn't really knowledge but something more ephemeral, and socially contagious. And, so, epistemologically, the situation is rather bleak: the best we can hope for is to enumerate 'avatars'—instantiations of or variations on some literary fixed point, which turns up every so often in the course of human letters. Hence Borges' well documented tendency to see "all really good metaphors [as] variations on a very limited range of comparisons." Writers, in inside knowledge, essay variations on "universal, paradigmatic metaphors," which have "accumulated over time deeply encrusted poetic resonances" due to the labor of others.³⁹ This, incidentally, is how I read the gnomic title of "Avatars of the Tortoise." Borges writes, in the opening passage, that he had once longed to compile the "mobile history" of the concept of infinity—he would open with the Hydra, which he regards as "a prefiguration or emblem of geometric progressions"; the piece "would be crowned by the sordid nightmares of Kafka." He writes that "five or seven years of metaphysical, theological, and mathematical apprenticeship" would merely allow him to "plan, decorously, that book," but adds "that life forbids him that hope, and even that adverb." His own mortality prevents him from accounting, properly, for all variations on the concept of infinity; the best he can do, in revising "The Perpetual Race of Achilles and the Tortoise" (1929), is to "register certain avatars of the second paradox of Zeno." As shown earlier, the summation of an infinite series seems to Borges to be stymied by "the descent into more and more minute precipices," by infinite regression. Therefore, the revision, "Avatars of the Tortoise," concerns itself with various uses, deployments, of infinite regression in philosophical thought, and doesn't attempt to evaluate the arguments as does "Perpetual Race." In "Avatars," Borges figures infinite regression as a trope, a "universal metaphor" due to Zeno, and glosses its later expropriations: the eponymous "avatars." Borges writes:

I have examined those which enjoy certain prestige; I venture to assert that only in the one formulated by Schopenhauer have I recognized some property of

³⁹Donald Leslie Shaw, *Spanish American Poetry After 1950: Beyond the Vanguard* (Suffolk: Boydell & Brewer, 2008), p.46. See also the essay "La metáfora." Borges remarks on "the *reductio ad absurdum*" inherent to "any attempt to produce new metaphors."

the universe. According to this doctrine, the world is a fabrication of the will. Art always requires visible unrealities. Let it suffice for me to mention one: the metaphorical or numerous or carefully accidental diction of the interlocutors in a drama. . . Let us admit what all idealists admit: the hallucinatory nature of the world. Let us do what no idealist has done: seek unrealities which confirm that nature. We will find them, I think, in the antinomies of Kant and in the dialectic of Zeno.⁴⁰

There is the idea of infinite regression, recursion, delegated to Zeno, and the idea of “the concrete growth of the perceived,” enumerability, to the “idealists,” among whom Borges counts Hume, because he sees Hume’s ontology, built from “bundles of perceptions,” as a generalisation of Berkeley’s. In “Perpetual Race” Borges finds that *“la pululación de abismos,”* or *mise en abîme*, infinite regression, prevents the aggregation of parts into a whole. He turns to the enumerable infinite and the idealists seeking—though, as I will show in discussing “New Refutation,” not really expecting to find—a means of constituting a whole, a means of “summing” a self. As the 1929 essay foreshadowed the role of Hume in “A New Refutation,” so this 1939 essay implicates two more players, “the antinomies of Kant and. . . the dialectic of Zeno.” I will return to this collusion between Kant and Zeno—contra Hume, as we will see—in my discussion of “A New Refutation of Time” (1944). Before we get there, I want to examine the relationship between the mathematical ideas in “Perpetual Race” and “al-Mu’tasim” more closely.

The series Borges fixates on in “Perpetual Race” records the approach of a literal precursor, and in “al-Mu’tasim” Borges thinks of influence using this mathematical analogy. One can think of a series, Borges suggests, like the one in the last chapter, with al-Mu’tasim the first, whole, term and the each of the others terms in a descending power series; each successive term is ‘al-Mu’tasim’ raised to a negative power, so that each of his ‘precursors’ is a fraction of the mystic himself. Mir Bahadur Ali is surely himself a term in this series; the observation evinces the dizzying scale at which Borges’ analogy operates. Ali’s quest aims at constructing al-Mu’tasim’s idiosyncrasy, \mathbb{A} , from the impressions cast by his soul in others’. Every person he meets, the analogy would suggest, is quantified according to the component shared with al-Mu’tasim. So all of humanity is laid out in a great sequence, ordered by similarity to one man. This is an account of influence in artistic production: *A* begot *B*, who in turn begot *C*. . . ; every author regarded as the terminus of a series of precursors, but also as descending from someone earlier. Later, in “Kafka,” there is a shift in Borges’ thinking, from influence as a thing in outside knowledge, which can be thought of in analogy to the series (1.1), to influence as contained in inside knowledge, and cognizable as perceptual experience. A key question in the background of these attempts

⁴⁰Translation mine. Borges, “Avatares de la tortuga,” p.258.

to understand experience in different forms (a reader's; writers'; that of influence, both ways) is: can we really understand anything serially? Is it in fact the case that there are things in the world and in experience that can be understood as a directed *sequence* of things; a picture in which things are propagated one link at a time in a great chain whose ends we never see? Borges' reaction to Russell's analysis of the paradox of Achilles and the Turtle—"it corrupts. . ."—results from the *horror* (as I meant the word last chapter) of applying this scheme to itself. (Is it in fact turtles all the way down?)

As Hayles has noted, "Borges. . . knows that the series he uses. . . [involve] him in paradoxes that he creates and exploits, and to which he also yields."⁴¹ But I think "Kafka" shows that Borges doesn't "yield," and instead realizes a solution to the paradoxes which appear to result from using series concepts to understand things in inside knowledge. The precursors in "Kafka" are dissimilar to each other; that means they aren't points on a continuum like the precursors in "al-Mu'tasim." Influence as readers' diachronic recognition of similarity and difference in "Menard" is a midway point: the narrator's deadpan comparison suggests the importance of the reader's discrimination of recognition, but there's no epistemological position taken. Finding the *Aeneid* in the *Odyssey* is presented as a game, not as the result of something's earlier "creation" like in "Kafka." The shift I think results from Borges having recognized, between "al-Mu'tasim" and "Kafka," that unlike in the race between Achilles and the tortoise, there is nothing—no quantity—that we can use to *parameterize* the relationship that exists between writers and their precursors, or between readers and writers. Borges, in the passage I quoted from "Kafka," generalizes this picture, by noting that any given author in fact engenders many possible artistic lineages. Moreover, and in doing so, he makes the *perception* of influence decisive—he moves judgments about comparisons between authors into the reader's domain. Mathematically speaking, to *parameterize* a model is to specify variables or degrees of freedom, quantities which record variation in the object of study. In other words, to parameterize is to decide what matters. Consider a journey: you're at A, and you want to get to B. The separation between A and B can be thought of in two different ways: we can think of the distance in time, or in space. Both metrics are useful, but both elide and append detail; 'A is ten minutes away from B by car' tells us less than 'A is five hundred metres from B' if we're walking. Specifying separation temporally is a kind of inside knowledge, based as it is on past experience; distance is outside knowledge, readily communicable and universal. The end of "al-Mu'tasim," the footnote about the thirty birds who go in quest of "the distant king of birds, the Simurgh"—"purified by suffering," "they reach the great peak of the Simurgh," only to "realize that they are the Simurgh and that the Simurgh is each of them and all of them"⁴²—intimates that some relations are constructed, created, in inside know-

⁴¹Hayles, *Cosmic Web*, p.167.

⁴²The "divine extension of the principle of identity" Borges posits—"All things in the intelligible heavens

eldge, and aren't readily accounted for in the terms or parameters of outside knowledge. It's left to each of the surviving birds to realize that they are, collectively, the Simurgh. The problem Borges describes in "Kafka," when he notes that the "precursors" do not all resemble each other, has to do with the practice of taking elements of "inside knowledge," a reader's recognition of resemblances, stabilizing them by fixing them to elements of "outside knowledge," details of a particular writer's life, for example, and then taking the resulting structure ('influence,' generally; the genealogy I mentioned previously) as itself a kind of outside knowledge.

All of this means that even if we assume its veracity, the genealogy of anyone's influence will still be more complex than the geometric series, (1.1), from Borges' analogy. Since the reader will perceive associations between works as they are read, and in the order they are read, the 'genealogy' will be *anachronic*. In fact, this is proof that what we are describing is not really influence, but a single reader's "anachronic present."⁴³ An author's idiosyncrasy, X, is something constructed in this present, in inside knowledge. But the strange thing about the resulting picture, this anachronic present, (besides the illogic of Cervantes paying homage to Menard's borrowing from Shakespeare), is that it's *almost* an account of influence, but only if we ignore time: 'to influence' and 'to be influenced' become the same thing—recognition on the part of the reader—if we consider the anachronic, rolling, present; the *tiempo vivo* [living time] evoked by literature, and in which all literary art is consumed. There is a 'present' in which every work is written, and which we consider if thinking (conventionally) about an author's influences in writing that work. But there are other 'presents,' in which readers read works, and by "*tiempo vivo*," or "living present," I mean the 'present' experienced by a reader; a composite of the writer's present and the reader's own. Considering 'influence' as a part of the 'phenomenology of reading,'⁴⁴ and so as the reader's prerogative, means thinking of it as a sense, *evoked* by the text *in* the reader, rather than as something that exists either in the text or its author. Rather, it exists in *tiempo vivo*. Put in Bloom's terms in *The Anxiety of Influence*, strong poets, like Kafka, are those who have "so stationed the precursor, in [their] own work, that particular passages in his work seem to be not presages of [their] own advent, but rather to be indebted to [their] own achievement, and even (necessarily) to be lessened by [their] greater splendor,"⁴⁵ and therefore those whose work so changes a reader's X that the poet seems to stand at the end (or beginning) of a series whose terms are his precursors. A

are in all places. Any one thing is all other things. The sun is all the stars, and each star is all the other stars and the sun"—supports the incompatibility between modes of thinking about physical objects or quantities and modes of thinking about impressions or things in conscious experience, inside knowledge. Borges, *Ficciones*, p.44.

⁴³ Agheana, *Experience in the Prose of J.L. Borges*, p.51ff.

⁴⁴ Georges Poulet, "Phenomenology of reading," *New Literary History* 1, no. 1 (1969): 53–68.

⁴⁵ Bloom distinguishes this from Borges' "witty observation" in "Kafka" in "Apophrades." I see Bloom's point as a corollary of Borges'. Harold Bloom, *The Anxiety of Influence: A Theory of Poetry* (New York: Oxford University Press, 1997), p.141.

strong poet's hold on *tiempo vivo* is such that a reader's recognitions are reparameterized and refigured in the poet's own image. Anybody's \mathbb{X} , pertaining to whichever author and however constructed, is therefore a timeless project, in a sense. This is how I read the motivation for "A New Refutation of Time."



I end by examining "Refutation," and showing the way in which it is structured around a serial understanding of perception, and time. The essay is a literary philosophical examination of the ideas recurring in *Ficciones*, and is likewise divided into Parts A and B, but the second a revision and condensation of the first. They are distinguished more by their tone than the content of their philosophical argumentation, and in both the logical structure of Borges' argument is ostensibly a proof by the contrapositive: he "denies the whole in order to exalt each of the parts."⁴⁶ Time is defined as a succession of events, laid end to end to form the "vast temporal succession which idealism admits."⁴⁷ This conception of time is actually due to Hume, rather than Berkeley; by the word "admits"["*admite*"] Borges means to derive a serial idea of time from Idealism. His refutation centres around two elements: "the negation of the succession of the terms of a series, [and] the negation of the synchronism of the terms in two different series."⁴⁸ In the introduction to Part A, Borges says that his argument proceeds via Berkeley's idealism and Leibniz's Principle of the Identity of Indiscernibles, although in each of the two parts, he allows these arguments to bleed into one another. I'll delimit them, in the following, and deal primarily with the argument from idealism, but without critiquing or countering the arguments. This is unnecessary, I'll show, since by the end of the essay both threads of argument have unraveled and the task is untenable—as is reflected in the *contradictio in adiecto* Borges himself identifies in the essay's title.

Borges "invocation" of idealism to negate the continuity of time⁴⁹ is structured as an elaboration of Hume's criticism of Berkeley. Berkeley's contribution to idealism, Borges argues, was to deny that matter had any existence outside of perception; Hume went further, to similarly deny the existence of spirit—that is, to insist the 'observer' is merely a "bundle or collection of different perceptions."⁵⁰ Implicit in this last denial is the negation

⁴⁶Borges, "New Refutation," p.268.

⁴⁷*Ibid.*, p.257.

⁴⁸*Ibid.*, p.267.

⁴⁹That is, the progression of terms in the series which constitutes time, in Borges' chosen conception. There is a distinction which will become important later between this more familiar kind of continuity, and the mathematical sense of the word. This latter sense refers to the divisibility of some parameter, and is opposed to 'discrete'.

⁵⁰David Hume, *Treatise of Human Nature*, Bk.I, Ch.IV, §2, as cited in Borges, "New Refutation," p.256.

of space. What is left is a “series. . . of imaginary acts and. . . errant impressions.”⁵¹ It is this notion of time which Borges denies—a mental process—on the grounds that such a series cannot be shared, nor lent any coherence by the entities in Hume’s ontology. This apparent inability of experienced time to function intersubjectively, to be anything more than an immanent phenomenon, is the essence of Borges’ refutation via idealism. Now, one could easily counter this by arguing that time is the means by which the Berkeleyan god—the unobserved observer—“[lends] coherence to the world.”⁵² Borges mentions this function of Berkeley’s god, but not its mechanism or realization. That this does not concern him suggests Borges is driving at something else: he is concerned only with the experience of the self. Borges’ line of argument may be fruitfully compared with that taken by the British Idealist J.M.E. McTaggart.⁵³ McTaggart’s argument concerns two series of time.⁵⁴ The ‘A series’ renders time a succession of past events leading to the present, and a succession of future events beyond. The ‘B series’ is a causal ordering, defining time as a linear succession of events—the same conception of time used by Borges—with an explicit order, $\alpha \leq \beta \leq \gamma \leq \delta$. The problem, as noted by both McTaggart and Borges, is that what may be called the naive conception of time, the B series, is fundamentally insufficient, since it excludes a present, and therefore precludes ‘experienced’ time. The A series, a subjective time, is therefore necessary, but impossible to categorise and order. The problem lies with the recalcitrance of the present: such a partial ordering is not possible for the A series due to the passage of time; McTaggart identifies a ‘bootstrap problem’: “Our grounds for rejecting time, it may be said, is that time cannot be explained without assuming time.”⁵⁵ Borges’ sentiments, though gnomic, perhaps Vedic, accord with McTaggart’s: “Time is the substance I am made of.” Note the formal similarity here to Beckett, previously, but also the difference: Borges’ bootstrap problem forestalls negation; Beckett’s forestalls creation. That Borges is content to title his argument a ‘refutation’ rather than a ‘negation’—as he refers to the arguments of Hume against spirit and space⁵⁶—suggests he is aware of this dissolution. So as surely as McTaggart cannot reconcile the A and B series, Borges cannot extricate himself from time’s tide. The present therefore effects the first of Borges’ refutations, that of the succession of terms in time’s series. While McTaggart ultimately rejects time on these grounds, Borges recognises, and is therefore forced to accept, time’s ineluctable immanence. The difference is one of perspective: McTaggart’s arguments pretend to objectivity, while Borges, concerned with the self, makes no such presumption.

The problems of the present figure in Part A, which Borges begins by presenting Berke-

⁵¹Ibid.

⁵²Ibid., p.264.

⁵³J.M.E. McTaggart, “The Unreality of Time,” *Mind* 17 (1908): 456–473.

⁵⁴McTaggart also defines a C series of time, an unordered set of events, which may for our purposes be neglected.

⁵⁵McTaggart, “The Unreality of Time.”

⁵⁶Borges, “New Refutation,” p.257.

ley's doctrine of idealism "in the words of its inventor," quoting at length from *Principles of Human Knowledge*. Schopenhauer appears next, only to be "censured" (Borges' word) for his "culpable negligences" in "expounding [the idealist doctrine]." Borges claims that Schopenhauer's error was in "[distinguishing] the 'world in the head' from 'the world outside the head,'" in his "dualism" (again, Borges' word). Borges marshals Spiller and Berkeley to this end, first quoting Berkeley's author surrogate Philonous: "The brain therefore you speak of, being a sensible thing, exists only in the mind."⁵⁷ Note the hierarchy implicit in this statement: the "brain" is conceived of idealistically, subordinated to "mind," and is regarded as a *tactile* organ in Berkeley's *Three Dialogues*. Next in the cavalcade of reference is Gustav Spiller's *The Mind of Man*, subtitled "a text-book of psychology." It is not the reference to Spiller that is interesting here, but the way in which Borges plays with the philosophical import of Spiller's mode of reasoning. Borges repeats an observation he attributes to Spiller, that "the retina and the cutaneous surface invoked in order to explain visual and tactile phenomena are, in turn, two tactile and visual systems" and derives from it the conclusion that Schopenhauer's 'outside,' or objective, world does not contain the 'inside,' or imagined, world, because the two are constituted by "two independent visual systems." Borges is referring to this passage from Spiller:⁵⁸

We are now able to deal with a long list of problems of a peculiar nature. First, as to the disparateness between mind and body. A certain change in the nervous system is said to run parallel with a change in the visual field, the former of which is looked upon as physical, and the latter as psychical. Yet here the opposition is superficial. What is the central nervous system but an exhausted visual and touch system? What meaning, then, is to be attached to the contention that the one differs in kind from the other? Strictly speaking, we picture now one thing—a house, and now another—a volume of white and grey matter called brain, both being sights.¹ The seen house is not inside the seen head; they are *two independent visual systems*, and, for that very reason, no looking into the one could show us the other.

¹The prevalent dualism is well exemplified when men regard an image, a memory picture, as being utterly distinct from its primary counterpart, and imagine the former alone to be immaterial and to occupy no space. *According to our interpretation both systems are alike sights (or contacts), and both have the same qualities and substantive attributes.*

Borges considered Spiller's psychology textbook a volume in his personal library, and the influence of the passage above is detectable in "Refutation." Colin Butler suggests that Borges argues "within the framework of an ontology that remains conventional through-

⁵⁷Appears in Part I of "The Second Dialogue" George Berkeley, *Three Dialogues Between Hylas and Philonous*, ed. Michael B. Mathias (1713; New Jersey: Longman, 2006).

⁵⁸Emphasis mine. Gustav Spiller, *The Mind of Man: a text-book of psychology* (London: Swan Sonnenschieden & Company, 1902), p.323f.

out”;⁵⁹ this is because he takes his ontology from Spiller. The essence of Spiller’s program above is the equal treatment of the ‘image’ of an object, and the ‘sensation’ due to the physical object itself. He insists that “[e]xcept for unimportant circumstances, the primary and secondary visual worlds, or the visual worlds of sense and imagination, are one.” Spiller’s original schema is physicalistic; Borges makes it idealistic by trading Spiller’s twentieth century conception of the brain as a “volume of white and grey matter” for Berkeley’s idea of the brain as a tactile organ. This allows Borges to use Spiller’s arguments to map an explicitly sensory opposition, that between touch and sight, onto an opposition between Schopenhauer’s inside and outside worlds, and derive “two independent visual systems.”⁶⁰ But note that in doing so, Borges makes both of these systems Berkeleyan—that is, composed of ideas and therefore subordinate to ‘mind.’ This is made clear when Borges writes that “Berkeley *likewise* denied the existence of primary qualities—the solidity and extension of things—and of absolute space.” As is evident from the footnote to the passage above, Spiller does no such thing. It is tempting to call this a misreading. Spiller has come to stand, in Borges’ mind, for an argument in which experience is decomposed into two (independent) systems. When placed into the eighteenth century context of his argument, the physicalistic conception of ‘mind’ Spiller argues with is replaced with Berkeley’s idealistic conception. This reading of philosophy (and also, importantly, mathematics) into isolable “techniques” is a habit of Borges’; consider Zeno’s paradox and the series (1.1).

The next step is to deny “the visual world of sense” in favor of the world “of evanescent impressions; a world without matter or spirit, neither objective nor subjective; a world without the ideal architecture of space; a world made of time, of the absolute uniform time of the Principia; a tireless labyrinth, a chaos, a dream.” Note the echoes of the idea’s earlier formulation in “Avatars of the Tortoise” here. Borges explains that in this ontology, which he attributes to Hume, “it is not licit to speak of the form of the moon or of its color; the form and color are the moon.” It is by extension not permissible to speak of ‘the self,’ the object supposed to be behind the impressions. All that remains is to consider present experience in this ontology, in which “we are, solely, the series of these imaginary acts and these errant impressions.”⁶¹ Borges has us “imagine a present moment of *any kind*”; the moment chosen for us is this:⁶²

⁵⁹Butler, “[Borges and Time](#).”

⁶⁰Emphasis mine. Following quoted from Borges, “[New Refutation](#),” p.259ff.

⁶¹It is of note that Borges here refers to one of two kinds of perceptual experience, “*impressions* and *ideas*. The difference betwixt these consists in the degrees of force and liveliness, with which they strike upon the mind, and make their way into our thought or consciousness. Those perceptions, which enter with most force and violence, we may name impressions: and under this name I comprehend all our sensations, passions and emotions, as they make their first appearance in the soul. By ideas I mean the faint images of these in thinking and reasoning.” David Hume, *A Treatise of Human Nature*, ed. David F. Norton and Mary J. Norton (1739; Oxford: Oxford University Press, 2000), Bk.I, Ch.I, §1.

⁶²Emphasis mine, and footnotes as in cited originals. Original in Borges, *Otras inquisiciones*, p.761; translation from Borges, “[New Refutation](#),” p.257.

During one of his nights on the Mississippi, Huckleberry Finn awakens; the raft, lost in *partial* darkness, continues downstream; it is *perhaps a bit* cold. Huckleberry Finn recognizes the *soft indefatigable* sound of the water; he *negligently* opens his eyes; he sees a *vague* number of stars, an *indistinct* line of trees; then, he sinks back into his *immemorable* sleep as into the dark waters.⁴⁰

⁴⁰For the convenience of the reader I have selected a moment between two periods of sleep, a literary moment, not a historical one. If anyone suspects a fallacy, he may substitute another example, *one from his own life if he so chooses*.

[En una de las noches del Misisipí, Huckleberry Finn se despierta; la balsa, perdida en la tiniebla *parcial*, prosigue río abajo; hace *tal vez un poco* de frío. Huckleberry Finn reconoce *el manso* ruido *infatigable* del agua; abre con *negligencia* los ojos; ve un *vago* número de estrellas, ve una raya *indistinta* que son los árboles; luego, se hunde en el sueño *inmemorable* como en un agua oscura.¹

¹Para facilidad del lector he elegido un instante entre dos sueños, un instante literario, no histórico. Si alguien sospecha una falacia, puede intercalar otro ejemplo; *de su vida, si quiere*.]

Borges seizes upon the word “series” as harbouring a continuity—that of the flow of time—to which we apparently have no right. In this way Borges rejects “chronological precision” as derived; as a schematisation of, or superstructure built from, fundamental objects. The only such objects in the ontology argued for are those that form the “bundle of perceptions” constitutive of the ‘moment’ experienced by Huckleberry Finn: in the quoted passage this bundle appears as a list of component percepts—“impressions” in Hume’s philosophy. Punctuated by semicolons, Borges would have us read this list as a (temporal) series, following Hume, whose “perceptions. . . succeed each other with inconceivable rapidity.”⁶³ This begins the “dissolution”: Borges goes on to deny the existence of time, *qua* an absolute ordering of just such a list of percepts, as ontologically superfluous.

Though his argument proceeds cleanly, the footnote to the passage reveals Borges’ legerdemain. He invites the reader to substitute a moment from his own life, in place of the literary one provided. In the original Spanish, the footnote reads like an “exercise left for the reader,” a trope found in mathematics textbooks:⁶⁴ defining structural features include a claim of simplification, “*para facilidad del lector. . .*”; and an invitation to the reader, “*si alguien sospecha una falacia. . .*” The latter is usually packaged with a hint, some path of least resistance which should be followed to the proper solution. Borges’ hint is his trick, “. . . ; *de su vida, si quiere*.” The use of the semicolon is significant, for it makes the suggestion—to use one’s own life as material for substitution—seem an afterthought,

⁶³David Hume, *Treatise on Human Nature*, Bk.I, Ch.IV, §6, as cited in Borges, “[New Refutation](#),” p.256.

⁶⁴This device also appears in Edward Kasner and James Newman, *Mathematics and the Imagination* (London: G. Bell & Sons, 1949), see for example pp.185 and 210.

and therefore salient. Like a mathematical novice reading a proof in Bourbaki, we cleave to the master and miss his feint. There is an irreducible incompatibility between the kind of ‘moment’ Borges would have us imagine—a literary, psychologicistic moment—and a moment metered with “chronological precision” according to the “time of the *Principia*.” In seeking to refute this Newtonian conception of time, Borges assumes it to be “absolute and uniform.”⁶⁵ Inherent in this definition is the infinite divisibility of time, since the flow of time is not uniform without infinitesimal variation. But, this last is of course impossible in Borges’ borrowed ontology: for Hume time is necessarily granular,⁶⁶ as follows from the atomicity of “ideas” and “impressions.” It’s important to note here that Borges himself is not arguing *for* a position, so much as he is using continuous, divisible, Newtonian time to eat away at discrete time in a Humean ontology—what he is really attacking is the Humean notion of a “separable” self, composed of unit percepts and nothing more. This is why in the last part of A (1) he says, “as yet I am ignorant of the ethics of the system I have outlined.” If neither “poverty nor pain” nor others’ percept is cumulative, how do we apply this system? The fundamental discreteness of percept is predicated on the finitude of the human mind; contra Descartes, Hume’s skepticism subordinates extended matter to thought. Hume argues in the *Treatise*: insofar as “the capacity of the mind is limited, and can never attain a full and adequate conception of infinity”;⁶⁷ insofar as “our ideas are adequate representations of the most minute parts of extension”;⁶⁸ and, insofar as “[e]very thing capable of being infinitely divided contains an infinite number of parts,”⁶⁹ perceptions are necessarily discrete objects. The discreteness of time follows immediately from the above. Hume goes on to note that “[a]ll this reasoning takes place with regard to time,”⁷⁰ the idea of which is “derived from the succession of our perceptions of every kind, ideas as well as impressions.”⁷¹ It’s also important to consider the absolute lack of causal structure to Huckleberry Finn’s “moment.” Causation is only implied in the extract; it seems to inhere somewhere between the semicolons, in a relation between percepts, and not in the percepts themselves. Construing time as an ordering without causal structure, as Hume does, makes it easier to reject causality as superfluous, as Borges does. This is similar to Kant’s addition to Hume’s account of the self as a series of bundles of perceptions. Kant renders this as: “this throughgoing identity of the apperception of a manifold given in intuition contains a synthesis of the representations, and is possible only through the

⁶⁵Borges, “[New Refutation](#),” p.256.

⁶⁶“It is certain then, that time, as it exists, must be composed of indivisible moments. For if in time we could never arrive at an end of division, and if each moment, as it succeeds another, were not perfectly single and indivisible, there would be an infinite number of co-existent moments, or parts of time; which I believe will be allowed to be an arrant contradiction.” Hume, *Treatise*, Bk.I, Ch.II, §2. Note that this “arrant contradiction” is exactly the conclusion to which Borges’ argumentation leads.

⁶⁷*Ibid.*, Bk.I, Ch.II, §1.

⁶⁸*Ibid.*, Bk.I, Ch.II, §2.

⁶⁹*Ibid.*

⁷⁰*Ibid.*

⁷¹*Ibid.*, Bk.I, Ch.II, §3.

consciousness of this synthesis. [...] The latter relation therefore does not yet come about by my accompanying each representation with consciousness, *but rather by my adding one representation to the other and being conscious of their synthesis*. Therefore it is only because I can combine a manifold of given representations in one consciousness that it is possible for me to represent the identity of the consciousness in these representations itself.”⁷² This is the procrustean bed to which Borges would subject Huckleberry Finn’s moment, the intended result a splitting at the joints. The passage opens with an act of apperception, the reflexive verb in the first line, “*se despierta*,” placing us within Huck’s self-consciousness as he wakes. Borges’ application of Hume’s schema segments Huck’s self-consciousness into distinct sense impressions, each bound by semicolons: the vestibular; the thermoceptive; the auditory; and the visual, respectively. Though styled as such, what follows is not an empirical sequence of states—configured to determine a particular instant in time—so much as it’s a gradual process of coming into being.

Between these ‘joints,’ then, are the sensory components of being, their serial progression the insinuation of a Humean temporal order. The next step in the *reductio* is the realization that such a series requires the existence of “one single time, in which all things are linked as in a chain”;⁷³ here is Borges’ invocation of Newtonian time. Borges’ conflation of Newtonian and Humean time has as its source the more fundamental tension between the continuous⁷⁴ and the discrete. In taking from both conceptions of time, Borges masks the key question of the nature of time itself—is it discrete, and subject to only so much subdivision, or is there in “every *now* within which something happens... *also* a succession”?⁷⁵ Borges quotes Augustine in agreement, and even though nowhere between Huck’s moment and Augustine does he make his justification explicit, Borges seems to have in mind the *mise en abîme* from the “Perpetual Race.” The tension between continuous and the discrete ideas of time manifests in the passage itself, as qualification. The words italicised above act to ‘blur’ each percept—to place within each discrete and ostensibly unitary impression a continuous quantity. “Vague,” “indistinct,” “partial”; in specifying Huck’s perceptual experience Borges undermines the unity of each impression; the qualifying adjectives suggest a spectrum of sensory experience, not the atomistic picture Hume’s ontology assumes. In this way, Hume’s stipulation in the *Treatise* that the impressions be prime—indivisible and therefore unqualified—is artfully undermined.

The second of Borges’ arguments, from the Identity of Indiscernibles, completes the

⁷²Kant, *Pure Reason*, B 133, as cited in Paul Guyer, ed., *The Cambridge Companion to Kant* (Cambridge: Cambridge University Press, 1992), p.192.

⁷³Borges, “[New Refutation](#),” p.257.

⁷⁴As per the distinction discussed in fn.(49), I refer not to the continuity of a given progression, but the divisibility of the quantity parameterising the progression. So for example, to assert the continuity of space—parameterised by the quantity of distance—is to reject spatial atomism, in favour of a spatial continuum. As I’ve mentioned, Borges recognizes the discreteness of matter.

⁷⁵Borges, “[New Refutation](#),” p.260.

work of the first, since it purports to negate “the synchronism of the terms in two different series.”⁷⁶ That is to say, Borges seeks to argue that it is possible for there to exist a state of affairs which would contravene the explicit order he imputes to idealistic time.⁷⁷ In part B, it appears that the “two series” Borges mentions are the chronologies of two different people. The argument proceeds via the parable of Chuang Tzu, who “dreamt he was a butterfly and did not know, when he awoke, if he was a man who had dreamt he was a butterfly or a butterfly who now dreamt he was a man.”⁷⁸ This dream, and its attendant mental state is, Borges argues, a perception in the mind of the Berkeleyan god. Borges then posits the existence of a reader of this parable who dreams that he is a butterfly, then dreams that he is Chuang Tzu. This reader’s experience parallels that of Chuang Tzu to such an extent that the two are indistinguishable. Applying the Identity of Indiscernibles now leads us to conclude that Chuang Tzu’s dream, ϵ , and the reader’s, ϵ' , are identical, $\epsilon = \epsilon'$. We arrive at the contradiction, and the consequent negation, since an event ϵ now precedes itself in the causal order. This completes Borges’ dissolution of time.



I want to conclude by extending Shaw’s comment, on Borges’ tendency to see continuity between metaphorical tokens by regarding them as variations on some “universal, paradigmatic” type. As has been noted repeatedly,⁷⁹ much of the intellectual work done in Borges’ writings is a kind of interpolation between scattered and eclectic (and rarely read) points in his working bibliography. This is a librarian’s phenomenology of literature: there is an obvious correspondence between Borges’ situation at the municipal library—where he read merely what was available—and this view of literature. It is not a view from nowhere, nor is it a view from everywhere; it’s a hermeneutics of a gappy record. This approach has meant that in the critical literature, he “has been repeatedly attacked for seeing man in terms of his cultural constructs—his “philosophies” and his institutions—rather than in perhaps the more vogueish terms of his inner existential or outer sociological circum-

⁷⁶*Ibid.*, p.267.

⁷⁷Or more precisely, the axioms events are required to satisfy, should we wish to think of time as a partially ordered set of events. The only axiom for which this argument has need states that an event α can succede an event β , β may succede α or α and β may be simultaneous. If the two events α , β in question do not have temporal extension, duration, then only one of the previous may be true of both α and β . Note that this holds of both the A and B series. (And note also that this whole scheme is untenable without a rigorous definition of the ‘present’, such as is precluded by Borges’ conception of the present, above.)

⁷⁸Borges, “[New Refutation](#),” p.266.

⁷⁹See Lisa Block de Behar, *Borges: The Passion of an Endless Quotation* (Albany: State University of New York Press, 2003), pp.5–14 and notes for a survey of critical articulations of this position.

stances.”⁸⁰ I’d qualify this in the following way. As I’ve argued, conceptual structures, philosophies and institutions, are indeed often the subject of or scaffolding for Borges’ stories and essays. But I think that he sees these *in the terms set by* our “inner existential or outer sociological” circumstances, though not precisely in the sense that Foster’s opposition intimates. At the scale Borges considers literature—across gaps of centuries and continents—constructs are all that wash out. But even still, the institutions in Part A of *Ficciones*, Tlön itself and the Library, aren’t presented uncritically, without blemishes and as inviolate constructs; nor is the mental life of Funes held up as ideal or even attainable. It is true, however, that the details of the Irishman’s struggle, even his identity, in “Shape of the Sword” read like fungibles. Character and setting aren’t central to the story; the unity of narrator and “coward” are; one could imagine the story with contextual details taken from any other conflict in history—the Irishman’s “inner existential” and “outer sociological” circumstances are universalized by the story’s structure and conceit. This is more effective in reverse: when a philosophical or literary idea is taken as conceit and its existential and sociological implications are allowed to play out. Menard seems tragic, even if we entertain the observation he used his life to illustrate; the society of the Librarians is broken and hopeless. Borges’ method isn’t truly philosophical, and neither is his aim. Like Menard, Borges uses philosophical and discursive means for literary ends. His concern is always with what the former might mean for us—we’re figured as ‘the reader’ in “Menard” because Borges’ concerns are usually literary—which he investigates by fictionalizing philosophy that strikes him. Unlike Menard, though, Borges’ commitment to these kinds of ideas runs as deep as his fascination with them. This extends to his use of mathematics—the associations Borges makes between Achilles’ race and literature and influence—since, from Russell, he takes mathematics as an extension of philosophy.

My aim in the foregoing hasn’t been to provide a census or glossary of Borges’ dealings with mathematics and infinity; there are many essays and passages I haven’t examined. I’ve tried instead to show that my chosen examples are literary philosophical in nature; to show that Borges sees mathematical series and infinity as serious analogical means for understanding experience evoked by literature. *Tiempo vivo* is always somewhere in Borges’ ruminations, always liminally specified, but in the final analysis I think it refers to the mediation of experience in language, that nearly gives literary art the power to negate time. Mathematics is recruited in connection with literature’s power to represent the world as it is, to simulate, but, as I’ve tried to show, also in connection with its dual: to represent the world as it can’t be—the power to fabulate—the power to express and intend *idola forum* in sequence, to tell an impossible story.

⁸⁰David William Foster continues: “But obviously for Borges, the latter are also constructs, cultural ones in the broadest sense, and he sees man as obsessed by these constructs,” in Lindstrom, *Study of the Short Fiction*, p.151.

Works Cited

- Agheana, Ion T. *The Meaning of Experience in the Prose of Jorge Luis Borges*. New York: Peter Lang, 1988.
- Aizenberg, Edna, ed. *Borges and His Successors: The Borgesian Impact on Literature and the Arts*. Columbia: University of Missouri, 1990.
- Bakhtin, Mikhail M. *The Dialogic Imagination: Four Essays*. Edited and translated by Michael Holquist and Caryl Emerson. Austin: University of Texas Press, 1992.
- . *Speech Genres and Other Late Essays*. Edited by Michael Holquist and Caryl Emerson. Translated by Vern McGee. Austin: University of Texas Press, 1986.
- Barrenechea, Ana María. *Borges, the Labyrinth Maker*. Translated by Robert Lima. New York: New York University Press, 1965.
- . “On the Diverse (South American) Intonation of Some (Universal) Metaphors.” In Aizenberg, *Borges’ Successors*.
- Barth, John. “The Literature of Exhaustion.” In *Critical Essays on Jorge Luis Borges*, edited by Jaime Alazraki. Boston: G.K. Hall & Company, 1987.
- Beckett, Samuel. *The Beckett Trilogy: Molloy, Malone Dies and The Unnamable*. London: Pan, 1979.
- Behar, Lisa Block de. *Borges: The Passion of an Endless Quotation*. Albany: State University of New York Press, 2003.
- Berkeley, George. *Three Dialogues Between Hylas and Philonous*. Edited by Michael B. Mathias. 1713. New Jersey: Longman, 2006.
- Blanchot, Maurice. *The Book to Come*. Translated by Charlotte Mandell. 1959. Stanford: Stanford University Press, 2002.
- . “Literary Infinity: The Aleph.” In *The Book to Come*, pp.93–6.
- Bloch, William Goldbloom. *The Unimaginable Mathematics of Borges’ Library of Babel*. New York: Oxford University Press, 2008.

- Bloom, Harold. *The Anxiety of Influence: A Theory of Poetry*. New York: Oxford University Press, 1997.
- . *How To Read and Why*. New York: Scribner's, 2000.
- Borges, Jorge Luis. *El aleph*. In *Obras 1923–1972*, edited by Carlos V. Frías, pp.533–630. 1949. Buenos Aires: Emecé editores, 1974.
- . “Avatares de la tortuga.” In *Discusión*, pp.254–8.
- . *Discusión*. In *Obras 1923–1972*, edited by Carlos V. Frías, pp.177–286. 1932. Buenos Aires: Emecé editores, 1974.
- . “La duración del infierno.” In *Discusión*, pp.235–8.
- . *Fervor de Buenos Aires*. In *Obras 1923–1972*, edited by Carlos V. Frías, pp.11–52. 1923. Buenos Aires: Emecé editores, 1974.
- . *Ficciones*. In *Obras 1923–1972*, edited by Carlos V. Frías, pp.427–530. 1944. Buenos Aires: Emecé editores, 1974.
- . *Ficciones*. Translated by Anthony Kerrigan. New York: Grove Press, 1994.
- . “Funes the Memorious.” In *Labyrinths*.
- . *El hacedor*. In *Obras 1923–1972*, edited by Carlos V. Frías, pp.779–854. 1960. Buenos Aires: Emecé editores, 1974.
- . *Historia de la eternidad*. In *Obras 1923–1972*, edited by Carlos V. Frías, pp.351–423. 1936. Buenos Aires: Emecé editores, 1974.
- . *Labyrinths: Selected Stories and Other Writings*. Edited by Donald A. Yates and James E. Irby. New York: New Directions, 1964.
- . *Labyrinths: Selected Stories and Other Writings*. Edited by Donald A. Yates and James E. Irby. London: Penguin, 2000.
- . “The Library of Babel.” In *Labyrinths*.
- . “The Lottery in Babylon.” In *Labyrinths*.
- . “La metáfora.” In *Eternidad*, pp.382–4.
- . “A New Refutation of Time.” In *Labyrinths*.
- . *Obras completas 1923–1972*. Edited by Carlos V. Frías. Buenos Aires: Emecé editores, 1974.
- . *Obras completas 1975–1985*. Buenos Aires: Emecé editores, 1989.

- . *Otras inquisiciones*. In *Obras 1923–1972*, edited by Carlos V. Frías, pp.633–775. 1952. Buenos Aires: Emecé editores, 1974.
- . “La perpetua carrera de Aquiles y la tortuga.” In *Discusión*, pp.244–8.
- . “Pierre Menard, Author of the *Quixote*.” In *Labyrinths*.
- . “The Shape of the Sword.” In *Labyrinths*.
- . *Siete noches*. In *Obras 1975–1985*, pp.207–286. 1980. Buenos Aires: Emecé editores, 1989.
- . “Tlón, Uqbar, Orbis Tertius.” In *Labyrinths*.
- . *The Total Library: Non-Fiction 1922–1986*. Edited by Eliot Weinberger. New York: Penguin, 1999.
- Borges, Jorge Luis, and Antonio Carrizo. *Borges el memorioso: conversaciones de Jorge Luis Borges con Antonio Carrizo*. Ciudad de México: Fondo de Cultura Económica, 1998.
- Borges, Jorge Luis, and Norman Thomas di Giovanni. *The Aleph and Other Stories 1933–1969*. New York: Bantam, 1973.
- Brown, J Andrew. “Borges’s scientific discipline.” *Hispanic review* 72, no. 4 (2004): 505–522.
- Brown, Norman O. *Hermes the Thief: The Evolution of a Myth*. Madison: University of Wisconsin Press, 1947.
- Butler, Colin. “Borges and Time: With Particular References to ‘A New Refutation of Time’.” *Orbis Litterarum* 28, no. 2 (1973): 148–161.
- Christ, Ronald J. *The Narrow Act: Borges’ Art of Allusion*. New York: New York University Press, 1969.
- Daston, Lorraine J., and Peter Galison. *Objectivity*. New York: Zone, 2010.
- De Costa, René. *Humor in Borges*. Detroit: Wayne State University Press, 2000.
- Fogle, Richard Harter, and Jeffrey Barnouw. “Empathy and Sympathy.” In *The New Princeton Encyclopedia of Poetry and Poetics*, edited by Alex Preminger and T. V. F. Brogan. Princeton: Princeton University Press, 1993.
- Foucault, Michel. “Technologies of the Self,” edited by Luther H. Martin, Huck Gutman, and Patrick H. Hutton, 16–49. London: Tavistock, 1988.

- Guyer, Paul, ed. *The Cambridge Companion to Kant*. Cambridge: Cambridge University Press, 1992.
- Hayles, N. Katherine. *The Cosmic Web: Scientific Field Models and Literary Strategies in the Twentieth Century*. Ithaca: Cornell University Press, 1986.
- Hernández, Juan Antonio. “Biografía del infinito: la noción de transfinitud en George Cantor y su presencia en la prosa de Jorge Luis Borges.” *Signos Literarios y Lingüísticos* 2, no. 2 (diciembre 2000): 131–139.
- Hume, David. *A Treatise of Human Nature*. Edited by David F. Norton and Mary J. Norton. 1739. Oxford: Oxford University Press, 2000.
- Hunsdahl, Jørgen B. “Concerning *Einfühlung* (empathy): A concept analysis of its origin and early development.” *Journal of the History of the Behavioral Sciences* 3, no. 2 (1967): 180–191.
- Hyde, Lewis. *Trickster Makes This World: Mischief, Myth, and Art*. Edinburgh: Canongate, 2008.
- Jahoda, Gustav. “Theodor Lipps and the shift from ‘sympathy’ to ‘empathy’.” *Journal of the History of the Behavioral Sciences* 41, no. 2 (2005): 151–163.
- Johnston, Martin. “Games With Infinity: The Fictions of Jorge Luis Borges.” *Variaciones Borges*, no. 5 (1998): 177–202.
- Kasner, Edward, and James Newman. *Mathematics and the Imagination*. London: G. Bell & Sons, 1949.
- King, John. *Sur: A Study of the Argentine Literary Journal and its Role in the Development of a Culture, 1931–1970*. Cambridge: Cambridge University Press, 1986.
- Knowlson, James. *Damned to Fame: The Life of Samuel Beckett*. London: Bloomsbury, 1997.
- Lindstrom, Naomi. *Jorge Luis Borges: A Study of the Short Fiction*. Boston: G.K. Hall, 1990.
- Locke, John. *An Essay Concerning Human Understanding*. Edited by Roger Woolhouse. 1690. London: Penguin, 1997.
- Martínez, Guillermo. *Borges and Mathematics*. Translated by Andrea G. Labinger. Lafayette: Purdue University Press, 2012.
- McTaggart, J.M.E. “The Unreality of Time.” *Mind* 17 (1908): 456–473.

- Merrell, Floyd. *Unthinking Thinking: Jorge Luis Borges, Mathematics, and the New Physics*. Lafayette: Purdue University Press, 1991.
- Monegal, Emir Rodriguez, and Roberto González Echevarría. "Borges and La Nouvelle Critique." *Diacritics* 2, no. 2 (1972): 27–34.
- Morello-Frosch, Marta. "Borges and Contemporary Argentine Writers: Continuity and Change." In Aizenberg, *Borges' Successors*.
- Nowak, Magdalena. "The Complicated History of *Einfühlung*." *Argument: Biannual Philosophical Journal*, no. 2 (2011): 301–326.
- Pilling, John, ed. *The Cambridge Companion to Beckett*. Cambridge: Cambridge University Press, 1994.
- Poulet, Georges. "Phenomenology of reading." *New Literary History* 1, no. 1 (1969): 53–68.
- Russell, Bertrand. *Introduction to Mathematical Philosophy*. London: George Allen & Unwin, 1919.
- Shaw, Donald Leslie. *Spanish American Poetry After 1950: Beyond the Vanguard*. Suffolk: Boydell & Brewer, 2008.
- Spiller, Gustav. *The Mind of Man: a text-book of psychology*. London: Swan Sonnenschien & Company, 1902.
- Spinoza, Benedictus de. *A Spinoza Reader: The Ethics and Other Works*. Edited by Edward Curley. Princeton: Princeton University Press, 1994.
- Steiner, George. *Language and Silence: Essays 1958-1966*. London: Faber & Faber, 1967.
- Wallace, David Foster. "Borges on the Couch." In *Both Flesh and Not*. New York: Little, Brown & Company, 2004.
- Weber, Frances Wyers. "Borges' Stories: Fiction and Philosophy." *Hispanic Review* 36 (1968): 124–141.
- Williamson, Edwin. *Borges: A Life*. New York: Viking, 2004.
- Yudin, Florence L. *Nightglow: Borges' poetics of blindness*. Salamanca: Universidad Pontificia de Salamanca, 1997.