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by

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Borges as Reader: Keats' Nightingale in the Garden of Forking Paths

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The University of Texas at Austin May 2005 Este es el laberinto de Creta. Este es el laberinto de Creta cuyo centro fue el Minotauro. Este es el laberinto de Creta cuyo centro fue el Minotauro que Dante imaginó como un toro con cabeza de hombre y en cuya red se perdieron tantas generaciones. Este es el laberinto de Creta cuyo centro fue el Minotauro que Dante imaginó como un toro con cabeza de hombre y en cuya red se perdieron tantas generaciones como María Kodama y yo nos perdimos. Este es el laberinto de Creta cuyo centro fue el Minotauro que Dante imaginó como un toro con cabeza de hombre y en cuya red se perdieron tantas generaciones como María Kodama y yo nos perdimos en aquella mañana y seguimos perdidos en el tiempo, ese otro laberinto.

-Borges, "El laberinto"

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Borges as Reader: Keats' Nightingale in The Garden of Forking Paths

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This study investigates Borges' solution to the problem of universals, and how this solution relates to his time labyrinth as it appears in "The Garden of Forking Paths"; to his conception of literature as a living labyrinth; and to the aesthetic and metaphysical ideas in his poem "The Art of Poetry". Chapter 1 analyzes Borges' essays on Zeno's paradox of the tortoise, and his "Penultimate Version of Reality". I show that Borges' discussion of the paradoxes associated with the notion of the universe that presupposes that time and space are absolute, uniform, and symmetrical, and his idea that only time is essential to the intellect, leads him to propose an artistic model of the universe made of time or music. This model, however, does not guarantee that the universe is an organic whole, or cosmos. This issue is discussed in Chapter 2, which also examines how Borges links language with his notion of time and the problem of causality. Additionally, I consider the implication of Borges' take on language and causality with regard to the art of narration and the aesthetic emotion (hecho estético). Chapter 3 discusses the problem of time in connection with the notions of eternal recurrence and eternity, and shows how these relate to Schopenhauer's interpretation of Plato's theory of Forms, and to Cantor's theory of transfinite numbers. Chapter 4 discusses the connection between Cantor's theory and those visual and literary artworks where fiction lives within fiction, and considers Borges' re-examination of eternal recurrence and Plato's notion of eternity. It also examines how Borges combines Cantor's and Schopenhauer's theories with the notion of eternity, to create his time labyrinth, which he concretized for the first time in "The Garden of Forking Paths". Chapter 5 is devoted to the analysis of this story, where Borges alludes to his own search for the solution to the riddle of the universe, and to the immortal bird of Keats' "Ode to the Nightingale". Then it briefly considers how the collection of short stories The Garden of Forking Paths compares to Dante's Divine Comedy. Finally, I discuss in Chapter 5 the problem of free will vis-à-vis determinism in connection with the time labyrinth, and the way in which this relates to modern science, fractal geometry and chaos theory. Chapter 6 examines how Borges developed his literary labyrinth, and how it relates to the time labyrinth and the aesthetic emotion. Finally, I show that Borges' "The Art of Poetry" comprises the poetic and metaphysical elements of both, the time and the literary labyrinths.

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List of Abbreviations

- AE Autobiographical Essay
- AOS Aleph and Other Stories
- BES Borges en Sur
- BRM Borges en Revista Multicolor
- CF Collected Fictions
- CV This Craft of Verse
- ECE Evaristo Carriego (English)
- LY Labyrinths
- MF El "Martín Fierro"
- OC Obras Completas
- OIE Other Inquisitions
- OP Obra Poética
- PA Personal Anthology
- SNE Seven Nights
- SNF Selected Non-Fictions
- SP Selected Poems

Introduction

I think that there is an eternity in beauty; and this, of course, is what Keats had in mind when he wrote 'A thing of beauty is a joy forever.'

-JLB, "A Poets Creed"

In the last of the "lost" Norton Lectures that Borges delivered at Harvard in 1967-1968 entitled "A Poet's Creed," Borges declared that poetry –along with his destiny as a man of letters— was revealed to him at a very young age when he heard the seventh stanza of John Keats' "Ode to a Nightingale" (CV, 99-100).¹ In 1952, the mature Borges devoted the essay "El ruiseñor de Keats" [Keats' Nightingale] to the analysis of the famous stanza, which stands out not only for its musicality, but also for its content:

Thou wast not born for death, immortal Bird! No hungry generations tread thee down; The voice I hear this passing night was heard In ancient days by emperor and clown: Perhaps the self-same song that found a path Through the sad heart of Ruth, when sick for home, She stood in tears amid the alien corn...

([1819] 1985, 348; lines 61-7)

Apart from the obvious reference to the eighth pastoral of the Old Testament, there is in this verse an ambiguity related to the "problem of universals," i.e., the long-standing metaphysical debate between those who believe in universals and those who reject them. Broadly speaking, Keats' stanza is an example of a literary

¹ The lecture was delivered on April 10, 1968, and was the last of a series of six, which were collected and published in book form some thirty-two years later under the title *This Craft of Verse* (2000).

work that brings together subjects in which the Argentine poet was very much interested, namely, aesthetics, religion, and metaphysics.

This study investigates Borges' solution to the problem of universals, and how this relates to his aesthetic and metaphysical ideas as they appear in his poem "Arte poética" [The Art of Poetry], which stands as an encapsulated expression of his poetic vision. Let us take a closer look at this problem and what it entails. In his essay Borges indicates that at first glance, it would seem that in referring to the bird Keats draws a distinction between the individual and the species, rejecting the former in favor of the latter. However, the English poet also refers to the fugacity of the human life, which seems to imply that for him only individuals are real. If this is the case, Keats' characterization of the bird as immortal can be regarded as a mere poetic device. Accordingly, one could say that he is indeed referring to the particular nightingale singing at that moment, not to the species.

The solution that Borges provides to this ambiguity is of a peculiar character, comprising both poetic and metaphysical elements in a way that makes it possible to reconcile both points of view. In explaining how such reconciliation may be accomplished Borges first cites American critic Amy Lowell (1925, 2:252): "El lector que tenga una chispa de sentido imaginativo o poético intuirá inmediatamente que Keats no se refiere al ruiseñor que cantaba en ese momento, sino a la especie" (OC, 2:95). [The reader who had a spark of imaginative or poetic sense would perceive at once that Keats did not refer to the nightingale singing at that moment, but to the species (OIE, 122).] According to Borges, such interpretation, though not entirely vain, is not correct. We cannot object to the

idea that a spark of imaginative or poetic sense is needed in order to understand the stanza, but under this assumption we cannot be expected to seriously entertain the idea that there is indeed a difference between the individual and the species. For, as Arthur Schopenhauer says, it is absurd to assume, on the one hand, that individual beings arise out of nothing and that their death is an absolute annihilation. On the other, it is impossible for us not to see that what vanishes when individual beings pass away and what appears in their place when new individuals like them come into existence, is one and the same thing ([1844], 1966, 2:476). Borges expresses in a poetic way Schopenhauer's thesis, which, as he rightly indicates, may be found in the second volume of *Die Welt als Wille und* Vorstellung (The World as Will and Representation; 1844), and concludes that the ephemeral nightingale of that night and the generic nightingale are the same: "Es decir, el individuo es de algún modo la especie, y el ruiseñor de Keats es también el ruiseñor de Ruth" (OC, 2:96). [In other words, the individual is somehow the species, and the nightingale of Keats is also the nightingale of Ruth (OIE, 122).] In Borges' opinion, if the stanza has been wrongly understood and misinterpreted that is due to the fact that every one is born either a Platonist or an Aristotelian. As Coleridge has famously stated:

Observa Coleridge que todos los hombres nacen aristotélicos o platónicos. Los últimos sienten que las clases, los órdenes y los géneros son realidades; los primeros que son generalizaciones; para éstos, el lenguaje no es otra cosa que un aproximativo juego de símbolos; para aquellos es el mapa del universo. El platónico sabe que el universo es de algún modo un cosmos, un orden; ese orden para el aristotélico, puede ser un error o una ficción de nuestro conocimiento parcial. A través de las latitudes y de las épocas, los dos antagonistas inmortales cambian de dialecto y de nombre: uno es Parménides, Platón, Spinoza, Kant, Francis Bradley; el otro Heráclito Aristóteles, Locke, Hume, William James. En las arduas escuelas de la Edad Media, todos invocan a Aristóteles, maestro de la humana razón (*Convivio*, IV, 2), pero los nominalistas son Aristóteles, los realistas, Platón. El nominalismo inglés del siglo XIV resurge en el escrupuloso idealismo inglés del siglo XVIII; la economía de la formula de Occam, *entia non sunt multiplicanda praeter necessitatem* permite o prefigura el no menos taxativo *esse est percipi*. (OC, 2:96-7; italics in the original)

[Coleridge observes that all men are born Aristotelians or Platonists. The latter feel that classes, orders, and genres are realities; for the former, that they are generalizations. For the Aristotelians, language is nothing but an approximative set of symbols; for the Platonists it is a map of the universe. The Platonist knows that the universe is somehow a cosmos, an order; that order for the Aristotelian, can be an error or a fiction of our partial knowledge. Across the latitudes and the epochs, the two immortal antagonists change their name and language: one is Parmenides, Plato, Spinoza, Kant, Francis Bradley; the other, Heraclitus, Aristotle, Locke, Hume, William James. In the arduous schools of the Middle Ages they all invoke Aristotle, the master of human reason (Convivio, IV, 2); but the nominalists are Aristotle, the realists, Plato. The English nominalism of the fourteenth century reappears in the scrupulous English idealism of the eighteenth century; the economy of Occam's formula, entia non sunt *multiplicanda praeter necessitatem*, permits or prefigures the no less precise esse est percipi. (OIE, 123; italics in the original)]

The Argentine poet thinks that there is some kernel of truth in Coleridge's observation. The history of philosophy, he writes, "no es un vano museo de distracciones y de juegos verbales; verosímilmente, las dos tesis corresponden a dos maneras de intuir la realidad" (OC, 2:124). [is not a vain museum of distractions and verbal games; the two thesis probably correspond to two manners of intuitively perceiving reality. (OIE, 156)] Schopenhauer's thesis has the merit of reconciling these divergent ways of perceiving reality. This is a remarkable achievement, so remarkable indeed that Borges was of the opinion that Schopenhauer was the only philosopher that came close to solving the riddle of

the universe (AE, 215-6). But Schopenhauer's thesis, or rather the book that includes it, was published in 1844, while Keats' poem was completed in 1819. Thus, Borges writes:

Keats, que, sin exagerada injusticia, pudo escribir: "No sé nada, no he leído nada", adivinó a través de las páginas de algún diccionario escolar el espíritu griego; sutilísima prueba de esa adivinación o recreación es haber intuido en el oscuro ruiseñor de una noche el ruiseñor platónico. Keats, acaso incapaz de definir la palabra *arquetipo*, se anticipó en un cuarto de siglo a una tesis de Schopenhauer. (OC, 2:96; italics in the origina)

[Keats, who could write without exaggerated injustice that he knew nothing, that he had read nothing, divined the Greek spirit from the pages of a schoolboy's dictionary; a very subtle proof of that divination or recreation is his intuitive recognition of the Platonic nightingale in the dark nightingale of a spring evening. Keats, who was perhaps incapable of defining the word *archetype*, anticipated one of Schopenhauer's theses by a quarter of a century. (OIE, 122; italics in the original)]

In other words, the English poet has the great merit of having anticipated the German philosopher's near solution to the riddle of the universe, which not only implies that the individual is somehow the species, but also that the universe is somehow an order and a chaos (in the traditional sense of the word chaos), and that language is and is not a map of the world. How is this possible?

This study has been guided by the conviction that in fulfilling his "imaginary destiny" as man of letters Borges provided an answer to this question. If we look closely at Keats' stanza or at Borges' summarized version of the Aristotelian-Platonist dichotomy, we can discern one central theme, namely, time. The Argentine poet was deeply and understandably fascinated by this subject, which has notoriously been a constant source of philosophical bewilderment and difficulty. Time is related to many other subjects: death and immortality, beauty, the existence of an order or cosmos, language, knowledge, determinism and free will, personal identity, to mention a few. He was also of the opinion that poetry and philosophy stem from a common root, namely, a certain perplexity or wonder concerning the world and our own existence, as is evident from the following paragraph where he paraphrases a famous passage from Aristotle's *Metaphysics* (1991, 2:1554; bk. I, ch. 2, 982b12-19):

Aristóteles escribe que la filosofía nace del asombro. Del asombro de ser en el tiempo, del asombro de ser en este mundo, en el que hay otros hombres y animales y estrellas. Del asombro nace también la poesía. (OC, 4:456)

[Aristotle writes that philosophy is born from wonder. From wonder of being in time, from wonder of being in this world, where there are other men and animals and stars. Poetry too is born from wonder. (my translation)]

Elsewhere he declared, elaborating on this idea:

... this fact of wondering at life may stand for the essence of poetry. All poetry consists in feeling things as being strange, while rhetoric consists as thinking of them as quite common, as very obvious. Of course I *am* puzzled at the fact of my existing, of my existing in a human body, of my looking through eyes, hearing through ears, and so on. And maybe everything I have written is a mere metaphor, a mere variation on that central theme of being puzzled by things. In that case I suppose there is no essential difference between philosophy and poetry, since they both stand for the same kind of puzzlement. Except that in the case of philosophy, the answer is given in a logical way, and in the case of poetry you use the metaphor. If you use language, you have to use metaphors all the time. Since you know my works ... my *exercises*, I suppose you have felt that I was being puzzled all the time, and I was trying to find a foundation for my puzzlement. (1980, 176-7; italics in the original)

I maintain in this study that Borges arrived at a poetic answer by reconciling Platonism and Aristotelianism. In so doing, he came to conceive the universe as a time labyrinth. This is certainly neither surprising nor unreasonable. On the one hand, Borges thought that time was the "essential enigma", the most important problem of metaphysics that has not as yet been resolved, and perhaps would never be (OC, 4:199). On the other, as is well known, the labyrinth was for him the most adequate image for perplexity. Moreover, time lies at the heart of the Aristotelian-Platonist dichotomy, and the labyrinth is a structure that presents us with an intricate network of possibilities, thus giving us the idea of the interplay between chaos (chance) and order. Additionally, by reconciling Aristotelianism and Platonism, he also came to conceive the world's literature in analogous terms. As he once said in an interview with Richard Burgin: "I think of the world's literature as a kind of forest. I mean it's tangled and it entangles us but it is growing. Well, to come back to my inevitable image of a labyrinth, well it is a living labyrinth, no? A living maze" (1967b, 16). The time and the literary labyrinths, I contend, are both organic and alive. Their structure, on the other hand, is similar to what we observe when we look to the trees above us as we walk through a forest, namely, a pattern of bifurcating paths (intersecting at certain points) that repeats itself endlessly; hence the title of this study, *Borges as Reader: Keats' Nightingale in The Garden of Forking Paths.* The title refers to both, the collection of short stories, and the celebrated story included in this collection, where Borges concretized for the first time his conception of the universe as a time labyrinth, and where Yu Tsun hears the song of the immortal bird as he walks under the English trees on his way to Stephen Albert's house.

In this study I propose to consider in detail how the Argentine poet arrived at both, the time and the literary labyrinth, and how they relate to Borges' poem mentioned above. To prove my thesis I appeal mostly to Borges' non-fictional writings, his lectures, and his sources, which run the gamut from specific citations to seemingly off-hand casual allusions. My purpose, therefore, is not to gloss criticism about Borges, nor to confirm Borges' adherence to any particular literary movement or philosophical school, but rather to try to understand the dialogue between Borges and his sources as that dialogue relates to the subjects associated with what he considered the essential enigma, namely, time. Among other things, I intend to show that Borges was not a dilettante who merely read encyclopedias and dictionaries, did not understand his subjects well, and was only interested in the shape of ideas rather than in their content, as is often assumed by literary critics, and also by critics with specialized knowledge in philosophy.² Borges was a hedonic reader, as he often described himself, who did not follow anyone else's reading list or curriculum of study, but that is not to say that he was anything other than a profound reader who genuinely understood the import of the aesthetic, religious, metaphysical, and mathematical questions he addresses throughout his works. Likewise, it has been assumed that Borges had no interest in the visual arts and in science.³ Nevertheless, critics have studied "The Garden of Forking Paths" in light of either relativity theory or quantum mechanics, and some have even speculated that Borges anticipated chaos theory and fractal geometry in his celebrated story.⁴ Borges' sources reveal that he was in fact acquainted with relativity theory and quantum mechanics, and that he had much

² See for instance, Bossart (2003).

³ See for instance, Bell-Villada (1999).

⁴ See for instance, Capobianco (1989), Rojo (1999), Weisz (1997), and Weissert (1991).

interest in modern science as it relates to human attempts to render the universe understandable, as well as to the question of determinism and free will. Borges' interest in modern science, I maintain, also played a part in his coming to conceive the universe as a time labyrinth. In fact, Borges reconciled the divergent points of view of relativity theory and quantum mechanics, and also anticipated chaos theory and fractal geometry. However, he did not anticipate these recent mathematical developments by accident. The Argentine poet knew well Cantor's theory of transfinite numbers, which plays a central role in both fractal geometry and chaos theory. Moreover, Borges' interpretation of Schopenhauer's thesis is related to Cantor's theory, and thus to his solution to the problem of universals. The time labyrinth, on the other hand, has the structure of certain verbal and visual labyrinths, such as *The Thousand and One Nights*, and Diego Velázquez's painting *Las meninas*, which resemble chaotic dynamic systems and fractals.

Critics have also addressed the question of Platonism and Aristotelianism in Borges, but no consensus has been reached. Some think of him as a Platonist, others as an Aristotelian, and others see Platonism and Aristotelianism in Borges as a contradiction.⁵ The Argentine poet himself frequently said that he supposed he was an Aristotelian but expressed his desire to be a Platonist; however, in some of his writings quite the reverse seems to be the case. Consequently, one is left with the impression that the poet was ambivalent towards the age-old dichotomy. This issue may be clarified if one allows for Borges' understanding of the subject to have changed over time. When this approach is taken, one can't fail to

⁵ See for instance, Mateos (1998), Nuño (1987), Rest (1976), Serna (1990), and Sturrock (1997).

recognize that Borges was not at all ambivalent, but actually quite consistent with the development of his own thought. This is somewhat difficult to appreciate because Borges kept rearranging or making additions to his books of essays, and did not always provide the dates when particular pieces were written. In addition, his contributions to *El Hogar*, *Sur*, and *Revista Multicolor de los Sábados*, were only recently organized and published in book form. The same may be said of his Norton Lectures, where Borges discusses in a more comprehensive way some of the subjects related to the Platonist-Aristotelian dichotomy.

For the purposes of this study, I have tried to re-establish the order of those writings where Borges examines subjects related to the problem of time, with the exclusion of those prior to the publication of "La penúltima versión de la realidad" [The Penultimate Version of Reality],⁶ which he disavowed. The analysis of these works within this study is not strictly chronological because there are topics about which Borges did not change his mind in the long run, and therefore later writings, lectures or poems help illuminate the subjects under discussion. Additionally, in organizing the study I have taken advantage of the fact that Borges concerned himself with both aspects of the age-old dichotomy, the metaphysical and the logical, which addresses language. Thus, I keep the discussion of these two separate in the first four chapters, establishing points of contact between them as they both relate to aesthetics, and then bring them together in the last two. I begin in Chapter 1 with the analysis of Borges' essays on Zeno's paradox of the tortoise, and his essay "The Penultimate Version of

⁶ Written in 1928, the essay was first published in *Discusión* (1932).

Reality". The central theme in these essays is the notion of the universe that presupposes that both time and space are absolute, uniform, and symmetrical. Borges' discussion of the paradoxes associated with this notion, and his idea that only time is essential to the intellect, leads him to propose an artistic model of the universe made of time or music, e.g. Schopenhauer's will, which he interprets as the succession of human emotions, passions, imaginings, and sensations. This model, however, does not guarantee that the universe is an organic whole or cosmos. This particular issue is discussed in Chapter 2, which examines how Borges links language with his notion of time and the problem of causality. Chapter 2 also considers the implication of Borges' take on language and causality with regards to the art of narration and aesthetic emotion (hecho estético). Chapters 3 and 4 examine in detail how Borges transformed his early model of the universe into an organic time labyrinth. Chapter 3 discusses the problem of time in connection with the notions of eternal recurrence and eternity and shows how these relate to Schopenhauer's thesis and Cantor's theory of transfinite numbers. Chapter 4 discusses how Borges relates Cantor's theory to those artworks where fiction lives within fiction, such as The Thousand and One Nights, Cervantes's Quixote, and Velázquez's painting Las meninas. In this connection, I discuss Borges' interest in the visual arts, and argue that in the poem "Dos versiones de Ritter, Tod und Toufel" [Two versions of "Knight, Death, and Devil"], Borges captures the essence of his own view on painting. The second part of Chapter 4 considers Borges' re-examination of eternal recurrence and Plato's eternity, and his reassessment and reinterpretation of Schopenhauer's

thesis. It then goes on to examine how he combines Cantor's and Schopenhauer's theories with Plato's eternity and the Christian notion of eternity, in order to create his time labyrinth. Chapter 5 is devoted to the analysis of "The Garden of Forking Paths". I maintain that in this story Borges alludes to his own search for the solution to the riddle of the universe, and to the immortal bird of Keats' stanza. Then I briefly consider the connection between the collection The Garden of Forking Paths, the Arab text mentioned above, and Dante's Divine Comedy. I argue that *The Garden*, which is the image of the universe as conceived by Borges, and the *Comedy* or the image of the universe as conceived by Dante, are both connected with The Thousand and One Nights, and that there is much in common between them. Finally, I discuss in Chapter 5 the problem of free will vis-à-vis determinism in connection with Borges' time labyrinth, and also the way in which the labyrinth relates to modern physics, fractal geometry and chaos theory. My last chapter examines how Borges developed his literary labyrinth, and how it is related to the time labyrinth and the aesthetic emotion. Finally, I show that the poem "Arte poética" comprises the poetic and metaphysical elements of both the time and the literary labyrinths.

Chapter 1: The World is Music

... there is the famous sentence of the Greek philosopher "No man steps twice in the same river." Here we have the beginning of terror, because at first we think of the river as flowing on, of the drops of water as being different. And then we are made to feel that we are the river, that we are as fugitive as the river.

-JLB, "The Riddle of Poetry"

The history proper of the famous quarrel between Platonists and Aristotelians has an obvious start: the philosophies of Plato and Aristotle. However, in his summarized version of the age-old dichotomy (quoted in the introduction) Borges starts with Parmenides and Heraclitus, who flourished in the fifth century B.C.E. Although this seems quite unorthodox, there is no mystery behind Borges' choice: on the one hand, both Plato and Aristotle were not only indebted to Parmenides and Heraclitus, but actually much more so than they admitted (Hussey 1999, 108); on the other, these two pre-Socratic philosophers paid particular attention to the notions of change and permanence, which are directly related to time, or to what Borges considers to be the "essential enigma".

From what survives of his writings, we know that Heraclitus thought that everything is in a state of flux, allowing, however, for something permanent. This is reflected in one of his most famous conclusion that "It is not possible to step twice into the same river" or that "We step into and do not step into the same rivers. We are and we are not" (McKirahan 1994, 122).⁷ Parmenides, on the other hand, sought for something not subject to the tyranny of time. He believed that reality itself is one undifferentiated whole, eternal and timeless, and that, on logical grounds, plurality, change and motion are mere illusions. On behalf of this tenet, Zeno of Elea (fl. 5th century B.C.E) formulated as many as forty paradoxes that go to the heart of our conceptions of time, space and motion. Concerned with these issues Borges devotes his essay "La perpetua carrera de Aquiles y la tortuga" [The Perpetual Race of Achilles and the Tortoise; 1929] from *Discusión* (1932), to the presentation of one of Zeno's most famous paradoxes and its most noteworthy revisions.⁸

The paradox in question states that Achilles running ten times faster than the tortoise gives him a ten-meter advantage. Achilles must first reach the place where the tortoise starts, but he has already departed. As Achilles arrives at each new point of the race, the tortoise having been there has already left. So Achilles can run forever and will never catch the tortoise, in spite of the fact that he runs faster. This shows that motion is illusory and that we live in a changeless world. In Borges' opinion, this paradox is an attack on the reality of space and the reality of time; to this he adds: "la existencia de un cuerpo físico, la permanencia inmóvil, la fluencia de una tarde en la vida, se alarman de aventura por ella" (OC, 1:248). [existence in a physical body, immobile permanence, the flow of an afternoon in life, are challenged by such an adventure. (SNF, 47)]

⁷ Fragments B91 & B49a, respectively. Today these fragments, which Borges repeatedly quoted throughout his work, are generally considered derivations from the genuine fragment B12: "Upon those who step into the same rivers, different and again different waters flow". (1994, 122)

⁸ The essay was first published in *La Prensa*, 1 Jan. 1929, and later included in *Discusión* (1932).

Since Aristotle, philosophers and mathematicians in almost every age tried to demolish Zeno's paradoxes but none of them succeeded. It was not until the development of the theory of the mathematical infinite by German mathematician and philosopher Georg Cantor at the end of the nineteenth century that a consistent refutation could be devised. Aware of this, Borges presents three refutations: that of John Stuart Mill, which is implicit in the refutation offered before him by Aristotle and Hobbes, and presupposes a finite divisible space and an infinitely divisible, but not infinite time; that of Henri Bergson, which presupposes an infinitely divisible space, but denies an infinitely divisible time; and finally, that of Bertrand Russell based on Cantor's transfinite numbers, which presupposes that both, time and space, are infinite and infinitely divisible.

Borges claims to have found Russell's refutation in William James' *Some problems of philosophy* ([1911] 1996, 179-83), and refers the reader to a couple of books by Russell where the total conception that it postulates may be studied: *Introduction to mathematical philosophy* (1919), and *Our knowledge of the external world* (1926). Of these books, the first deals with mathematical logic in general, and presents a detailed formal analysis of the mathematical infinite. The second book, which was first published in 1914, offers an interesting account of the problem of infinity from a historical perspective, and provides a method by which it is possible to construct the single all-embracing space and time assumed by mathematicians, from the private world of individuals. However interesting and well-written, these are by no means easy books. In Borges' opinion they are "libros de una lucidez inhumana, insatisfactorios e intensos" (OC, 1:246).

[unsatisfactory, intense books, inhumanly lucid. (SNF, 46)] This may explain Borges' decision to include in a later edition of *Discusión* (1957), his book review "Edward Kasner and James Newman: *Mathematics and the Imagination*," first published in *Sur* no. 73, October 1940. In this book the authors give a general overview of the basic concepts of the mathematics of infinity, and provide a clear, comprehensive explanation of George Cantor's theory of transfinite numbers, with its application to the resolution of Zeno's paradoxes ([1940] 2001, 35-64).

The problem with Russell's refutation, which Borges recognizes as the only valid one, is that although it is exact and consistent, it involves a form of madness. If one accepts its mathematical premises, one needs to accept two things: first, that *the whole is no greater than any of its parts*, or as Borges has it, one needs to accept that "la cantidad precisa de puntos que hay en el universo es la que hay en un metro del universo, o en un decímetro, o en la más honda trayectoria estelar" (OC, 1:247). [the precise quantity of points in the universe is the same as in a meter in the universe, a decimeter, or in the deepest trajectory of a star (SNF, 46).] Second, one must accept that being infinite and infinitely divisible, both time and space can grow, i.e., *the members of each infinite series can unfold into other series*.

Borges recognizes that, if one accepts Russell's refutation, then our concepts of space and time are completely erroneous. We then would have to modify our concept of a stable universe accepting a bigger paradox than any Zeno ever conceived of, thus allowing for "the concrete growth of the perceived." Thus, by the end of the essay Borges writes:

Zenón es incontestable, salvo que confesemos la idealidad del tiempo y del espacio. Aceptemos el idealismo, aceptemos el crecimiento concreto de lo percibido, y eludiremos la populación de abismos de la paradoja. ¿Tocar nuestro concepto de universo, por un pedacito de tiniebla griega?,

interrogará mi lector. (OC, 1:248)

[Zeno is incontestable, unless we admit the ideality of space and time. Let us accept idealism, let us accept the concrete growth of the perceived, and we shall elude the *mise en abîme* of the paradox.

Are we to affect our concept of the universe, for this bit of Greek obscurity? –my reader would ask. (my translation)]

The reader at last realizes that if one does not accept Russell's refutation then we have to accept Zeno's otherwise irrefutable paradox, which challenges the reality of space and time, thus indicating that our concept of the universe is also erroneous. In sum, Borges cannot accept that Zeno and Parmenides are right, but neither can he accept Russell's conclusions, therefore our concept of the universe must be erroneous.

The Argentine poet reaches a similar conclusion in his essay "Avatares de la tortuga" [Avatars of the Tortoise; 1939], which he included in the second edition of Discusión (1957);⁹ there, however, he has a word to add about philosophic doctrines and the conception of the universe. In general, the essay is different from the previous one in that Borges' attention focuses on the idea of infinite regress involved in Zeno's argument, and registers some historical examples of its application. The examples show that the *regressus in infinitum* can be used to validate an argument, but also its counterargument, and that it has been used this way throughout the history of philosophy, by different contending schools. Consider for instance Monism and Pluralism, or the Christian God and

⁹ This essay was published for the first time in *Sur* no. 63, December 1939.

the God of Pantheism, just to mention two of the many examples given by Borges. In both cases each of the contending concepts has been demonstrated (or proved false) using the *regressus* as an argument. In addition, Borges indicates that "Zeno's dialectic" can actually be applied to all topics, giving as particular examples epistemology and aesthetics:

...el vertiginoso *regressus in infinitum* es acaso aplicable a todos los temas. A la estética: tal verso nos conmueve por tal motivo, tal motivo por tal otro motivo... Al problema del conocimiento: conocer es reconocer, pero es preciso haber conocido para reconocer, pero conocer es reconocer... (OC, 1:258; italics in the original)

[...the vertiginous *regressus in infinitum* is perhaps applicable to all subjects. To aesthetics: such and such verse moves us for such and such reason, such and such reason for such and such reason... To the problem of knowledge: cognition is recognition, but it is necessary to have known in order to recognize, but cognition is recognition...(LY, 208; italics in the original)]

As applied to epistemology, the argument is known as the problem of criterion, and is considered one of the most difficult epistemological problems of all times. Formally, it is rendered as follows: "How can we specify *what* we know without having specified *how* we know, and *how* can we specify *how* we know without having specified *what* we know?" (Moser and vander Nat 1995, 24) Skeptics typically use this argument in support to their idea that there is no adequate justification for knowledge. Non-skeptical epistemologists had tried to provide answers to this problem, but none of the replies offered so far have proved to be viable solutions (Moser and vander Nat 1995, 13-19, 23-8).

Infinite regress, then, can be used to validate any argument or to invalidate them all. Thus by the end of the essay, the Argentine writer questions the legitimacy of Zeno's dialectic as an instrument of investigation, and offers the

following response:

Es aventurado pensar que una coordinación de palabras (otra cosa no son las filosofías) pueda parecerse mucho al universo. Es también aventurado pensar que de esas coordinaciones ilustres, alguna–siquiera de modo infinitesimal— no se parezca un poco más que otras. He examinado las que gozan de cierto crédito; me atrevo a asegurar que solo en la que formuló Schopenhauer he reconocido algún rasgo del universo. Según esa doctrina el mundo es una fábrica de la voluntad. El arte –siempre requiere irrealidades visibles. Básteme citar una: la dicción metafórica o numerosa o cuidadosamente casual de los interlocutores de un drama ... (OC, 1:258)

[It is venturesome to think that a coordination of words (philosophies are nothing more than that) can resemble the universe very much. It is also venturesome to think that of all of these illustrious coordinations, one of them–at least in an infinitesimal way — does not resemble the universe a bit more than the others. I have examined those which enjoy certain prestige; I venture to affirm that only in the one formulated by Schopenhauer have I recognized some trait of the universe. According to this doctrine, the world is a fabrication of the will. Art –always— requires visible unrealities. Let it suffice to mention one: the metaphorical or numerous or carefully accidental diction of the interlocutors in a drama ... (LY, 207-8)]

What the above statement amounts to is that philosophers *create* through a coordination of words, compelled by their *will*, models that try to resemble the universe. In this sense, Schopenhauer was right, the world is a fabrication of the will. Our conception of the universe, which presupposes that space and time are independent from us and infinitely divisible, is our own creation, a work of art produced by the verbal expression of our models, while we are the interlocutors in this drama of creating these unrealities that aim at resembling the universe. Consequently, Borges asks us to admit with the idealists the illusory nature of the world that we have created, which is "visible, ubicuo en el espacio y firme en el

tiempo" [visible, ubiquitous in space and durable in time], and tells us that we can find confirmation of its *'hallucinatory'* character in Kant's antinomies and in the Zeno's dialectic (OC, 1:258). [(LY, 208; italics in the original).]

Kant devised his famous antinomies as indirect proof of his transcendental idealism. He argued that if the world in space and time were a world of things existing apart from human cognition, it could be demonstrated to have several contradictory properties. Take for example the first antinomy: the argument (thesis) is that "The world has a beginning in time, and is also limited as regards space"; the counterargument (antithesis), "The world has no beginning in time, and no limit in space; it is infinite as regards both, time and space" (as qt. by Russell, 708). We have just seen that Zeno's dialectic can also be used to prove an argument and its counterargument, and is applicable to everything, including epistemology. We also know that the only way to meet the Greek philosopher's argument is Russell's refutation, which presupposes that both, time and space are infinitely divisible, and leads in turn to a bigger paradox that implies the concrete growth of the perceived. For these reasons, Borges asks us to admit that the model of the world ubiquitous in space and durable in time is an illusion, that is to say, an artistic creation that does not resemble reality.

Let us pause for a moment to consider this model that does not resemble reality, which was actually formalized by Isaac Newton in the seventeenth century. The model assumes that space and time are absolute, continuous, independent from us, and independent from one another. Being continuous, both space and time are infinitely divisible. The divisibility of the latter implies that time can be divided into smaller and smaller intervals: years, days, hours, minutes, seconds, and instants, among which there may be further instants. On the other hand, the divisibility of the former implies that physical bodies or volumes can be divided into smaller and smaller units: surfaces, lines and points. But a point is an abstraction; finite or infinite in number, points have no dimensions and cannot occupy an area; lines have no breadth; and planes have no thickness. They are all abstractions that do not resemble the space that we experience. Likewise, human beings are incapable of experiencing instants, they too are abstractions. Therefore, the classification of space in three dimensions, and time in smaller and smaller units, is nothing but a convention.

The essay "La penúltima versión de la realidad" [The Penultimate Version of Reality], also in Discusión (1932), shows that as early as 1928, Borges was already aware of these problem. There he draws attention to the suspicious nature

... de una sabiduría que se funda no sobre el pensamiento sino sobre una mera comodidad clasificatoria, como lo son las tres dimensiones convencionales. Escribo *convencionales*, porque –separadamente ninguna de las dimensiones existe: siempre se dan volúmenes, nunca superficies, líneas ni puntos. . . Frente a la incalculable y enigmática realidad, no creo que la mera simetría de dos de sus clasificaciones humanas baste para dilucidarla y sea otra cosa que un vacío halago geométrico. (OC, 1:198; italics in the origina)

[... of a wisdom that is founded not upon thought but upon a mere classificatory convenience, as are the three conventional dimensions. I write *conventional* because –separately— none of the dimensions exist: only volumes occur, never surfaces, lines or points. . . In the face of the immeasurable and enigmatic reality, I do not believe that the mere symmetry of two of its human classifications may be enough to elucidate it, and that it may be no more than an empty arithmetic flattery. (my translation; italics in the original)]

From here, it is clear that Borges rejects the model in question. On the one hand, he knows that the concepts of time and space assumed by mathematicians are mere conventions. On the other, he believes that, even if they were not, they cannot be compared, as he openly states soon after in this essay, for he knows that assuming the symmetry of the two concepts leads to logical absurdities, as he demonstrated in his 1929 essay, and that therefore, the model does not resemble reality.

This leads Borges to propose in this essay an alternative way of thinking of reality: in terms of time alone. He first criticizes metaphysicians and nonmetaphysicians alike, for contrasting space and time as if they had comparable natures. He refers to Spinoza, for instance, who maintained that the universe is made up of a single fundamental substance, namely, God. However, he gave his Deity the "attributes" of extension "vale decir, de espacio" [one could say, of space] on the one hand, and of thought "vale decir, de tiempo sentido" [one could say, of sensed time] on the other. In Borges' opinion the juxtaposition of these two concepts is a mistake:

Pienso que para un buen idealismo, el espacio no es sino una de las formas que integran la cargada fluencia del tiempo. Es uno de los episodios del tiempo y, contrariamente al consenso natural de los ametafísicos, está situado en él, y no viceversa. Con otras palabras: la relación espacial –más arriba, izquierda, derecha— es una especificación como tantas otras, no una continuidad. (OC, 1:200)

[I think that for a good idealism, space isn't but one of the forms that compose the loaded fluency of time. It is one of the episodes of time and, contrary to the natural consensus of the non-metaphysicians, it is situated in it, and not vice versa. In other words: the spatial relation –up, left, right— is a specification like many others, not a continuum. (my translation)] The full import of this passage is somewhat obscure, but as we finish reading the essay it becomes clear. For now let us say that at least part of what Borges is saying is that space is a system of relations, consequently the common-sense notion of space as a substance or continuity where events take place is erroneous. As stated above, this notion was established by Newton, who asserted the existence of absolute space, and accordingly maintained that each fraction of time fills all space simultaneously. Interestingly enough, Newton's contemporary, the German philosopher and mathematician Gottfried Leibniz, was of the same opinion as Borges. Like him, he maintained against Newton that space is not a substance but a system of relations. We have good reason to believe that Borges was acquainted with the so called "Leibniz-Clarke Correspondence" (1715-6), where the German philosopher attacks Newton's idea of absolute space and time. There, Leibniz writes referring to Newton and his followers:

These gentlemen maintain, therefore, that space is a real absolute being. But this involves great difficulties, for it appears that such being must be eternal and infinite. Hence some have believed it to be God himself, or one of his *attributes*, his immensity. But since space consists of parts, it is not a thing which can belong to God. (Leibniz 1989, 324; emphasis added)

In this passage we have an allusion to Spinoza's belief criticized by Borges above. In addition, Leibniz also expresses in this place the same opinion that Borges expressed in his essays concerning Zeno's paradox, namely, that philosophy is a "science of mere words", and that the notions of absolute space and time are but "*ideal*" things: "These are the imaginations of philosophers who have incomplete notions … Mere mathematicians who are only taken up by the conceits of imagination are apt to forge such notions, but they are destroyed by superior reason" (Leibniz 1989, 334). These remarks are particularly significant if we consider that Leibniz himself was an eminent mathematician who invented infinitesimal calculus at the same time as Newton. However, with the development of modern physics, we have come to realize that Leibniz, after all, was not at all mistaken. The theory of relativity, published some twenty years before Borges' essay, finally proved that space is but a system of relations, and that Euclidean geometry or any geometry for that matter (including non-Euclidian geometry) is not inherent in nature, but is imposed upon it by the mind. At about the same time, quantum theory introduced a wholly new form of atomicity where there are no longer two indivisible units, namely, electrons and protons, but only particles. According to Russell, these particles can be conceptualized as units of "action" (1914, 108-9). Therefore, in modern physics the world consists solely of events that happen in time, and which we specify in a particular system of reference that includes three measurements of space, which has no objective significance as a separate physical entity. Matter, on the other hand, can no longer be conceptualized as unchanging substance but merely as a way of grouping "events". Russell indicates, however, that the theory of relativity invalidates Newton's absolute time, i.e., the idea of one all-embracing time (1914, 128). Borges may not have had an in-depth knowledge of the new theories of physics at this time, but we know that he had acquired some familiarity with them via Russell's works, in particular Our Knowledge of the External World (1914, 128-31). Additionally, it is also possible that he had already read Alfred North Whitehead's Science and the Modern World (1925), which includes two chapters

that deal exclusively with relativity and quantum theory ([1925] 1967, 113-137). Whitehead's work is referenced by Russell in the book mentioned above, and was later referenced by Borges himself in a book review of 1939 entitled "*Modes of Thought*, de A. N. Whitehead" (OC, 4:421-2).¹⁰ However, it is not until1936 that he makes an explicit reference to the theory of relativity in relation to the idealist notion that time is subjective. Quantum theory, on the other hand, is only obliquely referred to at a much later date in a book review of 1944, where Borges discusses the problem of determinism and free will. What Borges has to say about this, we shall consider in due course. For the moment, let us look more closely at Borges' account of time from the perspective of metaphysics, i.e., from the perspective of thought.

Looking from this perspective, Borges considers that only the perception of time is inevitable, for he thinks that succession is inseparable from the intellect's essence. Consequently, he maintains that time is not illusory but real. This, the poet declared early on in the essay "Sentirse en muerte" [Feeling in Death] from *El idioma de los argentinos* [*The Language of the Argentines*; 1928.] Despite his rejection of this book and all of his early prose works from 1922 to 1928, the essay was later reprinted in two of Borges' essays: "Historia de la eternidad" [History of Eternity; 1936] and "Nueva refutación del tiempo" [New Refutation of Time; 1947.]

¹⁰ The book review was first published in *El Hogar*, March 1939, and later included in the anthology *Textos Cautivos* (1986) by Enrique Saceiro-Garí & Emir Rodríguez Monegal, and in *Obras Completas* (1996).

In the present essay Borges makes reference to this fact noting that several authors, including Seneca,¹¹ Rudolf Steiner, Fritz Mauthner and Schopenhauer, consider that human beings alone have the perception of time: "... el hombre tiene el *yo*: vale decir, la memoria de lo pasado y la previsión del porvenir, vale decir, el tiempo" (OC, 1:200; italics in the original). [... man has the *self*: that is to say, the memory of the past and the prevision of the future, that is to say, time (my translation; italics in the original).] In other words, human beings alone have a sense of personal identity, or "self" that persists over time. In this case, the "self" or identity over time should not be confused with the usage common in ordinary speech and psychology, where one's identity is said to consist in a set of values and goals that structures one's life. It is true that one's identity over time, apart from consisting of a memory which links together and unites the different parts of one's life into a singular personal history, consists also of the prevision of the future, but this refers to one's concern for one's future well-being rather than to one's goals.

Animals, on the other hand, are unaware of temporality, and therefore live in an eternal present, completely outside of time. Additionally, Borges explicitly declares that space is not essential to the intellect because there are "enteras provincias del Ser que no lo requieren" (OC, 1:200) [entire provinces of Being that do not require it (my translation)] –such as our senses of smell and hearing. Consequently he argues against Kant, who claimed that both space and time are

¹¹ The reference here is to Seneca of Cordoba, son of Seneca the Elder, who, in the last of his epistles to Lucilius (Epistle 124) wrote: "Animals perceive only the time which is of greatest moment to them within the limits of their coming and going –the present" ([1925] 2000, 445).

subjective: "El espacio es un incidente en el tiempo y no una forma universal de intuición, como impuso Kant" (OC, 1:200). [Space is an incident in time and not a universal form of intuition, as was imposed by Kant (my translation).]

To sum up, then: if we are to base our wisdom on thought, we need to recognize that time alone is essential to the intellect. Space, on the other hand, is an incident in time, or equivalently, nothing more than a system of relations. From here Borges draws a conclusion, which, however different, is not in conflict with the view of modern physics, namely, that the ultimate nature of reality is time.

In giving further support to his argument, Borges once again turns to Schopenhauer. He recalls that the German philosopher had already declared in his *Welt als Wille und Vorstellung* (1819) that "truth" with passion: "*La música*, escribe, *es una tan inmediata objetivación de la voluntad, como el universo*" (OC, 1:200-1; italics in the original). [*Music*, he writes, *is as immediate an objectification of the will, as the universe itself is* (my translation; italics in the original).]¹² According to Borges, this is equivalent to saying that "la música no precisa del mundo" [music does not require the world.] That is, music is in time alone without any reference to space; thus it follows that the universe is time. Thereafter, Borges writes that one can imagine a situation where space is not perceived, for example that in which all of one's senses were shut off, except for the ear. In this case, he concludes

La humanidad... seguiría urdiendo su historia. La humanidad se olvidaría de que hubo espacio. La vida, dentro de su no gravosa ceguera y su

¹² Borges' quote is direct translation from the original in German ([1844] 1966, 1:275). However, he is quoting from the first edition of the first volume of Schopenhauer's main work, which was indeed published in 1819, and remained virtually unchanged in the second edition of 1844.
incorporeidad, sería tan apasionada y precisa como la nuestra. De esa humanidad hipotética (no menos abundosa de voluntades, de ternuras, de imprevisiones) no diré que estaría en la cáscara de nuez proverbial: afirmo que estaría fuera y ausente de todo espacio. (OC, 1:200)

[Humanity... would continue weaving its history. Humanity would forget that space had existed. Life, within its not disagreeable blindness and its incorporeality, would be as passionate and precise as ours. Of that hypothetical humanity (no less abundant of desires, emotions, and lack of foresight) I would not say that it would be in the proverbial nutshell: I assert that it would be outside and absent of all space. (my translation)]

In this passage, the obvious allusion to Shakespeare's "... I could be bounded in a nut-shell and count myself a King of infinite space..." from *Hamlet* (1996, 1696; act 2, scene 2, lines 248-49), suggests that time is infinite. On the other hand, Borges' contention that life would be as passionate and precise as ours, calls attention to the fact that our emotions, passions, desires, and feelings, or what Schopenhauer calls the will, accompany our perception of time. In fact it may be said that they constitute its actual 'substance', and therefore, they are the *stuff* of the world, and also the stuff we are made off. He would later say it with an impressive lucidity and beauty, in his essay "Nueva refutación del tiempo" [New Refutation of time; 1947]:

Negar la sucesión temporal, negar el yo, negar el universo astonómico, son desesperaciones aparenes y consuelos secretos...El tiempo es la substancia de la que estoy hecho. El tiempo es un río que me arrebata, pero yo soy el río; es un tigre que me destroza, pero yo soy el tigre; es un fuego que me consume, pero yo soy el fuego. El mundo, desgraciadamente, es real; yo desgraciadamente soy Borges. (OC, 2:148-9)

[To deny temporal succession, to deny the self, to deny the astronomical universe, appear to be acts of desperation and are secret consolations... Time is the substance of which I am made. Time is a river that sweeps me along, but I am the river; it is a tiger that mangles me, but I am the tiger; it is a fire that consumes me, but I am the fire. The world, unfortunately, is real; I, unfortunately, am Borges. (SNF, 332)]

The Argentine poet, then, seems to be in complete agreement with Schopenhauer, who thought that music or time objectifies the will, i.e., the innermost nature of reality or the quintessence of life. This, however, does not mean that Borges accepts in its entirety the German philosopher's metaphysical theory, which he developed from postulates that Borges does not admit. For instance, we know that Schopenhauer adopted a Kantean position concerning the status of both, space and time, and also presupposed the existence of a 'transcendental' subject of knowledge. As we have seen, Borges rejects Kant's position concerning the status of space, and although he thinks of the self as time ("only man has the self ... that is to say, time"), or the succession of emotions, passions, feelings, etc., he does not posit the existence of a self-subsistent cognizing ego existing in some extra-mundane realm. In this regard, Borges seems to be more in agreement with Hume, who abandoned the idea of a personal core, or a self that constitutes the particular person that one is. The Scottish philosopher reasoned that it was difficult to see what more a person could be than a "bundle" of different perceptions (thoughts, images, feelings) that succeed each other "with inconceivable rapidity" ([1740] 1978, 251-63). Yet Borges neither takes sides with Schopenhauer, or with Hume. Like the latter, he questions the notion of personal identity, but admits at the same time that there is something enduring, which we are incapable of fully grasping. In a poem written in his Fervor de Buenos Aires [Fervor de Buenos Aires; 1923] many years earlier,

"Final del año" [Year's End], Borges had already expressed this idea; he concludes his poem with the following words:¹³

La causa verdadera es la sospecha general y borrosa del enigma del Tiempo; es el asombro ante el milagro de que a despecho de infinitos azares, de que a despecho de que somos las gotas del río de Heráclito, perdure algo en nosotros: inmóvil.

(OC, 1:30)

[The real cause is our murky pervasive suspicion of the enigma of Time; it is our awe at the miracle that, though the chances are infinite and though we are drops in Heraclitus' river, allows something in us to endure, never moving.

(SP, 19)]

In other words, despite of the fact that our "self" is always changing, we have an indispensable notion of self (of something that endures), because the past does not pass entirely, but stays in our memory, and the future, which is yet to come, exists in our foresight. This is clearly different from Hume's complete rejection of the idea of an underlying mental substance or self, to which he had arrived by taking Locke's and Berkeley's empirical philosophy to its logical conclusion. As it is well known, Berkeley had not questioned the self, but had rejected the

¹³The poem is taken from *Jorge Luis Borges: Obras completas* of 1996. The Argentine poet slightly modified it in editions subsequent to the first, without, however, changing the meaning.

intelligibility of an underlying substance inherent to material objects. In other words, he made objects of sense dependent upon mind, i.e., "to be [real] is to be perceived" (*esse est percipi*). For Borges, on the other hand, all things that happen in time are real, including those that we imagine. For instance, objects of sight (events to be more precise) disappear when we do not see them, however, it does not follow that they are not real. They are events that happen in time, which is real, therefore they are real. In the same way, although our self is always changing, memories and expectations, which determine our notion of self, exist in time; hence the self is real.

Borges explained all of this more fully in "El tiempo" [Time], one of the five lectures that he gave in 1978 at the University of Belgrano in Buenos Aires, where he basically repeats what he had written in his "Penúltima versión de la realidad" [Penultimate version of reality] fifty years earlier. There, however, Borges explains his ideas more thoroughly, and adds many interesting comments. He recalls, for instance, that Nietzsche felt that it was a kind of blasphemy to talk about Goethe and Schiller at the same time, and says that he feels the same way when he hears the words time and space used together. He recalls Schopenhauer once again, who noted that music is not something that is added to the world but is a world in itself: a world made of time, which objectifies the will like the universe itself does. Space, on the other hand, is one of the many things to be found inside of time. If in fact time were situated in space, then time would disappear if we ceased to perceive space. This, however, does not seem to be the case, for if we shut off all of our senses except for the ear, space disappears but we still perceive time. Furthermore, even when we are in full possession of all of our senses, we are not always aware of everything that is presented to us in experience, that is to say, in time. Let us suppose, says Borges, that you found yourselves in a dark room, then "desaparece el mundo visible, desaparece de su cuerpo. ¡Cuántas veces nos sentimos inconscientes de nuestro cuerpo...!" (OC, 4:198). [the visible world disappears, it disappears from your body. How many times we are unaware of our body! (my translation).] And he adds:

Por ejemplo, yo ahora, sólo en este momento en que toco la mesa con la mano, tengo conciencia de la mano y de la mesa. Pero algo *sucede*. ¿Qué sucede? Pueden ser percepciones, pueden ser sensaciones o pueden ser memorias o imaginaciones. Pero siempre ocurre algo. (OC, 4:198; emphasis added)

[For example, just now that I touch the table with the hand, I become conscious of the hand and the table. But something *happens*. What happens? They may be perceptions, they may be sensations or they may simply be memories or imaginings. But something always happens. (my translation, emphasis added)]

Note that Borges does not deny the reality of objects (i.e., events) of sense, e.g. our body or the table; he just indicates that the fact of perceiving is selective with regards to the things (i.e., events) that happen in time, which is always perceived, and comprises emotions, sensations, perceptions, memories, etc.. Therefore, Borges concludes, "el tiempo es un problema esencial. Quiero decir que no podemos prescindir del tiempo. Nuestra conciencia está continuamente pasando de un estado a otro, y ese es el tiempo: la sucesión" (OC, 4:199) [time is an essential problem. I mean that we cannot do without time. Our consciousness is constantly going from one state to another, and that is time, i.e., succession (my

translation).] Borges, thus, asserts that time is the central problem of metaphysics,

and therein the problem of personal identity, which he explains as follows:

Nosotros sentimos que estamos deslizándonos por el tiempo, es decir, podemos pensar que pasamos del futuro al pasado o del pasado al futuro, pero no hay un momento en que podamos decirle al tiempo: Detente ¡Eres tan hermoso... ! como quería Goethe. El presente no se detiene. No podríamos imaginar un presente puro; sería nulo. El presente tiene siempre una partícula de pasado, una partícula de futuro. En nuestra experiencia el tiempo corresponde siempre al río de Heráclito, siempre seguimos con esa antigua parábola. Es como si se nos hubiera adelantado en tantos siglos. Somos siempre Heráclito viéndose reflejado en el río, y pensando que el río no es el río porque ha cambiado aguas, y pensando que él no es Heráclito porque él ha sido otras personas entre la última vez que vio el río y esta. Es decir, somos algo cambiante y algo permanente. Somos algo esencialmente misterioso. (OC, 4:205)

[We feel as if we were sliding through time, that is, we can think that we pass from the future to the past or from the past to the future, but there isn't a moment where we can say: Time, Stop. You are so beautiful...! As Goethe wanted. The present does not stop. We could not imagine a pure present; it would be null. The present always has a particle of the past, a particle of the future. In our experience time always corresponds to Heraclitus' river, we remain ever with that ancient parable. It is as if he had gotten ahead of us in so many centuries. We are always Heraclitus seeing himself reflected in the river, and thinking that the river is not the river because it has changed waters, thinking that he is not Heraclitus because he has been other persons between this and the last time he saw the river. That is, we are something ever-changing and something everlasting. We are something essentially mysterious. (my translation)]

In other words, if temporal seriality is the very essence of individuals, then their inner being, which comprises perceptions, thoughts, images, feelings, passions, desires, and emotions, is always changing. However, we have an indispensable notion of "self" or person that we feel as existing and continuously persisting in existence, which at the same time, cannot be said to be constant and invariable. Therein, says Borges, lies the mystery, "Es decir, la idea de la permanencia en lo

fugaz" (OC, 4:205). [That is to say, the idea of the permanent in the fleeting (my

translation).]

In addition, Borges also expresses in this lecture his disbelief in the model

that assumes the infinite divisibility of time:

¿Por qué no aceptar la idea de dos instantes de tiempo ? ¿Por qué no aceptar la idea de las 7 y 4 minutos y de las 7 y 5 minutos? Parece muy difícil aceptar que entre esos dos instantes haya un número infinito o transfinito de instantes. Sin embargo Bertrand Russell nos pide que lo imaginemos así. (OC, 4:202)

[Why not accept the idea of two moments of time? Why not accept the idea of 7 and 4 minutes and 7 and 5 minutes? It seems very difficult to accept that between those two moments, an infinite or transfinite number of moments may exist. However, Bertrand Russell asks us to imagine that this is the case. (my translation)]

And then:

Si pensamos que el mundo es simplemente nuestra imaginación, ... ¿por qué no suponer que pasamos de un pensamiento a otro y que no existen esas subdivisiones puesto que no las sentimos? Lo único que existe es lo que sentimos nosotros. Sólo existen nuestras percepciones, nuestras emociones. Pero esa subdivisión es imaginaria, no es actual. (OC, 4: 203)

[If we think that the world is simply our imagination ... why can't we assume that we go from one thought to another and that those subdivisions do not exist, given that we do not sense them? Only what we sense exists, only our perceptions, our emotions. But that subdivision is imaginary, not factual. (my translation)]

These passages are significant for a variety of reasons. First, they makes explicit that Borges' notion of successive time does not allow subdivisions, because perceptual time takes place by finite rather than infinitesimal steps. Second, they reveal that Borges, like Leibniz, thought of mathematics as a creation of our mind, or our will, to use a word he prefers. The suggestion seems to be then that mathematics is not to be looked upon as a key to the truth with a capital T. This, despite the fact that the mathematics of infinity as well as Euclidian geometry, the legitimacy of which Borges also questioned, are both self-consistent mathematical systems. However, mathematicians themselves had realized that "absolute truths" are not infallible at least since the nineteenth century, when a self-consistent non-Euclidian geometry was discovered (or invented). Furthermore, at about the time that Borges was writing in relation to these topics, the Austrian mathematician Kurt Gödel proved that there are limitations to rational thought by showing that mathematical systems cannot be complete within themselves because it is possible to frame propositions which we cannot decide are true or false. More importantly, before him Russell himself showed that the logical contradictions involved in self-referential propositions, are not due to semantic difficulties, but, rather arise in all symbolic representations, including mathematics. In set theory, for instance, this contradiction arises when we consider the class of classes which do not include themselves. Russell explains it as follows:

This is a class: is it a member of itself or not? If it is, it is one of those classes that are not members of themselves, i.e., it is not a member of itself. If it is not, it is not one of those classes that are not members of themselves, i.e., it is a member of itself. (1919, 136)

Borges himself invented one of these contradictions, which appeared for the first time 1934 in a short essay published in *Revista Multicolor de los Sábados*:¹⁴ "En Sumatra, un hombre quiere doctorarse de brujo. El examinador le pide que adivine si será aprobado o si pasará. El hombre dice que será

¹⁴ The essay in question is "Dos antiguos problemas" first published in the literary supplement of *Crítica* mentioned above, no. 40 Dec. 5^{th} , 1934.

reprobado... Ya se presiente la infinita continuación" (RMS, 29; OC, 1:277). [In Sumatra, someone wishes to receive a doctorate in prophecy. The master seer who administers his exam asks if he will fail or pass. The candidate replies that he will fail... One can already foresee the infinite continuation (SNF, 250).] The problem here is that if the man is right, then he will pass the exam, but if he passes the exam then he was wrong, and he will not pass the exam, but then he was right... and so on *ad infinitum*. Borges' example is a *pure* logical fallacy, unlike that with which "the Geeks played": "Demócrito jura que los abderitanos son mentirosos; pero Demócrito es abderitano: luego Demócrito miente; luego no es cierto que los abderitanos son mentirosos; luego Demócrito miente; luego..." (RMS, 27; OC). [Democritus swears that the Abderites are liars, but Democritus is an Abderite; then it is not true that the Abderites are liars; then Democritus is not lying; then it is true that the Abderites are liars; then Democritus lies; then... (SNF, 249).] Borges is mistaken in attributing this paradox to Democritus, for it was originally formulated by Epimenedes of Crete. However, he rightly indicates that this example involves a trick: "Ésta [trampa] reside en la falsa identificación de mentir y ser mentiroso. Mentir es decir lo contrario de la verdad; ser mentiroso es tener el hábito de mentir, sin que ello signifique una obligación de mentir todo el tiempo" (RMS, 27). [This resides in the false identification of to lie ad to be a liar. To lieis to say that which is contrary to the truth; to be a liar is to have the habit of lying, which does not imply that one lies all the time (my translation).]

The fact remains, however, that there are logical contradictions in mathematics, like Zeno's paradox of the tortoise, that are not idle or foolish tricks.

To dispose of this type of contradictions, Russell and Whitehead proposed a theory known as the Theory of Types, which Russell explains in his *Introduction to Mathematical Philosophy* (1919, 131-43), one of the books referenced by Borges in relation to Cantor's theory of transfinite numbers. Among other things, the theory of types was successful in removing all inconsistencies from Cantor's theory, but the axiom on which it rests needs not to be accepted, and as a matter of fact it was rejected by most mathematicians at the time. Borges' attitude towards the "queen of sciences," then, is not unjustified, nor is his idea that models of the universe are a creation of our own mind. By the time he was writing, the notion that all scientific models and theories are approximate was already commonly accepted by scientists. Moreover, as we have seen, Newton's model of the universe, which was for almost three hundred years a formidable foundation supporting all of science and providing a firm basis for natural philosophy, was being changed, and other models were being devised based on the discoveries of modern physics.

For his own part, Borges envisioned a penultimate version of reality based on thought. In so doing he recognized, once again, a trait of the universe in the illustrious coordination of words formulated by Schopenhauer, whose conception of the universe as time or music, is as much an artistic creation as anybody else's. However, this version offers an advantage: its artistic nature is self-evident. Broadly speaking we may say that Borges takes sides with Heraclitus and the Aristotelians, as his version of reality implies that everything –including ourselves— is in state of flux, but it also allows for something permanent. Before going any further, it will be as well to consider briefly a particular difficulty which might arise out of what has been said so far. It is clear that over the years Borges did not change his mind with regards to what constitutes the ultimate nature of reality, namely, time. It is also clear that he remained convinced of the fact that models of the universe are the creation of our own mind, or a fiction of our partial knowledge, as the Aristotelians have it. Therefore, it might seem inaccurate to affirm, as I did in the introduction, that Borges' understanding of the Aristotelian-Platonist controversy changed over time. However, I would argue that this solely indicates that Borges never abandoned certain Aristotelian ideas throughout his life, which is not to say that his understanding of the controversy in question did not change. As we shall see, it was because it changed that Borges was able to transform his early fictional model of the universe into a living labyrinth where order and chaos coexist.

At this stage, when Borges speaks of the real world or the universe, he refers to it as chaotic, though he readily admits that we arbitrarily impose an order on it. Two essays from *Discusión* (1932) are quite revealing in this regard. I am referring to "El arte narrativo y la magia" [Narrative Art and Magic] and "La postulación de la realidad" [The Postulation of Reality],¹⁵ which we shall analyze in the following chapter, along with the essay "El idioma alalítico de John Wilkins" [John Wilkins' Analytical Language] from *Otras inquisiciones* [*Other*

¹⁵ Both of these essays were included in *Discusión*, 1932, but the first was previously published in *Sur* no.5, May 1932, and the second in *Azul* no. 10, June 1931.

Inquisitions],¹⁶ where Borges questions the notion of the universe itself, that is, the meaningfulness of notions of reality as an integrated whole.

¹⁶ The essay was first published in *La Nación*, Feb. 8, 1942, and later included in *Otras Inquisiciones* [Other Inquisitions; 1952].

Chapter 2: Aesthetics, chaos and order

And the right reader comes along, and the words –or rather the poetry behind the words, for the words themselves are mere symbols— spring to life, and we have a resurrection of the word —JLB, "The Riddle of Poetry"

So far we have seen that Borges postulated a universe made of time. In this conception causality naturally plays a central role. In this chapter, we will see what the Argentine poet has to say about this concept, which has been the subject of so much disagreement and controversy. Additionally, we will discuss some of his aesthetic ideas, and analyze his ideas concerning language, which are intimately related to the metaphysical ideas discussed in the previous chapter. As we saw, time, which is the succession of emotions, sensations, passions and imaginings, is infinite. The question is to determine whether there exists a word for each one of the ideas and feelings that are applicable to human experience, and whether we can establish a causal connection between them. If the answer is yes, then language is in fact expression (i.e., it is capable of representing all things) and the universe is an ordered cosmos. If the answer is no, then language cannot express all events that happen in reality, and there isn't an ordered cosmos, which requires a precise law linking all events together in an organic whole, unless there exists a God with a perfect dictionary that registers a word for every thing. Let us see what Borges' answer is, and how this relates to his aesthetic ideas concerning the art of narration.

Borges offered his fundamental views on causality early on in "El arte narrativo y la magia" [Narrative Art and Magic; 1932.] In this essay, the Argentine poet affirms that causality is the central problem of the novel, or the telling of a story, to be more precise. This includes the novel, the short story, epic poetry, and "la infinita novela espectacular que compone Hollywood con los plateados *idola* de Joan Crawford y que las ciudades releen" (OC, 1:230; italics in the original). [the endless spectacles composed by Hollywood with silvery images of Joan Crawford, and reead and reread in cities everywhere (SNF, 80).]

In discussing this issue, he distinguishes natural from magical causation. Borges contends that the latter is the type of causation should, and generally does, hold sway in the novel. In magical causation effects are connected with precise causes that obey a general law, which Borges describes as "la de la simpatía, que postula un vínculo inevitable entre cosas distantes" (OC, 1:230). [the law of sympathy, which assumes that things act on each other at a distance through a secret sympathy (SNF, 82).] By way of explaining this magical causation, Borges writes:

Todo episodio, en un cuidadoso relato, es de proyección ulterior. Así, en una de las fantasmagorías de Chesterton, un desconocido acomete a un desconocido para que no lo embista un camión, y esa violencia necesaria, pero alarmante, prefigura su acto final de declararlo insano para que no lo puedan ejecutar por un crimen. En otra una peligrosa y basta conspiración integrada por un solo hombre (con socorro de barbas, de caretas y de seudónimos) es anunciada con tenebrosa exactitud en el dístico: *As all stars shrivel in the single sun, / Thewords are many, but The Word is one* que viene a descifrarse después, con la permutación de mayúsculas: *The words are many, but the word is One*. (OC, 1:231; italics in the original)

[Every episode in a careful narrative is a premonition. Thus, in one of Chesterton's phantasmagorias, a man suddenly pushes a stranger off the rode to save him from an oncoming truck; this necessary but alarming violence foreshadows the later act of a declaration of insanity so that he may not be hanged for a murder. In another Chesterton story, a vast and dangerous conspiracy consisting of a single man (aided by false beards, masks, and aliases) is darkly heralded by the couplet: *As all stars shrivel in the single sun*, */ The words are many, but The Word is one* which is unraveled at the end through a shift of capital letters: *The words are many, but the word is One*. (SNF, 81; italics in the original)]

From this passage it is clear that the narrator creates an order with a "dangerous" harmony or a "frenética y precisa causalidad" [frenzied, clear-cut causality], which, according to Borges, does not apply in what he calls the "asiático desorden del mundo real" (OC, 1:231). [extreme disorder of the real world (my translation).] That is, the real world is chaotic; in it, according to Borges, there is a "natural causation," which is "el resultado incesante de incontrolables e infinitas operaciones" (OC, 1:232) [(the) incessant result of uncontrollable and infinite actions (my translation). This would seem to indicate that there is no discernible law linking events in a particular order. Any event is connected with an infinite complexity of events that follow no particular rule. Therefore, there is an element of chance implicit in those connections, which are, for this reason, simply impossible to ascertain.

Only in the novel, the short story, etc, does magical causation "donde profetizan los pormenores, lúcido y limitado" (OC, 1:232) [in which every lucid and determined detail is a prophecy (SNF, 82)], actually happen. There is, however, an exception, the "ponderous" psychological novel, which "finge o dispone una concatenación de motivos que se proponen no diferir de los del mundo real" (OC, 1:230) [attempts to frame an intricate chain of motives similar to those of real life (SNF, 80).] As an example Borges refers to James Joyce's *Ulysses* (1922). As it is well known, the famous novel recreates what happens in the life of two characters, Leopold Bloom and Stephen Dedalus, in a single day, within the perimeter of a single city. In this work the author certainly creates an order, but one that tries to simulate chaos. Thus, in 1937 Borges writes:

Más que la obra de un solo hombre, el *Ulises*parece la labor de muchas generaciones. A primera vista es caótico; el libro expositivo de Gilbert – *James Joyce's Ulysses*, 1930— declara sus estrictas y ocultas leyes. La delicada música de su prosa es incomparable. (OC, 4:251)

[More than a work of a single man, the *Ulysses* seems a work of many generations. At first glance it is chaotic; Gilbert's explanatory book – *James Joyce's Ulysses, 1930*— asserts its strict and concealed laws. The delicate music of its prose is incomparable. (my translation)]

And also:

Una de las coqueterías literarias de nuestro tiempo es la metódica y ansiosa elaboración de obras de apariencia caótica. Simular el desorden, construir difícilmente un caos, usar la inteligencia para obtener los efectos de la casualidad, ésa fue, en su momento, la obra de Mallarmé y de James Joyce. La quinta década de los *Cantos* de Pound, que acaba de salir en Londres, continúa esa extraña tradición. (OC, 4:319)

[One of the literary coquetries of our time is the methodic and anxious creation of works of chaotic appearance. To simulate disorder, to create a chaos with difficulty, that was, in its own day, the work of Mallarmé and James Joyce. The fifth decade of *Cantos* of Pound, which has just been published in London, carries on that strange tradition. (my translation)]

As is evident, Borges' appraisal of Joyce's work is not altogether negative. However, the Argentine poet generally disapproved of works of chaotic appearance. In the present essay Borges explains that the mere act of trying to simulate the disorder of the real world is dishonest, for it is misleading to present events as happening by pure chance, when the author has in fact predetermined the fate of his characters. Additionally, in not resorting to magical causation, the author impoverishes the reader, since he takes away from him the pleasure of gradually deciphering the plot and its final outcome. In this connection, Borges cites none other than Mallarmé:

Nombrar un objeto, dicen que dijo Mallarmé, es suprimir las tres cuartas partes del goce del poema, que reside en la felicidad de ir adivinando; el sueño es sugerirlo. Niego que el escrupuloso poeta haya redactado esa numérica frivolidad de las tres cuartas partes, pero la idea general le conviene y la ejecutó ilustremente en su presentación lineal de un ocaso: Victorieusement fut le suicide beau / Tison de gloire, sang par écume, or, tempête! (OC, 1:229; italics in the original)

["Naming an object," Mallarmé is said to have said, "is to suppress threefourths of the joy of reading a poem, which resides in the pleasure of anticipation, as a dream lies in its suggestion." I refuse to believe that such a scrupulous writer would have composed the numerical frivolity of "three-fourths," but the general idea suits Mallarmé, as he illustrated in his two line ellipse on the sunset: *Victorieusement fut le suicide beau / Tison de gloire, sang par écume, or, tempête!* (Victorious was the beautiful suicide / Firebrand of glory, blood-orange foam, gold, tempest!) (SNF, 79; italics in the original)]

At first glance this comment seems to be very favorable and even laudatory. However, this is far from being the case. At this point, Borges had just introduced Edgar Alan Poe's only novel *Narrative of Arthur Gordon Pym* (1837-8), which tells the story of a man's expedition to Antarctica, and the mysterious circumstances of his death. But Borges argues that the novel has also a secret plot, namely, "el terror y vilificación de lo blanco" [the terror and vilification of whiteness], and is hinted at all along the work but not revealed until the end. Borges thus indicates that the French poet's idea was no doubt "suggested" by Poe's work, and ironically asks: "¿El mismo *impersonal* color blanco no es mallarmeano?" (OC, 1:229; emphasis added). [The *impersonal* color white itself – is it not utterly Mallarmé? (SNF, 79; emphasis added).] With this Borges not only

questions Mallarmé's originality, but also holds up to ridicule his appropriation of the color white, which bespeaks of certain arrogance. Likewise, certain egotism is involved in "attempting to frame an intricate chain of motives similar to those of real life," because the writer tries to impose a personal vision of reality without leaving anything to the reader's imagination. Accordingly, in postulating reality the narrator should strive for imprecision and verisimilitude rather than precision or accuracy. In so doing he is more likely to achieve that "espontánea suspensión de la duda, que constituye, para Coleridge, la fe poética" (OC, 1:226). [willing suspension of disbelief which, for Coleridge, is the essence of poetic faith (SNF, 73).]

This takes us directly to "La postulación de la realidad" [The Postulation of Reality; 1931], where Borges defends the idea of imprecision and verisimilitude in literature. To make his case, he first indicates that here are two ways or methods of writing: expression or representation, and allusion. These methods correspond to "dos arquetipos de escritor (dos procederes)" (OC, 1:217) [two archetypes of the writer (two procedures) (SNF, 59)]: the romantic and the classical. From the outset, Borges announces his dissatisfaction with the first of these methods, which, in keeping with Benedetto Croce's doctrine, assumes "la identidad de lo estético y lo expresivo" (OC, 1:217). [the identical nature of the aesthetic and the expressive (SNF, 59).] Thus, in the opening paragraph he writes:

Hume notó para siempre que los argumentos de Berkeley no admiten la menor réplica y no producen la menor convicción; yo desearía para eliminar los de Croce, una sentencia no menos educada y mortal. La de Hume no me sirve, porque la diáfana doctrina de Croce tiene la facultad de persuadir, aunque ésta sea la única. (OC, 1:217)

[Hume noted once and for all that Berkeley's arguments do not admit of the slightest reply and do not produce the slightest conviction; I would like to have a no less polite and lethal maxim with which to eliminate the arguments of Croce. Hume's does not serve my purpose, for Croce's diaphanous doctrine does have the faculty of persuading, even if this is its only faculty. (my translation)]

It should be noted that Borges' assessment of Croce's doctrine is no less polite and lethal than Hume's maxim, which comes from a footnote of the Scottish philosopher's *An Enquiry Concerning Human Understanding* ([1777] 1993, 106 n. 64), for the word diaphanous has the double connotation of clarity or transparency and insubstantiality. But there is more to this passage. In order to appreciate its full significance, we need to briefly examine Croce's doctrine, and Borges' own notion of the aesthetic. Let us start with the first.

As Borges indicates, the Italian idealist identified beauty with expression, the paradigm of which is language. According to him, the content of expression itself consists of "intuitions", that is, the first impressions gathered up by the artist's mind in his perception of reality. Intuitions encompass feelings and images, which come together and fuse in the unity of the artwork. Accordingly, the form and the content in an artwork are one and the same, and an artwork is beautiful because it encloses feelings within the circle or representation. For literature this seems to mean that writers may express, through words and metaphors, all impressions gathered up in the perception of reality, or at least this is how Borges understands it. The romantic writer, he says, "en general con pobre fortuna, quiere incesantemente expresar." [generally with ill fortune, wish incessantly to express.] In general, romantic writers seek to "deplete" reality by reproducing a mental process with precision: "su método es el énfasis, la mentira parcial" (OC, 1:217, 219). [their continual method is emphasis, the partial lie (SNF, 59, 62).] Borges, then, is interpreting Croce as implying that since language is the paradigm of expression, which consists of intuitions that encompss feelings and images, each word or symbol is inseparable from the artistic intuition, and therefore the symbol and the thing symbolized are one and the same. This interpretation may not be completely accurate, but it follows from Croce's idea that language is the paradigm of expression. Additionally, it would seem to be implied in some passages of his *Aesthetic as science of expression and genral linguistic* (1902). For instance, in that passage quoted by Borges many years later in his "De las alegorías a las novelas" [From Alegories to the Novel; 1948], where Croce argues against the allegory on the basis of its being an abstract concept, that is, a symbol separated from the artistic intuition ([1902] 1959, 34).

Now, according to Borges, classic writers do not try to express anything. They may, for instance, just give a general notification of the important facts. An author that follows this strategy, as Borges indicates, is the English historian Edward Gibbon, whose history tells of the *Decline and Fall of the Roman Empire* (1776-1788) through a thousand years. Although the Argentine poet does not say so, Gibbon's history stands in sharp contrast to Joyce's *Ulysses*, which tells the story of two fictional characters in a single day. Unlike Joyce, Gibbon does not create an order in an effort to replicate the chaotic reality. Instead, he trusts his language, i.e., "cree en la virtud de cada uno de sus símbolos", and creates an order by which he successfully narrates a real episode of universal history, without going into detail. By way of explanation Borges writes:

El autor nos propone un juego de símbolos, organizados rigurosamente, sin duda, pero cuya animación eventual queda a cargo nuestro. No es realmente expresivo, se limita a registrar una realidad, no a representarla. Los ricos hechos a cuya póstuma alusión nos convida, importaron cargadas experiencias, percepciones, reacciones; éstas pueden inferirse de su relato, pero no están en él. Dicho con mejor precisión: no escribe los primeros contactos con la realidad, sino su elaboración final en conceptos. (OC, 1:217-8)

[The author presents us with a play of symbols, no doubt rigorously organized, but whose eventual animation is up to us. He is not really expressive; he does no more than record a reality, he does not represent one. The sumptuous events to whose posthumous allusion he summons us involved dense experiences, perceptions, reactions; these may be inferred from the narrative but are not present in it. To put it more precisely, he does not write reality's initial contacts, but its final elaboration in concepts. (SNF, 60]

It may be argued that Gibbon could not have written the first contacts with reality, given that it is simply impossible to recount in detail the history of the rise and fall of the Empire, its military organization and campaigns, its provincial administration, the passage of Greek philosophy into Christian theology, and the rise and clash of two religions. However, it may as well be possible to tell the precise story of what happens in a single day of an individual. But Borgs does not leave room for such argument. He observes that the greater part of world literature is written in the classic method, and cites a passage of the *Quixote* (I, chap. 34) which does not lose its "effectiveness" in spite of its extreme imprecision. Then he proposes the following hypothesis:

la imprecisión es tolerable o verosímil en la literatura, porque a ella propendemos siempre en la realidad. La simplificación conceptual de estados complejos es muchas veces una operación instantánea. El hecho mismo de percibir, de atender, es de orden selectivo: toda atención, toda fijación de nuestra conciencia, comporta una deliberada omisión de lo no interesante. Vemos y oímos a través de recuerdos, de temores, de previsiones. En lo corporal, la inconciencia es una necesidad de los actos físicos. Nuestro cuerpo sabe articular este difícil párrafo, sabe tratar con escaleras, ... sabe atravesar una calle sin que nos aniquile el tránsito, sabe engendrar, sabe respirar, sabe dormir, sabe tala vez matar: nuestro cuerpo no nuestra inteligencia. Nuestro vivir es una serie de adaptaciones, vale decir, una educación del olvido. (OC, 1:218)

[imprecision is tolerable or plausible in literature because we almost always tend toward it in reality. The conceptual simplification of complex states is often an instantaneous operation. The very fact of perceiving, of paying attention, is selective; all attention, all focusing of our consciousness, involves a deliberate omission of what is not interesting. We see and hear through memories, fears, expectations. In bodily terms, unconsciousness is a necessary condition of physical acts. Our body knows how to articulate this difficult paragraph, how to contend with stairways, ... how to cross the street without being run down by traffic, how to procreate, how to breathe, how to sleep, and perhaps how to kill: our body, not our intellect. For us, living is a series of adaptations, which is to say, an education in oblivion. (SNF, 61)]

As we saw before, we are not aware of everything that is presented to us in experience. Our perceptions, sensations, emotions, imaginings, etc., are dependent upon our "self", i.e., our memory of the past, which includes oblivion of the past as well, and our prevision of the future, which includes our fears. As a consequence, reality as perceived by any one individual is not only imprecise, but also biased. In sum, reality is the same yet different for everyone. For literature (the art of narration in particular) this means that it is impossible to express the whole of reality. Any attempt at expressing everything would not only result in a partial lie, but would necessarily result in the imposition of the writer's point of view, which speaks of certain egotism, or idolatry of the self. For history, on the other hand, the implication is that we cannot arrive at a *pure* universal or personal history. We necessarily impose an arbitrary order on the chaotic reality, which means that there is no science of history. Borges made this explicit for the first

time in 1936, in a synthetic biography devoted to Oswald Spengler, where he approvingly quotes an observation made by Schopenhauer ([1844] 1966, 2:440, 443), namely: "'No hay una ciencia general de la historia; la historia es el relato insignificante del interminable, pesado y deshilvanado sueño de la humanidad'." (OC, 4:238) ['There is no general science of history. History is the insignificant tale of humanity's interminable, weighty, fragmented dream.' (SNF, 170)], which he juxtaposes to Spengler's historical thesis in *Der Untergang des Abendlandes* (1923) [The decline of the West], according to which cultures pass through an organic life cycle of growth and decay, which he names by analogy to seasons. Later, Borges would repeatedly quote Schopenhauer's observation, frequently adding the following lines by the same author ([1844] 1966, 2:443):

"Los hechos de la historia son meras configuraciones del mundo aparencial, sin otra realidad que la derivada de las biografías individuales. Buscar una interpretación de esos hechos es como buscar en las nubes grupos de animales y de personas." (OC, 4: 353)

["The events of history are mere configurations of the phenomenal world, which have no other reality than that derived from individual biographies. Accordingly, the attempt to explain and expound them is like the attempt to see group of persons and animals in the forms of clouds." (my translation)]

Both, the historian and writer of literary works, impose a verisimilar order upon reality. This, however, does not mean that there is no fundamental distinction between history and literature. In his book review of Veit Valentin's *Weltgeschichte* (1939) [History of the World], for instance, Borges underscores the similarity between Schopenhauer's and Valentin's opinion of history (1939, 1:12), about which Borges writes as follows:

"Cada acontecimiento es nuevo" nos dice (Valentin). "La realidad es más pródiga que cualquier imaginación; no hay leyes históricas. La historia universal es un caso particular que consta de casos particulares: es la revelación de lo individual". Palabras más valederas si recordamos que las firma un historiador y que encabezan una obra admirable. (BES, 209)

["Every event is new" he (Valentin) says. "Reality is more prolific than any imagining; there are no historical laws. The history of the universe is a particular case made of particular cases: it is the revelation of that which is personal." These words have more validity if we bear in mind that they are endorsed by a historian, and are the preamble to an admirable work. (my translation)]

In addition, Borges praises the absence of Darwinian and Catholic discourse in Valentin's work, and the absence of all superstitions, including the superstition of progress. But the historian does not invent his characters. Real individuals like Shakespeare, Loyola, Wallestein, Cromwell, Napoleon, Bismarck, etc. illustrate and hold the narration. Borges acknowledges, however, that when the historian, in general, knows little about his characters, he may as well invent some of the circumstances. Thus, in his lecture "A Poet's Creed" of 1968 he says:

When I write, I try to be loyal to the dream and not to the circumstances. Of course, in my stories (people tell me I should speak about them) there are true circumstances, but somehow I have felt that those circumstances should always be told with a certain amount of untruth. There is no satisfaction in telling a story as it actually happened. We have to change things, even if we think them insignificant: if we don't we should think of ourselves not as artists but perhaps as mere journalists or historians. Though I suppose all true historians have known that they can be quite as imaginative as novelists. For example when we read Gibbon, the pleasure we get from him is quite akin to the pleasure we get from reading a great novelist. After all, he knew very little about his characters. I suppose he had to imagine the circumstances. He must have thought of himself as having created, in a sense, the decline and fall of the Roman Empire. And he did it so wonderfully that I do not care to accept any other explanation (CV, 116).

In contrast, the writer does not only invent the circumstances, he also creates characters that resemble real individuals, whose acts are not always conscious. This is the case of Argentine writer José Hernández, who created, in Borges' opinion, one of the most verisimilar characters in world literature. In an essay published a month prior to the essay under discussion where Borges analyzes Hernandez's Martín Fierro (1872),¹⁷ he says that the author did not attempt "la imposible presentación de todos los hechos que atravesaron la conciencia de un hombre" (OC, 1:196-7). [the impossible presentation of all the facts that went through a man's consciousness (my translation).] In the work, the protagonist Martín Fierro tells his personal story leaving many things untold, and the reader is forced to wonder about many of the reasons behind his actions, and in Borges' words: "esa perplejidad de los motivos lo hace más real" (OC, 1:197). [the perplexity of those motives makes him more real (my translation).] In contrast, the Argentine poet would later say about Joyce's *Ulysses*: "We are told thousands of things about the two characters, yet we do not know them" (CV, 54). That is, in his effort to simulate the chaotic reality, imposing his own point of view, Joyce made his characters less real.

Now, according to Borges the writer, but not the historian, may also resort to two additional strategies in their postulation of reality. One is "strictly literary" and "consiste en imaginar una realidad más compleja que la declarada al lector y referir sus derivaciones y efectos" (OC, 1:219). [consists of imagining a more

¹⁷ The essay in question is "*Martin Fierro*", first published in *Sur*, no. 1, May, 1931. It was later conjoined with "El coronel Ascasubi" also published in *Sur*, no. 1, January, 1931, becoming part of the essay "La poesía gauchesca" (1957), which was included in the second edition of *Discusión*.

complex reality than the one declared to the reader and describing its derivations and results (SNF, 62).] As an example Borges refers to a passage of William Morris's *The life and death of Jason* (1867), and to the opening of Alfred Tennyson's *Morte d' Arthur* (1842), which reads as follows:

So all day long the noise of the battle roll'd Among the mountains by the winter sea; Until King's Arthur's table, man by man, Had fallen in Lyonnesse about their lord, King Arthur; then, because his wound was deep, The bold Sir Bedivere uplifted him, Sir Berdivere the last of all his knights, And bore him to a chapel nigh the field, A broken chancel with a broken cross, That stood on a dark strait of barren land. On one side lay the Ocean, and on one Lay a great water, and the moon was full.

Borges translates this fragment "en desentonada prosa española" [in unmelodious

Spanish prose] as follows:

"Así, durante todo el día, retumbó el ruido bélico por las montañas junto al mar invernal, hasta que la tabla del rey Artús, hombre por hombre había caído en Lyonness en torno a su señor, el rey Artús: etonces, porque su herida era profunda, el intrépido Sir Bediver lo alzó, Sir Berdiver el último de sus caballeros, y lo condujo a una capilla cerca del campo, un presbiterio roto, con una cruz rota, que estaba en un oscuro brazo de terreno árido. De un lado yacía el Océano; del otro lado, un agua grande, y la luna era llena." (OC, 1:219)

In Borges' opinion this fragment is the best illustration of this strategy. In it, says he, Tennyson postulates a more complex reality three times: "la primera mediante el artificio gramatical del adverbio *así*; la segunda y mejor, mediante la manera incidental de transmitir un hecho: *porque su herida era profunda*; la tercera mediante la inesperada adición de y *la luna era llena*" (OC, 1:219-20; italics in

the original). [first, by the grammatical artifice of the adverb *so*; second (and better), by the incidental manner of transmitting a fact: "because his would was deep"; third, by the unexpected addition of "and the moon was full." (SNF, 62; italics in the original).]

The other strategy, is less strictly literary, since it may also be used in the cinematographic novel, and consists in making use of "la invención circunstancial" [the invention of circumstances], i.e., the creation of "pormenores lacónicos de larga proyección" (OC, 1:220). [laconic details with broad implications (SNF 63).] Borges offers an example extracted from Enrique Larreta's *La Gloria de don Ramiro* (1929): "ese aparatoso *caldo de torrezno, que se servía en una sopera con caldo para defenderlo de la voracidad de los pajes*, tan insinuativo de la miseria decente, de la retahíla de criados, del caserón lleno de escaleras y vueltas y de distintas luces" (OC, 1:220; italics in the original). [the appetizing "bacon broth, served in a tureen with a padlock to protect it from the voracity of the pages," so suggestive of genteel poverty, the line of servants, the big old house full of stairways and turns and varying light (SNF, 63).]

The use of these strategies and the trust in language, allow the classic writers to offer a reality which "is a question of confidence". The readers, thus, willingly suspend their disbelief, and their response to the fiction presented by the work of art is analogous to that which they have in real life. That is, their perception of the fictional reality is accompanied by emotions, desires, sensations, and imaginings, which depend on their "self" (memories of the past and the prevision of the future). Through allusion, then, the classic writers make the readers imagine, and thus experience, the emotions, perceptions, reactions, and sensations, that are not in the work. This is, I think, what Borges means when he says that those things that are not in the work may be "inferred" from it. This inference would be different for every reader, given that their 'self' is different. Furthermore, since the readers' self is always shifting, the inference would change every time they read the work. Therefore, the artwork is subject to multiple interpretations, thanks to its imprecision; in short, it is the same yet different for everyone, and it changes over time.

The artwork itself, then, is not beautiful. For Borges the artwork is "effective" if it elicits an emotional response from the reader, just as reality does. Borges would make this explicit in 1936, in an essay entitled "Eugene G. O'Neill: Premio Novel de Literatura".¹⁸ There, he praises the American dramatist's later works, which are neither realistic nor psychological, but are nonetheless faithful to the "quotidian of the world". In these dramas, says Borges, we know that what happens is terrible, though we cannot specify exactly what happens. Then he writes:

La música (dijo Hanslick) es un idioma que entendemos y hablamos, pero que no somos capaces de traducir. De traducir en conceptos, naturalmente. Es el caso de los dramas de O'Neill. Su espléndida eficacia es anterior a toda interpretación y no dependen de ella. Es también el caso del Universo, que nos destruye, nos exalta y nos mata, y no sabemos nunca qué es. (OC, 4:225)

[Music (said Hanslick) is a language which we understand and speak, but are unable translate; to translate into concepts, naturally. This is the case of O'Neill's dramas. Their splendid efficacy is prior to all interpretation,

¹⁸ The essay was first published in *El Hogar*, November 1936, and later included in the anthology *Textos Cautivos* (1986) by Enrique Saceiro-Garí & Emir Rodríguez Monegal.

and does not depend on it. It is also the case of the Universe, which destroys us, excites us, and kills us, and we never know what it is. (my translation)]

Here, Borges is referring to the Austrian musician and critic Eduard Hanslick, who famously opposed the aesthetics of expression in music, in the development of which Schopenhauer was an influential figure. It is perhaps for this reason that Borges chooses to quote from Hanslick's *Vom Musikalisch-Schönen* (1854) [On the Musically Beautiful; 1986, 30), instead of quoting from Schopenhauer's main work, where the German philosopher said something analogous about music ([1844] 1966, 1:260). It should be remembered, however, that Borges took from Schopenhauer the idea that the universe is music, and inferred that since music is in time alone, without any reference to space, it follows that the universe is time. And time is, as we have seen, an enigma, i.e., we never know what it is.

In general, beauty or the aesthetic for Borges is not identical to expression, but it happens as a result of the contact between the reader and the work. Many years later, in the prologue to his *Obra poética* (1977), Borges would write

Este prólogo podría denominarse la estética de Berkeley, no porque la haya profesado el metafísico irlandés –una de las personas más queribles que en la memoria de los hombres perduran—, sino porque aplica a las letras el argumento que éste aplicó a la realidad. El sabor de la manzana (declara Berkeley) está en el contacto de la fruta con el paladar, no en la fruta misma; análogamente (diría yo) la poesía está en el comercio del poema con el lector, no en la serie de símbolos que registran las páginas de un libro. Lo esencial es el hecho estético, el thrill, la modificación física que suscita cada lectura Esto acaso no es nuevo, pero a mis años las novedades importan menos que la verdad. (OP, 15; italics in the original)

[This prologue could be called Berkeley's aesthetic, not because the Irish metaphysician –one of the most cherished persons that endure in the memory of men-- professed it, but because it applies to the belles-lettres

the argument that he applied to reality. The flavor of the apple (says Berkeley) is in the contact of the fruit with the palate, not in the fruit itself; similarly (I would say) poetry is in the exchange of the poem with the reader, not in the series of symbols registered in the pages of a book. What is essential is the aesthetic fact, the thrill, the physical modification that each reading arouses. This, perhaps, is not new, but at my age novelty is less important than the truth. (my translation; italics in the original)]

Seen from Borges' perspective, this view of the aesthetic was certainly not new. The opening passage to this essay and his explanation of the classic method show that by 1931 he had already reached this conclusion. At this point, however, Borges applies Berkeley's argument without saying so, thus allowing the readers the pleasure of finding it out for themselves. His mention of Hume's polite and lethal maxim ("Berkeley's arguments do not admit the slightest reply and do not produce the slightest conviction") not only serves as a clue for the readers, but also allows Borges to declare the possibility of this truth without being perceived as a writer who wants to impose his point of view. Clearly he wants to distance himself from Croce and the romantic writers, whose "continual method is emphasis, the partial lie". Moreover, the argument that he applies to the *belles*-*lettres* is not of his own creation, but had been brought to existence by the Irish metaphysician, who applied it to reality. This conforms to the method of the classic writer, who is neither an idolater of the self, nor an innovator:

Para el concepto clásico, la pluralidad de los hombres y de los tiempos es accesoria, la literatura es siempre una sola. Los sorprendentes defensores de Góngora lo vindicaban de la imputación de innovar – mediante la prueba documental de la buena ascendencia erudita de sus metáforas. El hallazgo romántico de la personalidad no era ni presentido por ellos. Ahora, todos estamos tan absortos en él, que negarlo o descuidarlo es sólo una de tantas habilidades para "ser personal". (OC, 1:219)

[To the classical mind, the plurality of men and of eras is incidental; literature is always one and the same. The surprising defenders of Góngora exonerated him of the charge of innovation – by documenting the fine erudite lineage of his metaphors. They had not the slightest premonition of the romantic discovery of the personality. Now all of us are so absorbed in it that the fact of denying or neglecting it is only one of many clever ways of "being personal". (SNF, 61)]

According to Borges, the classic writers avoid creating new metaphors in order to express something, and may accordingly not use them at all. However, the use of conventional metaphors is justified, given the classic writers' belief that "una vez fraguada una imagen ésta constituye un bien público" (OC, 1:219). [once an image has been brought into existence, it is public property (SNF, 61).]

The same principles seem to apply to language. This is suggested by the idea that classic writers believe in "the ample virtue of each of its signs". This implies that new words need not to be created. Classic writers use those that already exist, the virtue of which resides in the fact that they stand for something that is public knowledge. In other words, the virtue of language does not reside in the ability of its symbols to express something, but in the fact that the readers, as well as the writers, have experienced what those symbols stand for. This had been hinted at by Borges in his *Evaristo Carriego* of 1930, where he wrote: "No hay versificador incipiente que no acometa la definición de la noche, de la tempestad, del apetito carnal, de la luna; hechos que no requieren definición porque ya poseen nombre, vale decir, una representación compartida" (EC, 54; OC, 54). [There is no fledgling versifier who does not attempt to define the night, a storm, carnal desire, the moon – things that stand in no need of definition since they

already have a name or a representation known to us all (ECE, 66).] He makes this notion more explicit in his 1968 lecture "A Poet's Creed," where he said:

When I was young I believed in expression. I had read Croce, and the reading of Croce did me no good. I wanted to express everything. I thought, for example, that if I needed a sunset I should find the exact word for a sunset –or rather, the most surprising metaphor. Now I have come to the conclusion (and this conclusion may sound sad) that I no longer believe in expression: I believe only in allusion. After all, what are words? Words are symbols for shared memories. If I use a word, then you should have some experience of what the word stands for. If not, the word means nothing to you. I think we can only allude, we can only try to make the reader imagine. The reader, if he is quick enough, can be satisfied with our merely hinting at something (CV, 117-8).

The passage also shows the reason behind Borges' desire to distance himself from Croce and the romantic writers, noticed above: the Argentine poet himself had believed in expression or exact representation sometime during the 1920's. The analysis of this period goes beyond the scope of the present study. All that need be stressed here is that after he ceased to believe in expression, Borges adopted and never abandoned the idea that words are symbols for shared memories. In the prologue to *El informe de Brodie* (1970), for instance, he writes: "Cada lenguaje es una tradición, cada palabra un símbolo compartido" (OC, 2:400). [Each language is a tradition, each word a shared symbol (my translation).] This suggests that Borges had the same idea in mind when he wrote in the prologue to "El otro el mismo" [The Self and the Other; 1964]: "Los idiomas del hombre son tradiciones que entrañan algo de fatal" (OC, 2:235). [The languages of man are traditions which contain something inevitable about them (SP, 147).] That is to say, the idea that words are not abstract symbols capable of representing or expressing all emotions, sensations, and imaginings, but symbols

that stand for something for which we have some experience. This experience, as Borges himself explained in another of the Norton lectures in 1968, is not only accompanied by emotions, sensations, imaginings, etc., but is also concrete in that it springs from our contact with reality. Moreover, it varies from individual to individual, and even in the life of a single individual. Therefore, words are not abstract symbols with a fixed or hard conceptual meaning; they are in a sense concrete and carry a multiplicity of meanings without committing themselves to any one in particular (CV, 79-80). To put it differently, words are metaphors, as Argentine writer Leopoldo Lugones said in the forward to his book Lunario Sentimental (1909) (CV, 22). Although Borges does not say so in this lecture, this is, by implication, what makes literature akin to music. That is, literature, like music, is a language that we understand and speak but are unable translate into concepts, as both, Hanslick and Schopenhauer have it. To put it in Schopenhauer's terms, literature, like music, "is as immediate an objectification of the *will* as the universe itself is"; hence, the universe is literature or poetry, to be more precise. In this case, of course, poetry means the indefinable series of emotions, imaginings, perceptions, that we experience when confronted with a literary work, be it in prose or verse.

Now, both Hanslick and Schopenhauer, thought, albeit for different reasons, that music is the highest of all arts because it is the only art form where the form *is* the content and vice versa (Hanslick [1854] 1986, 30, 80; Schopenhauer, [1844] 1966, 1:262, 2:448-9). Furthermore, the Austrian musician argued that "what is description in literature is already metaphor in music"

([1854] 1986, 30). Borges, on the other hand, thought that in a way the same thing happens in literature. On this point, it is worth quoting a passage from the prologue to "El otro el mismo" mentioned above, where Borges expounds on the aesthetic ideas discussed so far:

Pater escribió que todas las artes propenden a la condición de la música, acaso porque en ella el fondo es la forma, ya que no podemos referir una melodía como podemos referir las líneas generales de un cuento. La poesía, admitido ese dictamen, sería un arte híbrido: la sujeción de un sistema abstracto de símbolos, el lenguaje, a fines musicales. Los diccionarios tienen la culpa de ese concepto erróneo. Suele olvidarse que son repertorios artificiales, muy posteriores a las lenguas que ordenan. La raíz del lenguaje es irracional y de carácter mágico. El danés que articulaba el nombre de Thor o el sajón que articulaba el nombre de Thunor no sabía si esas palabras significaban el dios del trueno o el estrépito que sucede al relámpago. La poesía quiere volver a esa antigua magia. (OC, 2:236)

[Pater wrote that all arts aspire to the condition of music, perhaps because in music meaning is the form, since we are unable to recount a melody in the way we can recount the outline of a short story. If we accept this statement, poetry would be a hybrid art –the subjection to of a set of abstract symbols which is language to musical ends. Dictionaries are to blame for this erroneous concept. It is often forgotten that they are artificial repositories, put together well after the languages they organize. The root of language is irrational and of magical nature. The Dane who pronounced the name of Thor or the Saxon who uttered the name of Thunor did not know whether these words signified the god of thunder or the rumble that is heard after the lightning flash. Poetry wants to return to that ancient magic. (SP, 149)]

It should be noted that in the English translation of this passage Borges' "la sujeción de un sistema abstracto de símbolos, el lenguaje, a fines musicales" is rendered as "the subjection of a set of abstract symbols which is language to musical ends", when in fact it should read: "the subjection of an abstract system of symbols which is language to musical ends." For, what Borges is obviously

and in fact giving as arbitrary is the system, not the symbols. These are described as 'irrational and of magical nature', which means that they are artistic rather than arbitrary creations. Note too, the careful way in which Borges avoids using the word "content" in relation to form. Instead he uses the word "fondo", which he will later translate as "substance". Thus, the phrase "Pater wrote that all arts aspire to the condition of music, perhaps because in music meaning is the form", should read: "Pater wrote that all arts aspire to the condition of music, perhaps because in music the substance is the form". For, in fact, in his lecture "Thought and Poetry" delivered in English in 1968, he says:

Walter *Pater wrote that all art aspires to the condition* of music. The obvious reason (I speak as a layman of course) would be that, in music, form and substance cannot be torn asunder. Melody, or any piece of music, is a pattern of sounds and pauses unwinding itself in time, a pattern I do not suppose can be torn. The melody is merely the pattern, and the emotions it sprang from, and the emotions it awakens. The Austrian critic Hanslick wrote that music is a language that we can use, that we can understand, but that we are unable to translate.

In the case of literature, and especially of poetry, the case is supposed to be quite the opposite. We can tell the plot of *The Scarlet Letter* to a friend of ours who had not read it, and I suppose we could even tell the pattern, the framework, the plot of, say, Yeats' sonnet "Leda and the Swan." So that we fall into thinking of poetry as being a bastard art, as being something of a mongrel. (CV, 77-8; italics in the original)

Borges' description of the melody in this passage is nowhere to be found in Hanslick's work referred to above or Pater's *The Renaissance* from which Borges quotes ([1888] 1998, 86),¹⁹ but it is reminiscent of Croce's idea that in literature form and content are one and the same. However, while Croce identifies the

¹⁹ Pater's work was first published in 1873, but this first edition did not include Borges' quote, which comes from the essay "The School of Giorgione" (1877), added to the third edition of *The Renaissance* in 1888. ([1888] 1998, xix).

'content' with the images and feelings gathered up by the artist's mind in the perception of reality, Borges identifies the 'substance' with the emotions of the musician or the poet from which the melody sprang, and the emotions that the musical or literary piece awakens in the listeners. In this sense, music and literature do not differ. However, in the case of literature words, which were originally metaphors, have acquired a fixed abstract meaning. This in turn facilitates everyday communication and abstract thinking, and also makes it possible to recount the outline of a literary work, be it in prose or verse. Thus, two pieces may have the same abstract meaning and yet have a different "musical" meaning, which eludes us in the act of seizing it. In this connection Borges cites two fragments from William Butler Yeats' "After a Long Silence", and George Meredith's Modern Love (Sonnet IV), respectively: "Bodily decrepitude is wisdom; young / We loved each other and were ignorant." and "Not till the fire is dying in the grate / Look we for any kinship with the stars" (CV, 83). In both fragments we have the same abstract meaning, namely, the idea that we become interested in philosophy ("love of wisdom") at an old age. Yet, says Borges, "they strike quite different chords" (CV, 83-4).

Through allusion, then, classical writers recover the music of the words bringing language back to its original source, which was not rational but irrational. That is, words did not start by being abstract, but sprang from the emotions of those who first created them, which in turn happened as a result of a concrete experience. In sum, language was originally an artistic creation, or as
Borges says in his lecture, paraphrasing an observation made by Chesterton in his

book G. F. Watts (1904, 91):

... language is not, as we are led to suppose by the dictionary, the invention of academicians or philologists. Rather, it has been evolved through time, through a long time, by peasants, by fishermen, by hunters, by riders. It did not come from the libraries; it came from the fields, from the sea, from the rivers, from the night, from the dawn. (CV, 81)

In Borges' opinion, dictionaries make us think that the explanations they provide exhaust the words, but this is erroneous. Each word is unique in the sense that it carries its own magic or music, and cannot be "exchanged" by any other (CV, 91). This is related to another observation by Chesterton (also from his book on Watts) quoted by Borges in his 1942 essay "El idioma analítico de John Wilkins" [John Wilkins' Analytical Language], which is in his own estimation "acaso lo más lúcido que sobre el lenguaje se ha escrito" (OC, 2:86) [perhaps the most lucid words written about language (SNF, 232)]:

He (Man) knows that there are in the soul tints more bewildering, more *numberless*, and more nameless than the colours of an autumn forest... Yet he seriously believes that these things can every one of them, in all their tones and semi-tones, in all their blends and unions, be accurately represented by an arbitrary system of grunts and squeals. He believes that an ordinary civilized *stockbroker* can really produce out of his own inside noises which denote allthe mysteries of memory and allthe agonies of desire. (1904, 88-91; emphasis added)

Although Borges does not mention this observation in his lecture, he does refer to Whitehead's "Fallacy of the Perfect Dictionary," which he had compared to Chesterton's statement in his 1939 book review of the English philosopher's *Modes of Thought* (1938) mentioned in the previous chapter. The 'fallacy', about which Borges says: "Chesterton –¿quién lo adivinaría?— ya la había denunciado

con entusiasmo." (OC, 4:422) [Chesterton –who would have guessed?— had already denounced it with enthusiasm. (my translation)], refers to an idea expounded on by Whitehead in this book, according to which we are under the false but "very natural" impression of there being an exact symbol for *all* of the fundamental ideas that are applicable to human experience. Furthermore, we erroneously believe that human language explicitly expresses these ideas in single words or phrases. ([1938] 1968, 173).

In general, we may say that the fallacy of the perfect dictionary divides writers into two groups: the romantics and the classicist. The latter believe that language is a tradition, and each word a shared symbol. The former, on the other hand, believe that words are arbitrary symbols, and that language can be used to express everything. As a consequence, they manipulate those symbols for musical ends, and even arbitrarily invent words, phrases or metaphors in an effort to express *all* things.

In the 1942 essay on Wilkins, Borges showed that such a conception of language raises insuperable difficulties. To begin with, and this seems quite evident, if words were expressive they would not need to be defined. Thus, early on in the essay Borges makes the following ironic comment:

No hay edición de la Gramática de la Real Academia que no pondere "el envidiado tesoro de voces pintorescas, felices y expresivas de la riquísima lengua española", pero se trata de una mera jactancia sin corroboración. Por lo pronto, esa misma Real Academia elabora cada tantos años un diccionario que define todas las voces del español. . . (OC, 2:84)

[There is no edition of the Royal Spanish Academy Grammar that does not ponder "the envied treasure of picturesque, felicitous, and expressive, words in the reaches of the Spanish language, but that is mere boasting, with no corroboration. Meanwhile, that same Royal Academy produces a dictionary every few years in order to define those words.... (SNF, 229-30)]

Like Spanish, all languages in the world are, in Borges' opinion, equally inexpressive. Wilkins' analytical languagestands out as the only example of an expressive language, given that in it each word defines itself. It is based in the division of the universe in forty categories indicated by monosyllables of two letters. Those categories are subdivided into differences indicated by a consonant, which are in turn subdivided into species indicated by a vowel. Thus, for instance, in Spanish "La palabra salmón no nos dice nada; zana, la voz correspondiente [en el idioma de Wilkins] define (para el hombre versado en las cuarenta categorías y en los géneros de esas categorías) un pez escamoso, fluvial, de carne rojiza."(OC, 2:86; italics in the original). [The word salmon tells us nothing; zana, the corresponding word [in Wilkins' language], defines (for the person versed in the forty categories and the classes of those categories) a scaly river fish with reddish flesh (SNF, 232; italics in the original).] Wilkins' language, then, is remarkable in that it functions as a dictionary or a "secret encyclopedia," and aims at classifying -in a lasting way— all human ideas. In this sense it may be regarded as Descartes' dream come true:

Descartes en una epístola fechada en noviembre de 1629, ya había anotado que mediante el sistema decimal de numeración, podemos aprender en un solo día a nombrar todas las cantidades hasta el infinito y a escribirlas en un idioma nuevo que es el de los guarismos; también había propuesto la formación de un idioma análogo general, que abarcara todos los pensamientos humanos. John Wilkins, hacia 1664, acometió esa empresa. (OC, 2:84-5) [Descartes, in a letter dated November 1619, has already noted that, by using the decimal system of numeration, we can learn in a single way to name all the quantities to infinity, and to write them in a new language, the language of numbers; he also proposed the creation of a similar, general language that would organize and contain all human thought. Around 1664, John Wilkins undertook that task. (*Selected Non-fiction*, 230)]

This passage, which makes reference to Descartes' letter from Holland to Marin Marsenne (1970, 3-6), is critical in the understanding of Borges' critique of the idea that a set of symbols (i.e., language) can encompass all 'things'. Despite being an eminent mathematician, the French philosopher did not realize that the decimal system of numeration cannot name all quantities to infinity, as we will see below. The same goes for the simplest system of numeration –the binary system invented by Leibniz— and for all others, including Wilkins' base-forty system. In other words, given that the things that exist are infinite in number or numberless as both, Chesterton and Descartes have it, we cannot name them all. To understand this we need to briefly consider the process of counting. When we count we match in a one-to-one correspondence the elements of one class, for instance all books in a library, with the element of another class, namely, the integers, which for convenience we regard as being given in serial order. Any system of numeration, for example the decimal system (which requires a finite number of symbols, from 0 to 9, to represent the integers), can name all the books in a library because the number of books is finite. However, there is no system that can actually name all quantities to infinity, since infinity by definition is unreachable. If we take the largest number that we can think of, no matter how big, this number is not infinite but finite. That is, we cannot assign a symbol (be it a number or a word) to *all* ideas that are applicable to human experience. Borges

hints at this fact in a footnote, where he calls attention to Leibniz's system, which the German philosopher and mathematician discovered in the "enigmatic hexagrams of the I King," and indicates that the only numeration system that could possibly register an infinite number of symbols is so complex that only *"divinities and angels*" can use it.

Borges then indicates that in Wilkins' language, since every letter is meaningful there is a non-arbitrary symbol for each thing represented. However, he immediately underlines the arbitrariness, ambiguity, redundancies, and deficiencies of the forty-part table on which the language is based, presenting examples of the classification of the mineral world. Then he compares it to the equally chaotic (i.e., arbitrary) system of a Chinese "apocryphal" encyclopedia that divides the category of 'animal in 14 classes, from a to n; and to that of the Bibliographical Institute of Brussels that parcels the universe into 1000 subdivisions. Together, these chaotic systems of classification include many of the areas of human knowledge: the natural world of minerals and animals; the human world, as it exhibits itself in religion, mysticism, morality, and human relations; and also knowledge about what is conceivable though impossible. The apocryphal Chinese encyclopedia illustrates this last type of knowledge, for it is impossible to use the alphabet to arrange an encyclopedia for reference, when the language in which it is written does not posses an alphabet. But Borges could conceive of this encyclopedia and include under the category 'animal' subjects such as "perros que mueven la cola" [dogs that shake their tails] or "innumerables" [innumerable], in an effort to present three systems that together

seem to register all human ideas. However, even if this encyclopedia existed, these systems of classification could not possibly register all human ideas, because whether you parcel the universe in 40, 14, 1000, or any number of categories, the number of things represented under them will be no nearer to infinite than number one.

From here Borges draws a conclusion consistent with what he had argued so far with regards to the universe, namely, that the universe might be a fiction of our partial knowledge; however, he goes a step further to suggest that the concept of the universe itself may be erroneous

... notoriamente no hay clasificación del universo que no sea arbitraria y conjetural. La razón es muy simple: no sabemos que cosa es el universo. "El mundo –escribe David Hume— es tal vez un bosquejo rudimentario de algún dios infantil, que lo abandonó a medio hacer, avergonzado de su ejecución deficiente; es obra de un dios subalterno, de quien los dioses superiores se burlan; es la confusa producción de una divinidad decrépita y jubilada, que ya se ha muerto" (*Dialogs Concerning Natural Religion*, V, 1779). Cabe ir más lejos; cabe sospechar que no hay universo en el sentido orgánico, unificador, que tiene esa ambiciosa palabra. Si lo hay falta conjeturar su propósito; falta conjeturar las palabras, las definiciones, las etimologías, las sinonimias del secreto diccionario de Dios. (OC, 2:86)

[... obviously there is no classification of the universe that is not arbitrary and speculative. The reason is quite simple: we do not know what the universe is. "This world," wrote David Hume, "was only the first rude essay of some infant deity who afterwards abandoned it, ashamed of his lame performance; it is the work only of some dependent, inferior deity, and is the object of derision to his superiors; it is the production of old age and dotage in some superannuated deity, and ever since his death has run on ..." (*Dialogs Concerning Natural Religion* V [1779]). We must go even further, and suspect that there is no universe in the organic, unifying sense of that ambitious word. If there is, then we must speculate on its purpose; we must speculate on the words, definitions, etymologies, and synonymies of God's secret dictionary. (SNF, 231) Borges' reference to Hume in this passage is not incidental. In the Scottish philosopher's dialogue, which explores the *nature* of the Divine Being and His providential plan from the perspective of human reason, it is the skeptic Philo who says these words to Cleanthes, a character who believes that we can prove the existence of a Deity whose nature has much in common with the human mind ([1779] 1998, 2, 15). Immediately after, Philo declares that what he had just said, along with other similar suppositions, can only take place if the attributes of the Deity are assumed finite. Therefore, Borges is justified to go even further and question the design of the universe, for he is assuming that the ideas that are applicable to human experience, and by extension to God, are infinite. Hume, however, never abandoned the belief in the design of the universe, and therefore in some kind of intelligent Being, despite his complete skepticism with regards to all beliefs, and his doubts about the merits of logical argumentation about the existence of God. For he thought that all reasonable people have a natural compulsion to believe in certain things, even though we are unable to resolve all doubts theoretically. ([1779] 1998, xiv) Similarly, Borges questions but does not entirely abandon the notion of a design of the universe, as it is clear from what he adds to the passage above, namely, that "La imposibilidad de penetrar el esquema divino del universo no puede, sin embargo, disuadirnos de planear esquemas humanos, aunque nos conste que éstos son provisorios" (OC, 2:86). [The impossibility of penetrating the divine scheme of the universe cannot, however, dissuade us from planning human schemes, even though it is clear that they are provisional (SNF, 231).] Moreover, long before he wrote this essay, Borges had

proposed a model of the universe based on thought, rather than classification, according to which causal connections are impossible to determine. And by the time this essay was published in 1942, he had already transformed this early chaotic universe into a living labyrinth where chaos and order coexist. Borges, however, did not arrive at this conception starting from the presuppositions of language, for he was aware of the fact that it is humanly impossible to do so. What he offered was a near solution to the riddle of the universe that comprises metaphysical as well as poetic elements, and which he attributed to Schopenhauer. In the two chapters that follow we will examine in detail the manner in which Borges arrived at this solution, and consider how it relates to those works of art where fiction lives within fiction.

Chapter 3: History of Eternity and the Doctrine of the Cycles

What is the history of philosophy, but a history of the perplexities of the Hindus, of the Chinese, of the Greeks, of the Schoolmen, of Bishop Berkeley, of Hume, of Schopenhauer, and so on? I merely wish to share those perplexities with you.

—JLB, "The Riddle of Poetry"

In the first chapter we saw that Borges rejected the model of the universe that assumes the symmetry of absolute notions of time and space, for two main reasons. First, these notions do not resemble the space and time that we experience; and second, the model itself leads to insurmountable logical absurdities, such as those suggested by Zeno and Russell. Instead, he proposed to think of reality in terms of time, for time alone is inseparable from the intellect's essence. However, given that we do not perceive subdivisions of time, Borges' notion of time is mathematically discontinuous, but perceptually continuous. That is, time is a process that takes place by finite not infinitesimal steps; it comprises our perceptions, thoughts, images, feelings, passions, desires, and emotions, which are infinite in number, and succeed each other with incredible rapidity. Everything is in perpetual flux, as Heraclitus said, but since we have an indispensable notion of self (of something that endures), there ought to be something permanent. Borges considered this issue in two essays of 1936: "Historia de la eternidad" [History of eternity] and "La doctrina de los ciclos" [The Doctrine of the Cycles].²⁰ Let us examine the second one first.

In this essay Borges discusses one of the forms of the theory of cycles known as Eternal Recurrence or Eternal Return. In this form, the theory presupposes that everything that happens is part of an endlessly repeating cycle or sequence of events. Accordingly, not just individual persons, but the whole universe and all of history will be repeated eventually without variations. Here, we are faced with the impossibility of asserting that something *was* so, for it is equally truth that the "*same*" thing *will* be so, or even of saying that it *is*, if that is taken in a temporal sense. So, the universe itself and all of history is eternal, infinite, and has no beginning or end.

In the history of philosophy the theory of recurrence is most commonly associated with Stoicism, one of the two great philosophical schools of the Hellenistic period. In general the Stoics believed that there is no such thing as chance, and that the universe undergoes total periodic conflagrations with all the intervening events re-enacting themselves. The other school, the Epicureans, did not hold a theory of recurrence. However, according to the poet Titus Lucretius Carus (c. 99-c. 55 B.C.E) they were willing to concede that an individual person might live again. In his *De rerum natura (On the Nature of Things)*, where the Latin poet sets forth in verse the philosophy of Epicurus, he explains that matter exists in the form of an infinite number of atoms moving in an infinite space, and

²⁰ Both of these essays were included in *Historia de la eternidad* (1936), but the second was first published in *Sur*, no. 20, May 1936.

reasons that in the immeasurable extent of time the same atoms might by chance meet in the same order, so that the person lived again. He says, however, that the recurrence means nothing to us, given that we have no recollection of our earlier existence (bk. 1, lines 483-644; bk. 3, lines 846-62). Apart from this, evidence exists indicating that the theory of recurrence was held by the early Pythagoreans (i.e., the Pythagoreans of the Pre-Socratic era). This evidence comes from the Neoplatonist Simplicius, who wrote a commentary on Aristotle's *Phisics*, where he quoted the Greek philosopher's pupil Eudemus of Rohdes as saying:

But if someone were to believe the Pythagoreans that numerically the same things recur, then I also will romance, holding my staff, while you sit there, and everything else will recur in like manner, *and it is plausible to say that the time too will be the same*. (1992, 142; sec. 732, lines 30-5; italics added)

Borges provides a Spanish translation of this passage, with the exception of what appears in italics. The reason for this omission is understandable, for Eudemus' inference that time will be the same destroys the Pythagorean theory given that it implies that things really happen only once and therefore there is no recurrence (1992, 3).

Additionally, Borges refers to the Stoics, but omits mentioning Lucretius. At the beginning of the essay, however, he imaginatively reconstructs a conceptual argument for recurrence that brings to mind the Latin poet's work. He writes that the doctrine of the Eternal Return may be formulated as follows:

"El número de todos átomos que componen el mundo es, aunque desmesurado, finito, y sólo capaz como tal de un número finito (aunque desmesurado también) de permutaciones. En un tiempo infinito, el número de las permutaciones posibles debe ser alcanzado y el universo tiene que repetirse. De Nuevo nacerás de un vientre, de Nuevo crecerá tu esqueleto, de Nuevo arribará esta misma página a tus manos iguales, de Nuevo cursarás todas las horas hasta la de tu muerte increíble" (OC, 3:385; italics in the original)

[The number of all the atoms that compose the world is immense but finite, and as such only capable of a finite (though also immense) number of permutations. In an infinite stretch of time, the number of possible permutations must be run through, and the universe has to repeat itself. Once again you will be born from a belly, once again your skeleton will grow, once again this same page will reach your identical hands, once again you will follow the curse of all the hours of your life until that of your incredible death (SNF, 115; italics in the original)]

He then adds: "Tal es el orden habitual de aquel argumento, desde su preludio insípido hasta su desenlace amenazador. Es común atribuirlo a Nietzsche" (OC, 3:385). [Such is the customary order of this argument, from its insipid preliminaries, to its enormous and threatening outcome. It is commonly attributed to Nietzsche (SNF, 115).] The truth of the matter is that, although the "threatening outcome" is common to all versions of the doctrine, the argument in this form is not. Borges might have taken the idea from Hume's Dialogues Concerning *Natural Religion* ([1779] 1998, 49); however, his objections to the theory are analogous to those raised by the Latin poet, rather than those raised by the Scottish philosopher. Moreover, Lucretius, like Nietzsche, denied the Providence, but unlike him, rejected immortality. Whatever the case may be, it so happens that phrasing the argument in terms of atoms results advantageous for several reasons: first, readers familiar with the history of philosophy would have no problem accepting this formulation, given that the theory of atoms was known in antiquity; second, contemporary readers would be familiar with modern atomic theory, and presumably detect from the outset the fallacy involved in the argument; and finally, this formulation allows Borges to devise a refutation of recurrence on logical grounds.

According to modern atomic theory, atoms, on the one hand, are infinitesimal in size and divisible. In antiquity, on the other hand, atoms were supposed to be very small, and physically indivisible, but geometrically divisible. Given that in both cases subdivision is possible, "el hermoso juego de Cantor" (OC, 1:387) [Cantor's lovely game (SNF, 117)] or the theory of transfinite numbers can be used to prove that a universe that consists of an infinite number of terms is rigorously capable of an infinite number of combinations. This is the same theory that Russell had applied to refute Zeno's paradox, and Borges uses it here to show that recurrence is not only improbable but also impossible. The idea is that if the material universe may be divided into smaller and smaller units then there are an infinite number of terms within each unit ("a meter in the universe, a decimeter, or in the deepest trajectory of a star") and the members of each infinite series can unfold into other infinite series.

This refutation would suffice, if it were not for the fact that Nietzsche "the philologist" had "denied" the atoms. The German philosopher had founded his thesis on the notion of a limited force or energy incapable of an infinite number of variations in an infinite time, and had further argued that the cosmic force cannot reach a state of equilibrium because that would have already happened in the "Prior Eternity." Borges indicates that Nietzsche's procedure is deceitful: "primero nos precave contra la idea de una fuerza infinita –'¡cuidémonos de tales orgías del pensamiento!'— y luego generosamente concede que el tiempo sea

infinito" (OC, 3:390). [first he sets us on guard against the idea of an infinite force –'let us beware such orgies of thought!'— and then he generously concedes that time is infinite (SNF, 121).] However, says Borges, infinite time is as inconceivable as infinite space: "retrocedamos al primer segundo y notaremos que éste requiere un predecesor, y ese predecesor otro más, y así infinitamente" (OC, 3:391). (we go back to the first second and note that it requires one as well, and so on infinitely (SNF, 121).] Nietzsche initially chooses to ignore this fact, and then appeals to energy in order to eliminate this infinite regress. To refute his theory, Borges resorts to the first and second laws of thermodynamics that prove that the forces that make up the universe gradually disintegrate, and that in an infinite time the universe will cool off, reaching a final state of degradation, and then it will have died.

Unlike Nietzsche, other thinkers had proceeded with more intellectual integrity when eliminating the infinite regress. St. Augustine, for instance, "resuelve que el primer segundo del tiempo coincide con el primer segundo de la Creación *–non in tempore sed cum tempore incepit creatio*" (OC, 1:391; italics in the original). [declares that the first second of time coincides with the first second of the Creation *–The Creation begins not in time but with time* (SNF, 121).] Borges does not evaluate this intellectual argument offered by Augustine in his *City of God* (1998, 456-7) and in *Confessions* (1999, 2:235-6), but is quite critical of his theological arguments against the "abominable" theory of recurrence, as they appear in the first of these works (1998, bk. 12, ch. 12, 14, 19, 20, and 21):

... la furia episcopal de su autor parece preferir dos motivos: uno, la aparatosa inutilidad de esa rueda; otro, la irrisión de que el Logos muera

como un pruebista en la cruz, en funciones interminables. Las despedidas y el suicidio pierden su dignidad si los menudean; San Agustín debió pensar lo mismo de la Crucifixión. De ahí que rechazara con escándalo el parecer de los estoicos y pitagóricos. Éstos argüían que la ciencia de Dios no puede comprender cosas infinitas y que esta eterna rotación del proceso mundial sirve para que Dios lo vaya aprendiendo y se familiarice son él; San Agustín se burla de sus vanas revoluciones y afirma que Jesús es la vía recta que nos permite huir del laberinto circular de tales engaños. (OC, 1:388)

[... the author's Episcopal fury seems to fix upon two arguments: one, the gaudy futility of this wheel; the other, the ridiculousness of the Logos dying on the cross like an acrobat in an interminable sequence of performances. Farewells and suicides lose their dignity if repeated two often; St. Augustine must have thought the same of the Crucifixion. Hence his scandalized rejection of the viewpoint of the Stoics and Pythagoreans, who argued that God's science cannot understand infinite things and that the eternal rotation of the world's process serves to allow God to learn more and familiarize himself with it. St. Augustine mocks their worthless revolutions and affirms that Jesus is the strait path that allows us to flee from the circular labyrinth of such deceptions. (SNF, 118)]

On this point it is worth mentioning that in his attack on the idea of recurrence, Augustine quoted a scriptural passage from Ecclesiastes (1:9), which, according to him, had been understood as supporting the theory of recurrence. The passage declares that "that which has been is that which shall be", and thus there is nothing new under the sun. Agustin argued that Solomon did not intend to imply eternal recurrence, but the repetition of similar things: "Solomon said this either of those things of which he had just been speaking –that is, the passing and arising of the generations, the turning of the sun, the descent of rivers— or else of all the kinds of things that arise and depart" (1998, 517; bk. 12, ch. 14). Borges does not mention Ecclesiastes. Instead, he chooses to introduce Augustine's attack to the theory in question, by saying that the conjecture of the general repetition "y

su nombre técnico apokatástasis, entró en los Evangelios (Hechos de los Apóstoles, III, 21), si bien con intención indeterminada" (OC, 1:388; italics in the original). [entered the Gospels (Acts of the Apostles 3:21), along with its technical name, apokatastasis, though with indeterminate intent (SNF, 118; italics in the original).] Interestingly enough, this technical name, which basically means "restoration," was in fact used in antiquity for the return of the celestial bodies to the same relation vis-à-vis one another, and the restitution of the cosmic cycles with the corresponding idea of eternal recurrence. Moreover, as Borges indicates, it occurred only once in the New Testament, in Acts 3:21, where it was not used to refer to the idea of cosmic recurrence (Gerhard and Gerhard 1985, 66). Clearly, Borges goes a long way just to avoid making any comment on Ecclesiastes, although he obviously agreed with Augustine's interpretation of the scriptural passage. This would seem to indicate that the Argentine poet made a conscious effort to disassociate himself from the Christian philosopher, for whom God is both the cause and the conclusion of his arguments. Borges, on the other hand, sees God as a rhetorical necessity and does not accept Augustine's theistic conclusions.

Apart from those testimonies discussed so far (that of the Pythagoreans, the Stoics, and Augustine), Borges also alludes to Virgil's so-called "Messianic Eclogue", of which he cites a single line in Latin, without providing a translation: *"Iam redit et virgo, redeunt Saturnia regna*..." (OC, 1:388). [Now the Maiden returns, the reign of Saturn returns (SNF, 118).] Readers familiar with the Latin poet's fourth Eclogue, would know that the reference in this line is to Virgin

Astraea (the star-maiden) who had lived on earth and blessed mortals during the Golden age of Greek mythology, and was later placed among the stars as the constellation Virgo; and to the legendary King Saturn who, according to Roman mythology, fled to Italy after being dethroned by Jupiter, and brought in the Golden Age, introducing laws and peace among the primitive people. Thus, the Eclogue stands as an expression of the idea of the periodic repetition of history, for it announces the advent of that period in the future that will presumably repeat the Golden Age, and the ages of Hesiod's history that came after it, namely, the ages of Silver, Bronze, Heroes, and Iron. Borges does not provide this information, but claims to have found the line cited by John Stuart Mill in a chapter of his System of Logic (1843) where he discusses the law of causation. Unlike Nietzsche, the English philosopher and economist was not a classical philologist; however, he was acquainted with the Eclogue. And although in this case the repetition of identical cycles is not necessarily implied, Mill actually interprets it that way ([1843] 1973, 346-7). But Borges does not draw attention to these points. His own stress is on the fact that according to Mill's deterministic interpretation of the law of causality the notion of the periodic repetition of history is conceivable but not true. However, immediately after he asks: "Nietzsche, helenista, ¿pudo acaso ignorar a esos 'precursores'? Nietzsche, el autor de los fragmentos sobre los presocráticos, ¿pudo no conocer una doctrina que los discípulos de Pitágoras aprendieron? Es muy difícil creerlo -e inútil" (OC, 1:388; italics in the original). [Can Nietzsche, the Hellenist, have been ignorant of these 'precursors'? Was Nietzsche, author of the fragments on the pre-Socratics,

perhaps unaware of the doctrine learned by the disciples of Pythagoras? This is hard to believe *-and futile* (SNF, 119; italics in the original).] Again, Borges is drawing attention to Nietzsche's intellectual dishonesty, for he had claimed to have "engendered" the eternal recurrence. But since the German Philosopher had presented the doctrine as the basic conception of *Zarathustra*, Borges is able to make a not-all together sympathetic apology for its author:

Nietzsche sabía que el Eterno Recurso es de las fábulas o medios o diversiones que recurren eternamente, pero también sabía que la más eficaz de las personas gramaticales es la primera. Para un profeta, cabe asegurar que es la única. Derivar su revelación de un epítome, o de la *Historia philosophiae greco-romanae* de los profesores suplentes Ritter y Preller, era imposible a Zarathustra, por razones de voz y de anacronismo –cuando no tipográficas. El estilo profético no permite el empleo de las comillas ni la erudita alegación de libros y autores . . . (OC, 3: 389)

[Nietzsche knew that the Eternal Recourse is one of the fables, fears, diversions, that eternally recur, but he also knew that the more effective of the grammatical persons is the first. Indeed, we would be justified in saying that, for a prophet, the only grammatical person is the first. It was not possible for Zarathustra to derive his revelation from a philosophical compendium or from the *Historia philosophiae greco-romanae* of the surrogate professors Ritter and Preller, for reasons of voice and anachronism, not to speak of typography. The prophetic style does not allow for the use of quotation marks nor the erudite attestation of books and authors . . . (SNF, 119)]

Borges maintains the ironic tone in drawing attention to the futility of Nietzsche's use of moral arguments to defend the doctrine, while stressing at the same time its contradictory nature. His argument was that we might be able to exult in the recurrence, if we so lived our life that we might want to live again. But this amounts to imagining that something can happen differently, for, as Nietzsche himself wrote, "En el mismo instante en que se presenta esa idea, varían todos los

colores— y hay otra historia" (OC, 1:390). [The instant that this idea presents itself, all colors are different— and there is another history (SNF, 120).]

By the end of the essay, the Argentine poet had consistently refuted all arguments in favor of eternal recurrence, including that which maintains that a déjà vu is nothing more than a memory of what happened in the previous cycle. He rightly argues that this destroys the theory, since remembering what happens in the previous cycle introduces a modification in a subsequent cycle that would not have occurred in the previous cycle. Not having found any good reason to support the idea of recurrence, Borges concludes, like Lucretius, that recurrence means nothing to us:

Aceptada la tesis de Zarathustra, no acabo de entender como dos procesos idénticos dejan de aglomerarse en uno. ¿Basta la mera sucesión, no verificada por nadie? A falta de un arcángel especial que lleve la cuenta, ¿qué significa el hecho de que atravesamos el ciclo trece mil quinientos catorce, y no el primero de la serie o el número trescientos veintidós con el exponente dos mil? Nada, para la práctica –lo cual no daña al pensador. Nada para la inteligencia –lo cual ya es grave. (OC, 1:391)

[If Zarathustra's hypothesis is accepted, I do not fully understand how two identical processes keep from agglomerating into one. Is mere succession, verified by no one, enough? Without a special archangel to keep track, what does it mean that we are going through the thirteen thousand five hundred and fourteenth cycle and not the first in the series or number three hundred twenty-two to the two thousandth power? Nothing in practice – which is no impairment to the thinker. Nothing for the intellect –which is serious indeed. (SNF, 122)]

The theory of recurrence is meaningless for, in spite of the fact that it promises immortality, there is no way for us to know if it actually happens. There isn't really anything permanent, unless there is Someone (or Something) who could hold the memory of what happened before. Borges elaborated on this idea in his essay "Historia de la eternidad" [History of Eternity; 1936]. There, he reasons that succession is an impoverishment because it implies that there isn't anything permanent; therefore, as George Santayana said: "*Vivir es perder el tiempo, nada se puede guardar sino bajo forma de eternidad*" (OC, 1:363; italics in the original). ['To live is to lose time, we can recover or keep nothing except under the form of eternity' (SNF, 135).] Borges then asks the reader to consider Lucretius' celebrated passage on the fallacy of the coitus (also from On the Nature of Things), in which the Latin poet conveys the idea that lovers can't retain anything in their embrace but images and vain hopes, for they cannot take anything away from the lover's body, nor can they merge into the other's body. (2001, bk. 4, lines 1094-111)

But Borges believes that there ought to be something permanent; otherwise there would be no personal identity, and thus no personal history. Likewise, the history of the universe is lost if there isn't something permanent: "Sin una eternidad, sin un espejo delicado y secreto de lo que pasó por las almas, la historia universal es tiempo perdido, y en ella nuestra historia personal –lo cual nos afantasma incómodamente" (OC, 1:364). [Without an eternity, without a sensitive, secret mirror of what passes through every soul, universal history is lost time, and along with it our personal history –which rather uncomfortably makes ghosts of us (SNF, 136).] However, Borges sees that although denying universal history –and personal history— is inconceivable, the search for something permanent has proven to be a vain enterprise. Time sweeps everything away, "es un problema para nosotros, un tembloroso y exigente problema, acaso el más vital de la metafísica; la eternidad, un juego o una fatigada esperanza" (OC, 1:353). [(it) is a problem for us a jarring, urgent problem, perhaps the most vital problem of metaphysics, while eternity is a game or a spent hope (SNF, 123).]

Borges' observation couldn't be more accurate. Since pre-Socratic times, philosophers, theologians, and scientists have been searching for something permanent, but up till now everything has been in vain. In antiquity the search also led to the idea of finding something completely removed from the tyranny of time. From here emerged the Greek and the Christian conceptions of eternity that Borges discusses in this essay.

Faced with the task of having to recount a historical development that covers some fourteen centuries, from Plato (ca. 428-ca. 348 B.C.E) to John Scotus Erigena (ca. 810-ca. 877), Borges follows a remarkable strategy. He focuses on two central figures who are more or less contemporary: Plotinus (ca. 204-70), founder of Neoplatonism; and Bishop Irenaeus (ca. 140-202), early Father of the Church. The former is the last of the great philosophers of antiquity. In his *Enneads* all the conceptions of eternity of those who preceded him converge, but they are all related to and do not differ much from Plato's eternity, the real world of ideas as opposed to that of illusory appearance. This allows Borges to focus on the Plato's Theory of Forms or Archetypes as laid out in the fifth book of Plotinus' work (1952, 208-51). In contrast, Bishop Irenaeus represents the point of departure of what was going to become the Christian conception. This came into being as a result of the debates around the mystery of the Trinity for which Irenaeus provided early on an explanation that would prevail and be accepted as

dogma. In this way, Borges takes Plotinus as the exponent of the first eternity based on realism, and Irenaeus as the exponent of the second one based on nominalism. The reader is thus placed before an image that is hardly ever found in Borges' writings: that of two mirrors standing back to back, one looking towards the past and reflecting realism, and the other looking towards the future and reflecting nominalism. In the essay, Borges makes clear that the early Christian thinkers turned to Plato rather than Aristotle in their effort to mediate between the dogmas of faith and the demands for reason. Thus, owing to thinkers such as St. Augustine, whose eleventh book of the *Confessions* is (in Borges' estimation) the best document of the Christian conception, eternity ceased to be conceptualized as a world apart and settled into the role of one of the attributes of God's unlimited mind, and the archetypes were reduced to eternal ideas in the creating Word. In this sense, the real existence of the archetypes, as postulated by Plato, was denied. Only individuals were taken as real and considered sinners responsible for their own salvation, for they had received from God the grace to will themselves into a state of grace. Versions differing from this one were condemned as heretical by the Church. Borges singles out the version of Scotus Erigena, who was the author of Periphyseon or De divisione naturae (ca. 867) (On the Division of Nature), a rather late work seeking to reconcile Platonism, Aristotelianism, and Christianity. Erigena maintained that the Platonic Forms exist, and subsist in the primal unity of God, who is eternal, infinite, and indeterminate, and does not perceive sin or the forms of evil. According to him, human beings possess free will, and, like all things, including time, they emanate from God and strive to return to Him.

Therefore, God is not only the end and purpose of all things, but also their beginning.

After briefly describing the Greek and the Christian conceptions, as well as Erigena's doctrine, Borges summarizes his "general history of eternity" as follows:

... el deseo humano soñó dos sueños sucesivos y hostiles con ese nombre [eternidad]: uno, el realista, que anhela con extraño amor los quietos arquetipos de las criaturas; otro, el nominalista, que niega la verdad de los arquetipos y quiere congregar en un segundo los detalles del universo. Aquél se basa en el realismo, doctrina tan apartada de nuestro ser que descreo de todas las interpretaciones, incluyendo la mía; éste en su contenedor el nominalismo, que afirma la verdad de los individuos y lo convencional de los géneros. (OC, 1:363)

[... human desire dreamed two successive and mutually hostile dreams by that name [eternity]: one, realist, yearns with a strange love for the still and silent archetypes of all creatures; the other, nominalist, denies the truth of the archetypes and seeks to gather up all the details of the universe in a single second. The first is based on realism, a doctrine so distant from our essential nature that I disbelieve all interpretations of it, including my own; the second, on realism's opponent, nominalism, which affirms the truth of individuals and the conventional nature of genres. (SNF, 135)]

He then rejects the Christian conception because of his disbelief in an idea conceived "para confundir herejías y para vindicar la distinción de las tres personas en una" (OC, 1:136). [to confound heresies and to vindicate the distinction of the three persons in one (SNF, 135).] Additionally, he comments on the uselessness of analyzing the philosophical principles on which it is based. He is convinced that "Ahora, semejantes al espontáneo y alelado prosista de la comedia, todos hacemos nominalismo *sans le savoir*: es como una premisa general de nuestro pensamiento, un axioma adquirido." (OC, 1:363; italics in the original). [Now, like the spontaneous and bewildered prose-speaker of the

comedy, we all do nominalism *sans le savoir*, as if it were a general premise of our thought, an acquired axiom (SNF, 135; italics in the original).]

Borges' strategy had paved the way to render this conclusion an inevitable outcome, since our reflection could only exist in the mirror of the future. But he also provides the reader with several reasons to reject realism. Amongst them is our impossibility to approve of a static world that does not tolerate repetition; in it there is only one Star which is all the stars, only one primordial form of Human, which is all human beings, and so on (Plotinus 1976, 241). Borges calls this world "el inmóvil y terrible museo de los arquetipos platónicos" (OC, 1:355) [the motionless and terrible museum of the Platonic archetypes (SNF, 126)], and believes that two of the hardest archetypes to accept as real entities of independent existence are, on the one hand, that of the eternal Humanity, and on the other, that of eternity itself, which encompasses all of the others and has successive time as its copy.

Borges formulates Plato's theory Forms as follows: "Los individuos y las cosas existen en cuanto participan de la especie que los incluye, que es su realidad permanente." (OC, 1:256; italics in the original). [Individuals and things exist insofar as they participate in the species that includes them, which is their permanent reality (SNF, 127; italics in the original).] Before rejecting it, he looks for arguments that may help explain and tolerate the thesis. First he turns to Schopenhauer, who argued that since animals do not perceive time, they are oblivious to death and memory, and therefore immortal. From here it follows that there is no difference between the individual and the species. Borges finds this line of reasoning acceptable, and thinks that it may explain that the nightingale that enchanted Keats was the same as the one heard by Ruth in Judah amid the alien corn of Bethlehem. But Schopenhauer had also reformulated Plato's theory of Forms, and in making sense of the archetypes he had written:

Quien me oiga asegurar que el gato gris que ahora juega en el patio, es aquel mismo que brincaba y que traveseaba hace quinientos años, pensará de mí lo que quiera, pero locura más extraña es imaginar que fundamentalmente es otro. Y después: Destino y vida de leones quiere la leonidad que, considerada en el tiempo, es un león inmortal que se mantiene mediante la infinita reposición de los individuos, cuya generación y cuya muerte forman el pulso de esa imperecedera figura. (OC, 1:356-7; italics in the original)

[Whoever hears me assert that the grey cat playing just now in the yard is the same one that did jumps and tricks there five hundred years ago will think whatever he likes of me, but it is a stranger form of madness to imagine that the present-day cat is fundamentally an entirely different one. And later:

It is the life and fate of lions to seek lion-ness which, considered in time, is an immortal lion that maintains itself by the infinite replacement of individuals, whose engendering and death form the pulse of this undying figure. (SNF, 127)]

Schopenhauer had applied the same argument to humans, which amounts to asserting that an individual's "self" is no different from the "self" of other individuals; hence, we are all the same. Borges' quotations in relation to this subject are of his own creation; however, they do encapsulate Schopenhauer's ideas on this subject, which may be found in various places of his main work ([1844] 1966, 1: 127-30, 208-12, 274-86; 2:463-509), and in other complementary essays from his *Parerga and Paralipomena* ([1851] 1966, 2:275-82, 289-90). Borges would later use these arguments to explain Keats' "Ode to the Nightingale," instead of the one he uses here related to the animals' lack of

temporal perception. At this point, however, he does not accept Schopenhauer's reformulation of the Platonic Forms. His response to the German philosopher is rather ironic and humorous:

Presumque la eterna Leonidad puede ser aprobada p or mi lector, que sentirá un alivio majestuoso ante ese único León, multiplicado en los espejos del tiempo. Del concepto de eterna Humanidad no espero lo mismo: sé que nuestro yo lo rechaza, y que prefiere derramarlo sin miedo sobre el yo de los otros. (OC, 1:357)

[I presume that my readers can find it within themselves to approve of this eternal Lion-ness, and that they may feel a majestic satisfaction at the thought of this single Lion, multiplied in time's mirrors. But I do not hope for the same response to the concept of an eternal Humanity: I know that our own "I" rejects it, preferring to jettison it recklessly onto the "I"s of others. (SNF, 128)]

Borges goes further looking for other good reasons to convince the reader that the

theory is unacceptable. His arguments revolve around the obvious fact that Plato's

Forms suffer from the same mixture and variety as the particulars that they try to

explain:

No son irresolubles, son tan confusos como las criaturas del tiempo. Fabricados a imagen de las criaturas, repiten esas mismas anomalías que quieren resolver. La Leonidad, digamos, ¿cómo prescindirá de la Soberbia y de la Rojez, de la Melenidad y la Zarpidad? (OC, 1:357)

[Far from being indissoluble, they are as confused as times own creatures, repeating the very anomalies they seek to resolve. Lion-ness, let's say: how would it dispense with Pride and Tawniness, Mane-ness and Pawness? (SNF, 128)]

In sum, Plato's Forms are just other particulars ethically and esthetically superior to the ordinary kind, for the particulars in the sensible world are but imperfect copies of their ideal heavenly counterparts. After having presented his arguments against the Christian and the Platonic notions of eternity, both of which assume that past and future coexist in an eternal present, Borges concludes that successive time is no less inconceivable than eternity; hence "Negar la eternidad, suponer la vasta aniquilación de los años cargados de ciudades, de ríos y de júbilos, no es menos increíble que imaginar su total salvamento" (OC, 1:364). [To deny eternity, to suppose the vas annihilation of the years freighted with cities, rivers and jubilations, is no less incredible than to imagine their total salvation (SNF, 136).]

Finally, Borges considers the question of how eternity came into being. In his opinion it does not appear inconceivable that the notion of eternity had developed from the recognition of one fact, namely, that in every present, elements of past and future exist. For in the present that is always passing, things past exist in our memory and things future in our expectation. In this connection, Borges cites St. Augustine, who had reached this general conclusion, and had given as an example the recitation of a poem:

Antes de comenzar, el poema está en mi anticipación; apenas lo acabé, en mi memoria; pero mientras lo digo, está distendiéndose en la memoria por lo que llevo dicho; en la anticipación, por lo que me falta decir. Lo que sucede en la totalidad del poema, sucede con cada verso y con cada sílaba. Digo lo mismo, de la acción más larga de la que forma parte el poema, y del destino individual, que se compone de una serie de acciones, y de la humanidad, que es una serie de destinos individuales. (OC, 3: 364; italics in the original)

[Before beginning, the poem exists in my expectation; when I have just finished, in my memory; but as I am reciting it, it is extended in my memory, on account of what I have already said; and in my expectation, on account of what I have yet to say. What takes place with the entirety of the poem takes place also in each verse and each syllable. This also holds true of the large action of which the poem is part, and on the individual destiny of a man, which is composed of a series of actions, and of humanity, which is a series of individual destinies. (SNF, 136)]

In his *Confessions*, St. Augustine had given this example by way of explaining how time past and time future somehow exist, in spite of the fact that only the present, which is but a fleeting instant, really is (2000, 277-9; bk. 9, ch. 28). The argument, of course, includes succession, and therefore Borges concludes that it is not commensurate with the notion of eternity in question. The quotation, however, is not without significance. On close examination, one notices that the ideas expounded by St. Augustine are reminiscent of Borges' own ideas regarding time. Moreover, in revising in its entirety the eleventh book of the Augustine's work, one sees that there is in fact a striking closeness of thought between the Christian philosopher and Borges on this particular topic. Like Borges, Augustine thought that time was an essential enigma. In examining the nature of succession, he started by considering the divisibility of time, which led him to the difficulty of explaining the existence of time past (which is no longer), and time future (which is not yet), both of which are necessary for the existence of time present, which is a fleeting moment. He reasoned that if time past and time future did not exist, the present would never pass into past time, and therefore it would not be time but eternity, i.e., an eternal present. In solving this difficulty, he suggested that time is in the human mind, which expects, considers, and remembers. With the example cited above, he showed that the present is gradually becoming past, and becoming future. Additionally, he did not claim to have really solved all difficulties with this theory of time, and thus confessed that he was as yet ignorant of what time is. Accordingly, he famously wrote: "What is time then? If nobody asks me, I know:

but if I were desirous to explain it to one that should ask me, plainly I know not" (2000, 239).²¹ Unlike Borges, however, Augustine believed in Eternity, which he thought was not prior to time. His argument is that since God had created time, he could not have preceded his own creation, for that would imply that He was in time. Or, as Borges writes in his early essay "Una vindicación del falso Basílides" [A Defense of Basilides the False; 1931]: "El universo, según deja entender San Agustín, no comenzó en el tiempo, sino simultáneamente con él –juicio que niega toda prioridad del Creador" (OC, 1:215). [The universe, as St. Augustine would have it understood, did not begin in time, but rather simultaneously with it – a judgment which denies all priority to the Creator (SNF, 68).]²²

Thus, it might be claimed that Borges agreed with Augustine's subjective theory of time with the exclusion of the concept of eternity, which the Argentine poet thinks might have arisen from nostalgia. A person who remembers past the delights or foresees future delights, tends to gather them up in a single image, i.e., sees them '*sub specie aeternatis*' [under the aspect of eternity]. For instance, says Borges, "los ponientes diversamente rojos que miro cada tarde, serán en el recuerdo un solo poniente" (OC, 3:364). [the diversely red sunsets I watch every evening will in memory be a single sunset (SNF, 136).] Whoever does this, however, completely forgets that those things happen in succession, or as Borges put it: the occurrence of one of them excludes or postpones all the others.

²¹ Conf., bk.9, ch. 14.

²² The essay in question was first published in *La Prensa*, 1 Jan. 1932, and later included in *Discusión*, 1932.

By the end of the essay Borges offers his personal theory of eternity, devoid of God and archetypes, which he formulated in his 1928 essay "Sentirse en muerte" [Feeling in Death], to which reference was made in the first chapter. There, he relates an experience he had one serene night as he was strolling at random in an area on the outskirts of Buenos Aires. The walk brought him to a street-corner with its typical sidewalk of broken concrete, its dirt street, its fig tree, its particular sounds and odors, etc., which would have been the *same* thirty years ago. Then, writes Borges:

El fácil pensamiento *Estoy en mil ochocientos y tantos* dejó de ser unas cuantas aproximativas palabras y se profundizó a realidad. Me sentí muerto, me sentí percibidor abstracto del mundo ... No creí, no, haber remontado las presuntivas aguas del Tiempo; más bien me sospeché poseedor del sentido reticente o ausente de la inconcebible palabra *eternidad*. (OC, 3:366; italics in the origina)

[The glib thought*I am in the year eighteen hundred and something* ceased to be a few approximate words and deepened into reality ... No, I did not believe I had made my way upstream on the presumptive waters of Time. Rather, I suspected myself to be in possession of the reticent or absent meaning of the word *eternity*. (SNF, 138; italics in the original)]

Borges explains that the impossibility of clearly distinguishing and separating the new from the old moment, indicates that time is a delusion. The assumption behind this, as Borges himself makes clear, is that time is a series of separable individual moments. In a time series, as in any series, the terms must be distinct from one another, i.e., each individual moment must be preceded by and followed by distinct moments. If two moments in the series are indistinguishable, the law that links them into an ordered extension breaks down, disrupting the time series and thus denying Time. The essay, which is an early version of "Nueva refutación del tiempo" [New Refutation of Time; 1947], concludes with the following words:

'Es evidente que el número de tales momentos humanos no es infinito. Los elementales –los de sufrimiento físico, los de acercamiento del sueño, los de audición de una música, los de mucha intensidad o mucho desgano— son más impersonales aún. Derivo de antemano esta conclusión: la vida es demasiado pobre para no ser también inmortal. Pero ni siquiera tenemos la seguridad de nuestra pobreza, puesto que el tiempo, fácilmente refutable en lo sensitivo, no lo es también en lo intelectual, de cuya esencia parece inseparable el concepto de sucesión. Quede pues en anécdota emocional la vislumbrada idea y en la confesa irresolución de esta hoja el momento verdadero de éxtasis y la insinuación posible de eternidad de que esa noche no me fue avara.' (OC, 1:366)

[The number of such human moments is clearly not infinite. The elemental experiences –physical suffering and physical pleasure, falling asleep, listening to a piece of music, feeling great intensity or great apathy— are even more impersonal. I derive, in advance, this conclusion: life is too impoverished not to be immortal. But we lack even the certainty of our own poverty, given that time, which is easily refutable by the senses, is not so easily refutable by the intellect, from whose essence the concept of succession appears inseparable. Let there remain, the glimpse of an idea in an emotional anecdote, and, in the acknowledged irresolution of this page, the true moment of ecstasy and the possible intimation of eternity which that night did not hoard from me. (SNF, 138-9)]

Given that our experiences are limited, at some point they must repeat *identical* either in the life of one individual, or in the life of multiple individuals. Then again, it is not appropriate to say that something *was* so, for it is equally true that the same thing *will* be so. Furthermore, we cannot say that it *is*, if that is taken in a temporal sense. Time is an illusion; each moment that we live in exists, and is unrelated to any other; therefore time does not exist. It follows that we live in an eternal present. Borges sees, however, that *succession* (i.e., the present gradually passing from time past into time future) is inseparable from the intellect's

essence; therefore time is not illusory but real. Borges, then, is able to deny Newton's conception of time, which has an existence independent from us, but he cannot, deny time understood as a mental process.

Now, the Argentine poet's denial of Newton's conception of time is related to the greatest of the difficulties suggested by time, to which he refers at the beginning of this essay ("History of Eternity"): "la de sincronizar el tiempo individual de cada persona con el tiempo general de las matemáticas" (OC, 3:354). [that of synchronizing each person's individual time with the general time of mathematicians (SNF, 124).] According to Borges, this difficulty had been hinted at by Einstein's relativity theory, which he "retrieves by distorting it" in the following way: "Si el tiempo es un proceso mental ¿como lo pueden compartir miles de hombres, o aun dos hombres distintos?" (OC, 3:54). [If time is a mental process, how can it be shared by thousands of men, or even two different men? (SNF, 124).] As we know, Einstein, unlike Newton, did not allow for the independence of time and space, and made time relative to an observer's frame of reference. In this sense, Borges' notion of time may be said to be analogous to Einstein's, given that he proposed to conceive space as an incident in time, and made time relative to the individual's intellect. For different reasons, both Borges and Einstein discarded Newton's conceptions of time and space, a fact that implies that instead of having one time series shared by all individuals, we now have one time series – which "takes on attributes of space" — for each individual. Although Borges does not say so explicitly in this essay, he later explained it in his lecture "El tiempo" [Time] of 1978:

Cuando Newton habló del tiempo matemático –es decir, de un solo tiempo que fluye a través de todo el universo— ese tiempo está fluyendo ahora en lugares vacíos, está fluyendo entre los astros, está fluyendo de un modo uniforme. Pero el metafísico inglés Bradley dijo que no había ninguna razón para suponer eso.

Podemos suponer que hubiera diversas series de tiempo, decía, no relacionadas entre sí. Tendríamos la serie que podríamos llamar a, b, c, d, e, f, ... Estos hechos están relacionados entre sí: uno es posterior a otro, uno es anterior a otro, uno es contemporáneo de otro. Pero podríamos imaginar otra serie con alfa, beta, gamma ... Podríamos imaginar otras series de tiempos.

¿Por qué imaginar una sola serie de tiempo? Yo no sé si la imaginación de ustedes acepta esa idea. La idea de que hay muchos tiempos y que esas series de tiempos –naturalmente que los miembros de las series son anteriores, contemporáneos o posteriores entre sí— no son ni anteriores, ni posteriores, ni contemporáneas. Eso podríamos imaginarlo en la conciencia de cada uno de nosotros. Podemos pensar en Leibniz, por ejemplo.

La idea es que cada uno de nosotros vive una serie de hechos, y esa serie de hechos puede ser paralela o no a otras. ¿Por qué aceptar esa idea? Esa idea es posible; nos daría un mundo más vasto, un mundo mucho más extraño que el actual. La idea de que no hay un tiempo. Creo que esa idea ha sido cobijada en cierto modo por la física actual, que no comprendo y que no conozco. La idea de varios tiempos. ¿Por qué suponer la idea de un solo tiempo, como lo suponía Newton? (OC, 4: 203-4)

[When Newton talked about the mathematical time, that is, of one absolute time which flows across the universe, that time is flowing right now in empty places, it is flowing among the heavenly bodies, it is flowing uniformly. But the English metaphysician Bradley said that there was no reason to assume that.

He said that we may assume the existence of several series of time unrelated to one another. We would have a series that we could call a, b, c, d, e, f, ... These facts are related: one is posterior to another, one is anterior to another, one is contemporary to another. But we could imagine another series with alpha, beta, gamma, ... We could imagine other time series.

Why imagine only one time series? I do not know if your imagination accepts that idea. The idea that there are many times and that those time series –the terms of those series are naturally anterior, contemporary or posterior between them— are neither anterior, nor posterior, or

contemporary. We could imagine that in the intellect of each one of us. We could think of Leibniz, for instance.

The idea is that each one of us lives a series of events, and that series of events may or not be parallel to others. Why accept that idea? That idea is plausible; we would have a richer world: a world much more extraordinary than ours. The idea that there isn't just one time. I think that that idea has been welcomed by the Physical Sciences of our time, which I neither understand, nor know. The idea of several times. Why should we assume, as Newton did, the idea of one absolute time? (*my translation*)]

In his *Appearance and Reality* (1893) the English philosopher Francis Herbert Bradley did in fact argue that there is nothing in the idea of a temporal series that logically guarantees that there is only one time series, as opposed to an indefinite multiplicity of time series ([1893] 1930, 185-91). In his 1936 essay, Borges alludes to this fact when he looks at another one of the difficulties suggested by time, namely, that of ascertaining the direction in which it flows. First, Borges notes that although we tend to think that time flows from the past to the future, the opposite notion is both possible and logical. In this connection Borges cites a verse from *Rosario de sonetos líricos* (1911) by Miguel de Unamuno (1966,

6:387):

Nocturno el río de las horas fluye desde su manantial que es el mañana eterno...

(OC, 3:353)

[Nocturnal the river of hours flows / from its source, the eternal tomorrow...

(Selected Nonfictions, 123)]

Then he adds:

Bradley niega las dos y adelanta una hipótesis personal: excluir el porvenir, que es una mera construcción de nuestra esperanza, y reducir lo "actual" a la agonía del momento presente desintegrándose en el pasado.

Esa regresión temporal suele corresponder a los estados decrecientes o insípidos, en cuanto que cualquier intensidad nos parece marchar sobre el porvenir... (OC, 3:353)

[Bradley denies both possibilities and advances a personal hypothesis, which consists in ruling out the future, a mere construction of our hopes, and reducing the "actual" to the death throes of the present moment as it disintegrates into the past. This temporal regression usually corresponds to states of decline or dullness, while any kind of intensity seems to us to advance on the future... (SNF, 124)]

Note that Unammuno's verse refers to absolute time, while Bradley's hypothesis refers to the individuals' time series. In other words, Bradley denies that time flows in any particular direction because of his disbelief in the existence of *one* temporal succession. In his opinion, the direction of time depends entirely on our experience. For some people events run forwards from the past, for others, they emerge from the future; thus, the direction of time is a matter of opinion ([1893] 1930, 189). And as Borges indicates, Bradley prefers the opinion according to which "the 'now' contains merely the process of the present turning into past" ([1893] 1930, 35).

Now the question arises why Borges did not openly mention in this essay Bradley's idea of the existence of an infinite multiplicity of time series which, according to the Argentine poet, may or not be parallel to others. To answer this question we must take notice of Borges' reference to Leibniz. As we have seen, Leibniz maintained that space is a system of relations, and that time is relative. Thus, he denied extension (i.e., space) and believed that there is only one fundamental substance, namely, thought (i.e., sensed time). Consequently he postulated a universe made of an infinite number of substances, which he called monads. Each one of these monads is in fact a soul or entelechy which has two intrinsic qualities, namely, perception and appetite (i.e., desires, passions), and sees the world in a certain perspective peculiar to itself (Leibniz 1989, 213-19). Broadly speaking we may say that up to this point, Leibniz's conception of the universe bears points of resemblance to Borges' penultimate version of reality, which is based on the assumption that only humans have the perception of time, and that space is not a universal form of intuition but a system of relations. Accordingly, the universe is made of human intellects or entelechies (to use Leibniz's term) who "keep weaving their history". That is, the universe consists of a multiplicity of time series (one in the intellect of each individual) interacting so as to form the web of time or the history of the universe, freighted with cities, rivers, jubilations, stars, migrations, etc. Leibniz, however, thought that every monad or soul mirrors the universe because there is a pre-established harmony that has all internal clocks synchronized (Leibniz 1989, 220-4). This has two implications. First, all monads, though independent from one another, share the same time. Second, all monads are the same, yet slightly different from one another, for according to the principle of identity of indiscernibles there is no such thing as two individuals indiscernible from each other. This amounts to saying that each one of the monads sees the world in a certain perspective peculiar to itself. In his essay "El Simurgh y el águila" [The Simurgh and the Eagle; 1948],²³ Borges compares the Simurgh of Persian poet and mystic Farid al-Din Attar (ca. 1145-1221), which is a bird made of birds, each one of which is in turn the Simurgh, to Leibniz's notion of the universe; he writes thus: "Análogamente en la

²³ The essay was first published in *La Nación*, March 14, 1948, and later collected in the book *Nueve ensayos dantescos: 1945-1951* (1982).
Monadología (1714), de Leibniz, se lee que el universo está hecho de ínfimos universos, que a su vez contienen el universo, y así hasta el infinito" (OC, 3:366n1). [Similarly, in Leibniz' Monadology (1714), we read that the universe is made of inferior universes, which in turn contain the universe, and so on *ad infinitum* (SNF, 294).] This is comparable, says Borges in the same place, to Plotinus' extension of the principle of identity, which, as he rightly indicates, may be found in the fifth book of the Alexandrian philosopher's *Enneads* (1956, 241):²⁴ "*Todo, en el cielo inteligible, está en todas partes. Cualquier cosa es todas las cosas. El sol es todas las estrellas, y cada estrella es todas las estrellas y el sol"* (OC, 3:368; italics in the original). ['Everywhere in the intelligible heaven is all, and all is all and each all. The sun, there, is all the stars; and every star, again, is all the stars and the sun' (SNF, 296).]

If Borges were to accept Leibniz's conception of the universe, he would have to accept that all individuals are themselves a universe that mirrors the Universe, and are thus somehow the same. But by 1936 Borges still does not accept that all individuals are the same, a fact that partly explains why he did not mention Leibniz in his "Penultimate Version of Reality" as we would have expected. Borges refuses to accept Schopenhauer's explanation of the eternal Human, which is the same as that of the eternal Lion multiplied in time's mirrors. The Argentine poet, however, chooses to convey this explanation in a slightly different way, so as to make evident the extension of the principle of identity:

²⁴ Enneads 5.8.4.

"'Una infinita duración ha precedido mi nacimiento, qué fui yo mientras tanto? Metafísicamente podría quizá contestarme: "Yo siempre he sido yo, es decir, cuantos dijeron yo durante ese tiempo, no eran otros que yo"" (OC, 1:357; italics in the original). [An infinite time has run its course before my birth; what was I throughout all that time? Metaphysically, I could perhaps answer myself: "I was always I"; that is, all who throughout that time said "I" were none other than I (SNF, 128).] In other words, Borges had not as yet understood that the individual is somehow the species, i.e., that what vanishes when individual beings pass away and what appears in their place when new individuals like them come into existence, is one and the same thing. At this point Borges explains Keats' stanza with another one of Schopenhauer's arguments, and compares Plato's archetypes to motionless pieces of a museum.

Before going any further, it is necessary to take a closer look at Cantor's theory of transfinite numbers, which help us deal with the problem of infinity, for Leibniz's idea of the Universe made of universes, which contain the universe, and so on *ad infinitum*, is somehow related to it. As we saw in the first chapter, the theory implies that *the whole is no greater than any of its parts*, i.e., the Whole is made of parts that contain the whole, which is the same as saying that the whole unfolds into other wholes *ad infinitum*. Now, as has already been pointed out, counting is a process by which we match in a one-to-one correspondence the elements of one class with the elements of another class, namely, the integers, which for convenience we regard as being given in serial order. As we saw, any system of numeration, for example the decimal system, can name finite quantities,

but there is no system that can actually name all quantities to infinity, for if we take the largest number that we can think of, no matter how big, this number is not infinite but finite. Being aware of these facts, Cantor assumed that the totality of integers exists, and that the series is well ordered (i.e., the numbers are consecutive), but he did not try to assign a symbol for each number. Instead, he invented the symbol **Xo** (Aleph-Null) –the first of the transfinite numbers— to describe the cardinality (or numerosity) of the whole class of integers. But then he noticed that the number of even numbers must be the same as the number of integers. That is, there is a one-to-one correspondence between even numbers and integers; consider the two rows:

1, 2, 3, 4, 5, 6, 7, 8, ... 2, 4, 6, 8, 10, 12, 14, 16, ...

It should be noted that in the second row the class of integers is 'thinned out', but still there are as many even numbers as integers. That is, the Whole contains a part equal to the whole. The same is true for the number of odd numbers, or the number of multiples of any number, or the number of exponential powers of any number, etc. Cantor then took the class of real numbers (numbers between 0 and 1), which is infinite as well, and proved that this class can also be 'thinned out', despite the presence of transcendental numbers (numbers that cannot be expressed as rational fractions, such as). This class is another Aleph, which he called C, for it represents the Aleph of the continuum (or the Aleph of the infinitely small). In general it can be said that the Aleph is made of alephs that contain the aleph. Interestingly enough, as Russell indicates in his *Introduction to Mathematical*

Philosophy, Leibniz himself noticed this fact, and rejected the notion of infinite numbers, though not that of infinite collections, because he thought it was self-contradictory that the parts should be "equal" to the whole. Russell explains that the word "equal" is problematic because it has various meanings. In this context, says he, it should be replaced by the word "similar". Russell provides some mathematical examples, and also a "picturesque illustration", namely, Josiah Royce's illustration of the map:

he imagines it [*sic*] decided to make a map of England upon a part of the surface of England. A map, if it is accurate, has a perfect one-to-one correspondence with its original; thus our map, which is part, is in one to one relation with the whole... Royce is interested in the fact that the map, if it is correct, must contain a map of the map, which must in turn contain a map of the map of the map, and so on *ad infinitum*. ([1919] 1960, 80)

In this example, each map is not identical (equal) but similar to other maps. If they were identical, the maps would all be the same in scale, and there would be after all only one map. Seen from this perspective, it may be said that in Leibniz's universe, the monads are not identical but similar. The obvious fact is that, at this point, Borges accepts neither the identity, nor the similarity of human destinies. If he were to do so, he could accept without contradiction Cantor's first transfinite number, Aleph-Null (**No**), but not the Aleph of the continuum (C), for his notion of time does not admit of subdivisions.

Taken together, these considerations may perhaps justify our saying of Borges' mind, as he himself said of the English mind in his essay "El ruiseñor de Keats", namely, that this mind was born Aristotelian. To this, he adds:

Que nadie lea una reprobación o desdén en las anteriores palabras. El inglés rechaza lo genérico porque siente que lo individual es irreductible,

inasimilable e impar. Un escrúpulo ético, no una incapacidad especulativa, le impide traficar en abstracciones, como a los alemanes. No entiende La *Oda del ruiseñor*; esa valiosa incomprensión le permite ser Locke, ser Berkeley, ser Hume, y redactar, hará setenta años, las no escuchadas y proféticas advertencias del *Individuo contra el Estado* (OC, 2:97; italics in the original).

[Please do not read reprobation or disdain into the forgoing words. The Englishman rejects the generic because he feels that the individual is irreductible, inassimilable, and unique. An ethical scruple, not a speculative incapacity, prevents him from trafficking in abstractions like the Germans. He does not understand the "Ode to the Nightingale"; that estimable incomprehension permits him to be Locke, to be Berkeley, to be Hume, and to write (around seventy years ago) the unheeded and prophetic admonitions about the individual against the State. (OIE, 124)]²⁵

In the following chapter, we shall see that another ethical scruple, along with the poetic feeling that "life is a dream", allowed Borges to finally accept the similarity (not the identity) of human destinies, and thus to accept Plato's Forms, which in turn led him to the creation of his time labyrinth, i.e., the fictional model of the universe where chaos and order coexist.

²⁵ In the last line of the Spanish original, Borges refers to Herbert Spencer's *The man versus the state* (1884), which he translates as *Individuo contra el Estado*. Thus, the English translation should read: "the unheeded and prophetic admonitions of *The man versus the state*." The book in question consists of a series of essays where Spencer opposes those regimes that presuppose the extension of the State functions and the subordination of the individual, such as militarism and socialism.

Chapter 4: The Eternal Recurrence Reconsidered

(Chuang Tzu) dreamt that he was a butterfly, and, on waking up, he did not know whether he was a man who had had a dream he was a butterfly, or a butterfly who was now dreaming he was a man.

—JLB, "The Metaphor"

At the close of the previous chapter it was suggested that one of the factors that played a decisive role in the development of Borges' time labyrinth, was the poetic feeling that "life is a dream". As it turns out, Borges associates this feeling with the problem of infinity. In order to see how he does it, we now turn our attention to his 1939 essay "Cuando la ficción vive en la ficción" [When Fiction Lives Fiction], which anticipates the essay "Magias parciales del Quijote" [Partial Enchantments of the Quixote] of 1949.²⁶

In the opening paragraph, Borges relates a brief and interesting story about his first contacts with the problem of infinity:

Debo mi primera noción del problema del infinito a una gran lata de bizcochos que dio misterio y vértigo a mi niñez. En el costado de ese objeto anormal había una escena japonesa; no recuerdo los niños o guerreros que la formaban, pero sí que en un ángulo de esa imagen la misma lata de bizcochos reaparecía con la misma figura y en ella la misma figura, y así (a lo menos en potencia) infinitamente... Catorce o quince años después, hacia 1921, descubrí en una de las obras de Russell una invención análoga de Josiah Royce. Éste supone un mapa de Inglaterra, dibujado en una porción del suelo de Inglaterra: ese mapa –a fuer de puntual— debe contener un mapa del mapa, que debe contener un mapa

²⁶ The first of these essays was published in in *El Hogar*, June 1939, and later included in the anthology *Textos Cautivos* (1986) by Enrique Saceiro-Garí & Emir Rodríguez Monegal. The second essay was first published in Nov. 1949, and included in *Otras inquisiciones* [Other Inquisitions; 1952].

del mapa, y así hasta lo infinito... Antes, en el Museo del Prado, vi el conocido cuadro velazqueño de *Las meninas*: en el fondo aparece el propio Velázquez, ejecutando los retratos unidos de Felipe IV y de su mujer, que están fuera del lienzo pero a quienes repite un espejo. Ilustra el pecho del pintor la cruz de Santiago; es fama que el rey la pintó para hacerlo caballero de esa orden... Recuerdo que las autoridades del Prado habían instalado enfrente un espejo, para continuar esas magias. (OC, 4:433)

[I owe my first inkling of the problem of infinity to a large biscuit tin that was a source of vertiginous mystery during my childhood. On one side of this exceptional object was a Japanese scene; I do not recall the children or warriors who configured it, but I do remember that in a corner of the image the same biscuit tin reappeared with the same picture, and in it the same picture again, and so on (at least by implication) infinitely... Fourteen or fifteen years later, around 1921, I discovered in one of Russell's works, an analogous 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 themap, which must contain a map of the map, an so on to infinity... Earlier, in the Prado Museum, I had seen Velázquez' famous painting, Las meninas. In the background is Velázquez himself working on a double portrait of Philip IV and his consort, who are outside of the frame but reflected in a mirror. The painter's chest is decorated with the cross of Santiago; it is rumored that the king painted it there, thus making him a knight of that order... I remember that the Prado's administrators had installed a mirror in front of the painting to perpetuate these enchantments. (SNF, 161)]

There are several points of interest about this quotation. In the first place, we note the careful way in which Borges introduces a complex mathematical problem resorting only to visual images. In addition, we also notice in this quotation an obvious reference to Russell's *Introduction to mathematical philosophy* (1919), and a veiled reference to the problem of the "self" multiplied in time's mirrors, or the Human archetype. The third point to notice is that here we see, in a single quotation, the wide variety of interests of the Argentine 'man of letters', which extend beyond the realm of literature, to include mathematics,

philosophy, and the visual arts. On this regard, it is worth mentioning that although Borges admitted that he was more moved by words than by colors and forms, this does not mean that he had no interst in the subject. We know, for instance, that he read and reviewed books on painting and sculpture: Chesterton's book on English painter George Frederic Watts, mentioned in Chapter 2; the book La Pintura y la Escultura en Argentina (1933) by the founder of the Argentine National Museum of Fine Arts, painter and critic Eduardo Schiaffino, (RMS, 220); La peinture en Espagne (1937) by French modernist critic Paul Jamot; and Greco (1937) by French critic Reymont Escholier (OC, 4: 397).²⁷ Additionally, Borges was a great admirer of Argentine painter Alejandro Xul Solar (Alejandro Óscar Agustín Schulz Solari), who was a prominent figure of the Argentine avantgarde of the 1920's. His works, along with those by Argentine artists Emilio Pettoruti and Pablo Curatella-Manes, were the visual counterpart of the modified version of *ultraísmo* that Borges introduced to the literary avant-garde during this period (Barnitz 2001, 73). Poet and painter met in 1924 and developed a close friendship. At the time, Borges dedicated his book *El tamaño de mi esperanza* (1926) to Xul Solar, and had him illustrate his *El idioma de los argentinos* (1928). Later, Xul illustrated Un modelo para la muerte (1946), which Borges wrote in collaboration with Adolfo Bioy Casares. Borges, on the other hand, acquired

²⁷ Many years later, Borges expressed his opinion about Greco's works in a prologue he wrote for the book *Norah, con quindici litografie di Norah Borges*, (1977): "Incomprensiblemente para mí, [Norah] admira las telas del Greco cuyos paraísos abarrotados de báculos y de mitras, me parecen más espantosos que muchos infiernos" (1977b, 185). [Inexplicably, (Norah) admires Greco's works, whose depictions of paradise packed with staffs and miters, seem to me more awful than many infernos (my translation).]

several paintings from Xul, ²⁸ and included him as a character in several of his short stories, e.g., "Tlön, Uqbar, Orbis Tertius" (1940). Additionally, he gave lectures and wrote several short pieces about the Argentine artist, where he invariably expressed his admiration for "that extraordinary man," who he compared to William Blake, for he thought that Xul Solar, like Blake, was a great painter, a mystic and a poet (1968, 15-19). In his opinion, Xul Solar's paintings were the "work of a genius" who was closer to Paul Klee than to Picasso or Braque (1984a, 119). In a brief essay written for the occasion of Xul Solar's exhibition in Galería Samos (Buenos Aires, 1949),²⁹ Borges gives further details about his works:

Sus pinturas son documentos del mundo ultraterreno, del mundo metafísico en que los dioses toman las formas de la imaginación que los sueña. La apasionada arquitectura, los colores felices, los muchos pormenores circunstanciales, los laberintos, los homúnculos y los ángeles inolvidablemente definen este arte delicado y monumental. (1949, 86)

[His paintings are documents of the world beyond, of the metaphysical world where gods take the form of the imagination of the dreamer. The passionate architecture, the joyful colors, the numerous laconic details, the labyrinths, the homunculi and the angels, memorably define his delicate and monumental art. (my translation)]

Although Borges does not mention any work in particular, *Zodiaco [Zodiac]* (1949; illustration 1), which was part of the exhibition, may serve to illustrate some of these points.

²⁸ According to Borges, with his first paycheck from the newspaper *Crítica (Revista multicolor)*, which he directed between 1933 and 1934, he acquired a painting from the artist because he "greatly admired his works" (1984a, 119). In 1940, he acquired two other paintings from Xul's exhibition at "Amigos del Arte" in Buenos Aires (Gradowczyk 1994, 170).

²⁹ The essay appeared as prologue in the exhibition catalogue, and was published in the magazine *Continente* no. 31, October 1949, under the title "Xul Solar y su arte".



Illustration 1. Xul Solar. *Zodiaco [Zodiac]*, 1949. Watercolor on paper, 47 X 32 cm. (Xul Solar Museum, Buenos Aires)

Also from an exhibition catalogue is the essay entitled "De la pintura" (1966), which Borges wrote for an exhibition of paintings by Argentine artist Juan Carlos Faggioli held at Wildenstein Galleries in Buenos Aires. This one-page essay is of much interest. There Borges says, after declaring his "ignorance" in matter of painting, that he has read the works of English art critic John Ruskin, who was one of the most influential art critics of the Victorian era.³⁰ He also states his preferences in painting: Flemish and Oriental art, the works of English landscape peinter Joseph M. W. Turner, the works of Italian graphic artist Giovanni Battista Piranesi, and the engravings of German painter and graphic artist Albrecht Dürer. To the question "What is paining?" he responds as follows:

³⁰ Ruskin was a graphic artist, studied literature, and was professor of Art at Oxford. His books include *The poetry of architecture* (1837), *Modern Painters* (1849), *The Seven Lamps of Architecture* (1849), *The Stones of Venice* (1851-1853), *Lectures on Architecture and painting* (1854), and *Lectures on art* (1870). Aso of interest are his *Letters on Art and Literature* (1890).

Todos lo seres luchan con el tiempo, que finalmente los destruye y olvida, los más lo ignoran, porque les falta la conciencia del tiempo. Ya Séneca observó que los animales viven en un presente puro, sin antes, ni después; ya Yates, partiendo de la filosofía de Berkeley, acuñó su espléndida línea: *El hombre ha creado la muerte*. A semejanza de las otras artes, la pintura es un medio, quizá el más eficaz y tangible, de rescatar algo de lo que se llevan los siglos. ([1966] 2003, 126; format in the original)

[All beings fight agains time, which eventually destroys and forgets them; most beings ignore it because they are unaware of time. As Seneca observed, animals live in the pure present, devoid of before and after; Yates too, starting from Berkeleys's philosophy, coined his splendid line: *Man has created death*. Like the other arts, painting is a medium – perhaps the most effective and tangible— for rescuing something of what the centuries take away. (my translation; format in the original)]

Borges captured the essence of his view on painting in a poem from *Elogio de la sombra* [In Praise of Darkness; 1969] entitled "Dos versiones de Ritter, Tod und Toufel" [Two versions of "Knight, Death, and Devil"], which refers to one of Dürer's greatest copper engravings, executed in 1513. This masterpiece (illustration 2, next page) shows a Christian knight in armor on horseback, neither looking to the right, left, nor backwards as he advances resolutely through an inhospitable landscape followed by a dog that symbolizes faith. The Devil stands behind with a submissive attitude and a naive grin, watching the knight advance, while Death, which is represented by an old man dressed in white and crowned with snakes, holds an hourglass up to the knight, reminding him that his time on earth is not eternal.



Illustration 2. Albrecht Dürer, *The Knight, Death and the Devil*, 1513. Engraving, 24 X 19 cm. (British Museum, London. National Collection of Western Prints and Drawings)

Borges' poem consists of two parts:

I

Bajo el yelmo quimérico el severo perfil es cruel como la cruel espada que aguarda. Por la selva despojada cabalga imperturbable el caballero. Torpe y furtiva, la caterva obscena lo ha cercado: el Demonio de serviles ojos, los laberínticos reptiles y el blanco anciano del reloj de arena. Caballero de hierro, quien te mira Sabe que en ti no mora la mentira Ni el pálido temor. Tu dura suerte es mandar y ultrajar. Eres valiente Y no serás indigno ciertamente, Alemán, del Demonio y de la muerte.

Π

Los caminos son dos. El de aquel hombre de hierro y de soberbia, y que cabalga, firme en su fe, por la dudosa selva del mundo, entre las befas y la danza inmóvil del Demonio y de la Muerte, y el otro, el breve, el mío. ¿En qué borrada noche o mañana antigua descubrieron mis ojos la fantástica epopeya, el perdurable sueño de Durero, el héroe y la caterva de sus sombras que me buscan, me acechan y me encuentran? A mí, no al paladín exhorta el blanco anciano coronado de sinuosas serpientes. La clepsidra sucesiva mide mi tiempo, no su eterno ahora. Yo seré la ceniza y la tiniebla; yo, que partí después, habré alcanzado mi término mortal; tú, que no eres, tú, caballero de la recta espada y de la selva rígida, tu paso proseguirás mientras los hombres duren. Imperturbable, imaginario, eterno.

(OC, 3:285-6)

[I

Under the unreal helmet the severe Profile is cruel like the cruel sword Waiting, poised. Through the stripped forest Rides the horseman unperturbed. Clumsily, furtively, the obscene mob Closes in on him: the Devil with servile Eyes, the labyrinthine reptiles And the ashen old man with hourglass. Iron rider, whoever looks at you Knows that in you neither the lie Nor pale fear dwells. Your hard fate Is to command and offend. You are brave And you are certainly not unworthy, German, of the Devil and of Death.

Π

There are two roads. That of the man Of iron and arrogance, who rides, Firm in his faith, through the doubtful woods Of the world, between the taunts and the rigid Dance of the Devil with Death, And the other, the short one, mine. In what vanished Long-ago night or morning did my eyes Discover the fantastic epic, The enduring dream of Dürer, The hero and the mob with all its shadows Searching me out, and catching me in ambush? It is me, and not the paladin, whom the hoary Old man crowned with sinuous snakes Is warning. The future's water clock Measures my time, not his eternal now. I am the one who will be ashes and darkness; I, who set out later, will have reached My mortal destination; you, who do not exist, You, rider of the raised sword And the rigid woods, your pace Will keep on going as long as there are men. Composed, imaginary, eternal

(SP, 291)]

We note that Borges has chosen for his poem an artwork which represents that life is transitory, and that time destroys us, for it leads us to our final destination, which is death –or at least, this is the way in which Borges interprets it. For him, the final destination of the "virtuous" Christian knight's journey through life is death rather than eternity, as it has sometimes been suggested.³¹ However, and

³¹ See for instance Panofsky (1971, 151-4).

this is certainly paradoxical, through the mastery of his art Dürer has successfully eternalized the knight's transitory journey through life. We note too that Borges captures the essential aspects of Dürer's work in a poem that includes two images of the same work, or, equivalently, a poem that branches out into two poems, as does the road of life, which branches into the eternal life of the imaginary knight and the transitory life of human beings. This brings us back to our essay under discussion where Borges examines works that include or mirror other works such as Velázquez's *Las meninas* (illustration 3), which he mentions in his concise but very effective introduction to the problem of infinity quoted above.



Illustration 3. Diego Velázquez, *Las meninas* (The Maids of Honour), 1656-7. Oil on canvas, 3,18 X 2.76 mts. (Del Prado Museum, Madrid. Collection: Spanish Painting, from 1100 to 1850) Velázquez's work, as was earlier noted, includes a painting within the painting, for the artist himself appears in it working on a double portrait of Philip IV and his consort, who are outside of the frame but reflected in a mirror. The placement of a mirror before the actual painting, multiplies the effect ad infinitum. In the essay, the Argentine poet goes on to argue that "Al procedimiento pictórico de insertar un cuadro en un cuadro, corresponde en las letras el de interpolar una ficción en otra ficción" (OC, 4: 433). [The pictorial technique of inserting a painting within a painting, corresponds, in the world of letters, to the interpolation of a fiction within another fiction (SNF, 161).] Then, identifies and briefly analyzes some literary works that have this type of structure. He refers to *Hamlet*, for instance, where Shakespeare includes on the stage another tragedy that mirrors the one being presented. Apart from suggesting "la posibilidad de infinitas involuciones" [the possibility of infinite involutions], the purpose of this procedure, says Borges, is "hacer que la realidad nos parezca irreal" (OC, 4:434). [to make reality seem unreal to us (*SNF*, 161).]

In his poem "Los espejos" [Mirrors] from *El Hacedor* [The Maker, 1960], Borges would write, alluding to Shakespeare's play:

Claudio, rey de una tarde, rey soñado, No sintió que era un sueño hasta aquel día En que un actor mimó su felonía Con arte silencioso, en un tablado.

(OC, 2:193)

[Claudius, king for an evening, king in a dream, did not know he was a dream until that day on which an actor mimed his felony with silent artifice, in a tableau.

Thus, Shakespeare makes us feel that life is a dream. Let us recall, however, that for Borges all feelings, imaginings, memories, thoughts, etc., are real, including the feeling that life is a dream, or, as Borges himself says elsewhere: "If you think of life as a dream, that is a thought, a thought that is real, or at least that most men are bound to have, no? 'What oft was thought but ne'er so well expressed.'" (1967c, 129).

Referring to Cervantes' *Quixote*, where the author included one brief novel within it, Borges argues that "Los dos planos –el verdadero y el ideal— no se mezclan" (OC, 4:433). [The two planes –the actual and the ideal— do not intermingle (SNF, 160).] In his 1949 essay, however, Borges makes a more thorough analysis of this work, proving that the two planes actually fuse in the famous novel. Yet something different happens in *The Thousand and One Nights*:

Esta compilación de historias fantásticas duplica y reduplica hasta el vértigo la ramificación de un cuento central en cuentos adventicios, pero no trata de graduar sus realidades, y el efecto (que debió ser profundo) es superficial, como una alfombra persa. (OC, 4:433; 2: 46)

[That compilation of fantastic stories duplicates and reduplicates to the point of vertigo the ramification of the central tale into subordinate ones, without attempting to evaluate their realities; the effect (which should have been profound) is superficial, like that of a Persian rug. (OIE, 45; SNF, 160-1)]

Other examples offered by Borges that do not differ much from the above are: Pierre Corneille's *L'illusion comique* (1635), Gustav Meyrink's *Der Golem* (1915), and Valmiki's *Ramayana* (4th century B.C.E). In his opinion the most complex of them all is Flann O'Brien's *At Swim-Two-Birds* (1939), which, apart from being a "verbal labyrinth" "es una discusión de las muchas maneras de concebir la novela irlandesa" (OC, 4:435). [is a discussion of the many ways to conceive of the Irish novel (SNF, 162).]

As is evident, Borges makes a clear distinction between our reality and the reality (or realities) of the literary works. In his opinion, literature is part of reality, but works of kind, or "Cuadros dentro de otros cuadros, libros que se desdoblan en otros libros" [Paintings within paintings, and books that branch into other books] help us grasp intuitively the identity postulated by Schopenhauer, who wrote "que la vigilia y los sueños eran hojas de un mismo libro y que leerlas en orden es vivir, y hojearlas, soñar" (OC, 4:435). [that dreaming and wakefulness are the pages of a single book, and that to read them in order is to live, and to leaf through them at random, to dream (SNF, 162).]

In his *Die Welt als Wille und Vorstellung*, the German philosopher had indeed postulated this identity, by way of conveying what the great poets had, in his opinion, rightfully claimed, namely, that "*life is a dream*" ([1844] 1966, 18). In this connection, Schopenhauer quotes Shakespeare's "We are such stuff / As dreams are made on, and our little life / Is rounded with a sleep" from *The Tempest* (1996 3095; act 4, scene, 1, lines 156-8), and mentions Calderón de la Barca who had sought to express this view "in a kind of metaphysical drama *Life a Dream* ('La Vida es Sueño')" ([1844] 1966, 17).³² Borges, however, refers neither to Shakespeare's lines above, nor to Calderón's work. Years latter, as he

³² Quoted in German in the original: "Das Leben ein Traum" (1997 [1844], 1.1:53).

was trying to explain why he was not particularly fond of Calderón's famous play,

he said that its title

was responsible for his being considered a metaphysical writer. One finds this in Schopenhauer's *The World as Will and Idea*, and Schopenhauer speaks about the oneiric essence of life (I think it is something like "das traumhafte Wesen des Lebens," but I won't answer for the accuracy of my quotation). Now then, I think that phrase can be interpreted two different ways. For example, when Shakespeare compares life to a dream, what he insists on is the unreality of life, the fact that it is hard to draw a line between what we dream and what we live. On the other hand, I think that in Calderon's case the phrase has a theological sense: "life is a dream," in the sense that our lives, our waking days, do not correspond to *the* reality, but only to a small part of reality, the sense that what is real is Heaven and Hell. (1982, 82; emphasis in the original)

In one of his Norton lectures, "The Metaphor" (1967), Borges says that Shakespeare's lines belong more to philosophy than to poetry, but that they are "heightened" or "lifted up into poetry" by the context. This, in turn, justifies Shakespeare's "sweeping statement," which insists on the unreality of life, rather than expressing the mere poetic feeling "that our lives are dreamlike or have a dreamlike essence" (CV, 28). As an example, he quotes a line by German poet Walther von der Vogelweide: "Ist mir mîn leben getroumet, oder ist est war?' 'Have I dreamt my life, or was it a true one?'".³³ And he adds:

I think this comes nearer to what the poet is trying to say, because instead of a sweeping affirmation we have a question. The poet is wondering. This has happened to all of us, but we have not worded it as Walther von der Vogelweide. He is asking himself "Ist mir mîn leben getroumet, oder ist est war?" and this hesitation gives us the dreamlike essence of life, I think. (CV, 28-9)

³³ In this quote, Borges mixes Middle German (in which the poem was originally written) with modern German.

Borges, then, makes a clear distinction between the philosophical notion of reality being illusory, and the poetic feeling of the dreamlike essence of life, which he thinks we all experience at some point in the course of our lives.

In his essay of 1949 Borges says that we find the literary works that include fictions within the fiction or branch into other stories "disquieting" because "tales inversiones sugieren que si los caracteres de una ficción pueden ser lectores o espectadores, nosotros, sus lectores o espectadores, podemos ser ficticios" (OC, 2:47). [those inversions suggest that if the characters in a story can be readers or spectators, then we, their readers or spectators, can be fictitious (OIE, 46).] And he adds, quoting from Carlyle rather than Schopenhauer: "En 1833, Carlyle observó que la historia universal es un infinito libro sagrado que todos los hombres escriben y leen y tratan de entender, y en el que también los escriben" (OC, 2:47). [In 1833 Carlyle observed that universal history is an infinite sacred book that all men write and read and try to understand, and in which they too are written (OIE, 46).] This suggests a twofold idea. First, the idea that our existence does not depend on us alone: others write our story as much as we write theirs. Together we write the history of the universe, that is, a book infinite in nature. The key word here is the word infinite. If the history of the universe were an infinite book, then it could unfold into other histories, each one mirroring the history of the universe. We could imagine this in the history of each individual, but the implication would be that human destinies are the same. This brings us back to Schopenhauer's idea of the eternal or archetypal human multiplied in time's mirrors, which, as we have seen, Borges does not accept. We

will come back to this issue later in this chapter. For now let us note that there is a second idea associated with the poetic feeling that life is a dream, namely, that human beings are fictions created by some deity, in virtually the same way that the fictional characters in a literary work are creations of a writer, who in turn may be a creation of some deity, who in turn may be a creation of another deity, and so on *ad infinitum*.

The year following the publication of "Cuando la ficción vive en la ficción", Borges published his now famous story "Las ruinas circulares" [The Circular Ruins; 1940],³⁴ where he follows this line of reasoning. There he tells the story of a man who invents a son in his dreams and brings him to life, only to discover at the end that he was also somebody else's invention. Commenting on this story, Borges says that its title suggests "the Pythagorean and Eastern idea of cyclical time", and its scheme is somehow timeless. According to him, two things lie at the root of his story. On the one hand, his disbelief in the Spinoza's ontological argument, "the claim that Something or Someone could be its own cause -its causa sui." He continues, "In my opinion, a speech implies a speaker and a dream a dreamer; this of course, leads to the concept of an endless series of speakers and dreamers, an infinite regress." On the other hand, the fact that he had "often thought about life as a dream" (AOS, 267-8; italics in the original). Additionally, Borges identifies two poems where he took up the same idea: "Ajedrez" [Chess] from El Hacedor [The Maker; 1960], and "El Golem" [The Golem] from *El otro el mismo* [The Self and the Other; 1964].

³⁴ The story was first published in *Sur* no. 75, December 1940, and later included in *Ficciones* [Fictions; 1956].

Borges showed much interest for the doctrine of the cycles in this period. Between the publication of "Cuando la ficción vive en la ficción" and "Las ruinas circulares", he published a book review entitled "Neil Stewart, *Blanqui*". ³⁵ In this review Borges briefly discusses Louis Auguste Blanqui's vindication and expansion of the doctrine in question, as it appears in his book *L'éternité par les astres* (1872), which is also prior to Nietzsche's postulation of eternal return. Perhaps what is more relevant in this short review is Borges' recovery of other testimonies of the doctrine, among which we find that of the Latin poet Lucretius mentioned in the previous chapter. Additionally, Borges reconsidered the eternal return in the poem "La noche cíclica" [The Cyclical Night; 1940],³⁶ where he transforms his personal theory of eternity devoid of God and archetypes, making of it a particular case of the doctrine in question. There, he once again suggests that this is the only eternity to which we can aspire with certainty. The poem is significant because it combines the repetition of identical cosmic cycles, with the repetition of similar cycles of time occurring in the life of a single individual.

In the first two stanzas, the poet briefly describes the doctrine known to the Pythagoreans, stating that stars and men revolve in cycles, and that the same history takes place again and again. By the end of the poem he writes:

Vuelve la noche cóncava que descifró Anaxágoras; Vuelve mi carne humana, la eternidad constante Y el recuerdo el ¿proyecto? de un poema incesante. "Lo supieron los arduos alumnos de Pitágoras . . ."

(OC, 2:242)

[It returns, the hollow night deciphered by Anaxagoras;

³⁵ The book review was first published in *Sur* no. 65, February 1940.

³⁶ The poem was included in *El otro, el mismo* [The Self and the Other; 1964].

In my human flesh, eternity keeps recurring And the memory –or the plan?— of an incessant poem. "They knew it, the fervent pupils of Pythagoras . . ."

(my translation)]

The doctrine itself is reflected by the poem's structure. This last stanza ends with a quote of the first line, making the poem cyclical and infinite in nature. Additionally, the poet's reference to Anaxagoras is not arbitrary. It is well known that the pre-Socratic philosopher was not only the first to give a correct theory of eclipses and to discover that the moon shines by reflected light, but also one of the very few atheists of the pre-Socratic era. By mentioning Anaxagoras, Borges is alluding to an eternity devoid of God and archetypes, as is clear from the following stanzas:

No sé si volveremos en un ciclo segundo Como vuelven las cifras de una fracción periódica; Pero sé que una obscura rotación pitagórica Noche a noche me deja en un lugar del mundo

Que es de los arrabales. Una esquina remota Que puede ser del norte, del sur o del oeste, Pero que tiene siempre una tapia celeste, Una higuera sombría y una vereda rota.

[I do not know if we will recur in a second Cycle, like numbers in a periodic fraction; But I know that a vague Pythagorean rotation Night after night sets me down in the world

On the outskirts of this city. A remote street Which might be either north or west or south, But always with a blue-washed wall, the shade Of a fig tree, and a sidewalk of broken concrete. (OC, 2:241)

(SP, 151)]

The poet shows uncertainty regarding the doctrine, but certitude that the night returns every day and with it the memories of the past gathered in a single image, thus it is that that memory inclines towards the intemporal. In the rest of the stanzas the poet keeps gathering up his memories of the past, and by the end he knows that it is the night of Anaxagoras, the eternity devoid of God and archetypes, which returns to his human flesh. This cyclical night is the only form of eternity that he can aspire to, since he doesn't know if there will be another cycle, and because this notion of eternity holds even if the memory of the poem recurs, while this would invalidate the Pythagorean doctrine.

In 1940, Borges also published an essay where he considers John W. Dunne's theory of time, which represents a modern and different way of combining the notion of eternity as the simultaneous occurrence of present, past and future with that of infinite regress.³⁷ In his book *An Experiment with Time* (1927), the English thinker argued that we actually live in eternity, as can be corroborated by prophetic dreams, which are a blend of memories of past and future events. In order to support his thesis, Dunne devised an intricate argument based on the *regressus*, which proposes the ontological multiplication of the self, and the spatial multi-dimensionality of absolute time (1927, 97-120).

The postulation of an absolute time, and its reduction to a category of space, are sufficient reasons for Borges to reject the theory. However, in a footnote Borges turns again to Schopenhauer for further support; he writes, thus:

³⁷ The essay "El tiempo y J. W. Dunne" [Time and J. W. Dunne] was first published in *Sur* no.72, Sept. 1940; later included in *Otras inquisiciones* [Other Inquisitions; 1952]. An early shorter version was published in *El Hogar*, 18 November 1938 under the title "J. W. Dunne y la eternidad" [J. W. Dunne and Eternity], and later included in *Textos Cautivos* (1986); see: OC, 4:399.

Medio siglo antes de que la propusiera Dunne, "la absurda conjetura de un segundo tiempo, en el que fluye, rápida o lentamente el primero", fue descubierta y rechazada por Schopenhauer, en una nota manuscrita agregada a su *Welt als Wille und Vorstellung*. La registra la pág. 829 del segundo volumen de la edición histórico-crítica de Otto Weiss. (OC, 2:25n2)

[A half century before Dunne proposed it, "the absurd conjecture of a second time, in which the first flows rapidly or slowly," was discovered and rejected by Schopenhauer, in a handwritten note added to *Welt als Wille und Vorstellung* which is recorded on p. 829 of vol. II of the historico critical edition by Otto Weiss. (SNF, 218n2)]

Although it might at first sight seem apocryphal, the information provided in this passage is true. In fact, Borges' quote is a literal translation from the original in old German style, which reads: "die absurde Voraussetzung einer 2ten Zeit, in der die erste, schnell oder langsam, verliefe, gemacht seyn" (Weiss, 2:829n44). Yet Borges does not mention that Schopenhauer, like Dunne, also adopted a Newtonian notion of uniform time. However, unlike Dunne, he did not believe that time exists apart from human cognition, a fact that may explain the omission. In general, Borges held the German philosopher in such high regard that his references to him do not only tend to be favorable in tone, but in some instances, they also tend to conceal aspects which the Argentine poet found objectionable. In the essay under discussion, we observe this happening a second time. In his introduction of Dunne's ontological multiplication of the self, or the idea that: "un sujeto consciente no solo es consciente de lo que observa, sino de un sujeto A que observa y, por lo tanto de otro sujeto B que es consciente de A y, por lo tanto, de otro sujeto C consciente de B ..." (OC, 2:25) [a conscious subject is conscious not only of what he observes, but of a subject A that also observes and, therefore, of another subject B that is conscious of A and, therefore, of another subject C conscious of B... (SNF, 217-8)], Borges observes that Schopenhauer, like the Hindus, had denied this idea

... nos consta que esta negación radical de la introspección cuenta unos ocho siglos. Hacia 1843, Schopenhauer la redescubre. "El sujeto conocedor", repite, "no es conocido como tal, porque sería objeto de conocimiento de otro sujeto conocedor" (*Welt als Wille und Vorstellung*, tomo segundo, capítulo 19. (OC, 2:24)

[... we know that this radical negation of introspection is about eight centuries old. Schopenhauer rediscovered it around 1843. "The subject who knows," he repeated, "cannot be known precisely as such, otherwise he would be known by other subject" (*Welt als Wille und Vorstelung* II, 19). (*SNF*, 217]

Schopenhauer had indeed denied that the self (or subject of knowledge), could be an immediate object of knowledge, for he thought that the only thing known is the will, which is successive in nature, and therefore always changing. This is in fact similar to Borges' own idea of the self, about which he says: "prefiero sospechar que se trata de estados sucesivos (o imaginarios) del sujeto inicial" (OC, 2:25). [successive (or imaginary) states of the initial subject. (SNF, 218).] However, as we saw earlier, Schopenhauer thought that the subject of knowledge (i.e., the human archetype) exists in some extra-mundane realm, and repeats itself in every individual self. For this reason there can only be *one* time series, which has the Newtonian characteristics of being continuous and infinitely divisible, and repeats itself in every individual self. Borges does not mention these facts, but it would seem that the omitted information is of no particular relevance to the topic being discussed. What matters is that the self cannot be known by other selves arranged in hierarchical order, and that Borges agrees with this line of reasoning. This, of course, would rule out the idea of an endless series of dreamers, as it appears, for instance, in the poem "Ajedrez" (mentioned above), where Borges compares human beings to pieces on a chessboard, whose destiny is governed by God. Here is the closing stanza of the poem:

Dios mueve el jugador, y éste, la pieza. ¿Qué Dios detrás de Dios la trama empieza De polvo y tiempo y sueño y agonías? (OC, 2:191)

[God moves the placer, he in turn the piece. But what God beyond God begins the round of dustand time and sleep and agonies?

(SP, 103)]

We note the infinite regress suggested by these lines, the hierarchy of subjects, whose destiny is governed by subsequent super-subjects *ad infinitum*. Borges finds no justification for this line of reasoning on logical grounds. But he is a poet writing a poem, and is only concerned with conveying the feeling that life is a dream. In fact, for all of his logical objections to Dunne's theory, by the end of the essay the Argentine poet shows how little he minds faulty reasoning when it leads to something beautiful:

Dunne asegura que en la muerte aprenderemos el manejo feliz de la eternidad. Recobraremos todos los instantes de nuestra vida y los combinaremos como nos plazca. Dios y nuestros amigos y Shakespeare colaborarán con nosotros.

Ante una tesis tan espléndida, cualquier falacia cometida por el autor, resulta baladí. (OC, 2:27)

[Dunne assures us that in death we shall finally learn how to handle eternity. We shall recover all the moments of our lives and combine them as we please. God and our friends and Shakespeare will collaborate with us. So splendid a theses, makes any fallacy committed by the author insignificant. (SNF, 219)]

Dunne's theory is somehow related to a theory formulated by Gerald Heard in his book Pain, Sex and Time: A New Outlook on Evolution and the Future (1939), which Borges reviewed in mid 1941. In general, the review in question, "Gerald Heard: Pain, Sex and Time (Cassell)," exhibits a change in Borges' attitude towards the idea of eternity.³⁸ The basic topic of the book is "La posibilidad de una evolución ulterior de nuestra conciencia del tiempo" (OC, 1:278). [The possibility of a subsequent evolution of our awareness of time (my translation).] Herald, like Seneca, Steiner, Schopenhauer, and Mauthner, argues that animals, unlike humans, are unaware of temporality, and therefore live in an eternal present, completely outside of time. Let us recall that Borges' "Penultimate Version of Reality" starts from this assumption, that is, from the idea that human beings alone have the perception of time. But Heard goes on to argue that eternity exists and makes a case for an accelerated evolution of the perception of time that allows the human species to pass from an initial a state of non-perception of time, to the perception of time, and finally to the intuition of the universe "sub specie aeternitatis" (OC, 1:278). [under the form of eternity.] Borges first expresses his doubts concerning the type of eternity to which Heard might be referring:

En el primer capítulo de su libro [Heard] afirma la existencia de un tiempo inmóvil que nosotros atravesamos. Ignoro si ese memorable dictamen es una mera negación metafórica del tiempo cósmico, uniforme, de Newton o si literalmente afirma la coexistencia del pasado, del presente y del

³⁸ The book review was first published in *Sur* no. 80, May 1941, and later included in *Discusión*, 1957.

porvenir. En el último caso (diría Dunne) el tiempo inmóvil degenera en espacio y nuestro movimiento de traslación exige *otro* tiempo. . . (OC, 1:278-9; italics in the original)

[In the first chapter of his book (Heard) asserts the existence of an immobile time, through which we go by. I ignore if that memorable pronouncement is merely a metaphorical denial of Newton's cosmic, uniform time, or if it literally affirms the coexistence of present, past and future. In the last case (Dunne would say), the immobile time is reduced to space, and our movement demands *another* time. . . (my translation; italics in the original)]

Borges' assessment of Heard's pronouncement comes as no surprise, given that Borges himself rejected Newton's notion of uniform and absolute time. What is really surprising is his assessment of the idea of an evolution of our perception of time that will allow us to intuit the universe under the form of eternity: "Que de algún modo evolucione la percepción del tiempo, no me parece inverosímil y es, quizá, inevitable. Que esa evolución pueda ser muy brusca me parece una gratuidad del autor, un estímulo artificial" (OC, 1:279). [The idea of an evolution of our perception of time is not implausible, and it may in fact be inevitable. But Herald's statement concerning the sudden evolution of that perception, seems to me arbitrary, an artificial stimulus (my translation).] In comparison to Borges' earlier remarks about eternity in general, this comment seems quite favorable. This, to be sure, does not mean that he accepts any particular notion of eternity, but now he is at least allowing for the possibility of intuiting or *feeling* that the universe is somehow eternal.

Additionally, Borges includes in this book review a long footnote where he tries to dispel the notion that Plato was a supporter of the theory of endless recurrence (OC, 277-8n1). He refers to Plato's *Timaeus*, where, as Borges rightly indicates, the Greek philosopher had talked about the Great Year, i.e., the period within which the celestial bodies come back to the same relative position vis-à-vis one another, as the one they had when the world began (1997, 1243; sec. 39D). But Plato, says Borges, did not infer from the notion of cosmic cycles that the history of the universe would repeat without variation. To support this assertion, he turns to the English philosopher Francis Bacon, who had acknowledged this fact in one of his literary essays, where he wrote that once Plato's Great Year was completed, the celestial bodies would cause the same general effects, but would not cause the repetition of the same individuals (Bacon [1625] 1883, 235).

In December of 1941, Borges published for the first time his essay "El tiempo circular" [Circular Time],³⁹ which he later included in the second edition of his *Historia de la eternidad*, 1953. There Borges reevaluates the notion of eternal recurrence, admitting, at last, one of its fundamental modes, namely, the eternal repetition, of *similar* cycles of time.

With his characteristic sense of humor, the Argentine poet opens this essay with the following words: "Yo suelo regresar eternamente al Eterno Regreso; en estas líneas procuraré (con el Socorro de algunas ilustraciones históricas) definir sus tres modos fundamentales" (OC, 1:393). [I tend to return eternally to the Eternal Return. In the following lines I will attempt (with the aid of a few historical illustrations) to define its three fundamental modes (SNF, 225).] The first of these modes, says Borges, rests on an astrological argument and was

³⁹ The essay was first published in *La Nación*, Dec. 14, 1941, under the title "Tres formas del eterno regreso" [Three Forms of the Eternal Return].

wrongly attributed to Plato. In Borges' opinion, the argument was in all probability formulated by an astrologer for the first time:

Algún astrólogo que no había examinado en vano el *Timed*ormuló este irreprochable argumento: si los períodos planetarios son cíclicos, también la historia universal lo será; al cabo de cada año platónico renacerán los mismos individuos y cumplirán el mismo destino. (OC, 1:393)

[An unknown astrologer, who had not read the *Timaeus* in vain, formulated this irreproachable argument: if the planetary periods are cyclical, so must be the history of the universe; at the end of each Platonic year, the same individuals will be born again and will live out the same destinies (SNF, 224)]

In this passage, we find and eco of Bacon's essay mentioned above, where the English philosopher refers to some "abstruse astrologer" who argued that the cyclical motion of the celestial bodies "perpetually" keeps time. Bacon agrees with this general conclusion, but he disagrees with the vain notion of those who conceive that "the celestial bodies have more accurate influences upon these things below than indeed they have" ([1625] 1883, 234-5).

The second mode is the one linked to Nietzsche, which Borges discussed and refuted in his "Doctrine of the Cycles" of 1934. Here, he mentions a few other thinkers who formulated the doctrine before the German philosopher: Blanqui, Le Bon, and Hume. The Scottish philosopher did not hold the doctrine to be true; however, Borges indicates that he formulated it in his *Dialogs concerning Natural Religion* (1779), to which reference was made in the previous chapter.

Finally, Borges defines a third mode of the doctrine in question, namely, one that supports similar rather than identical cycles:

Arribo al tercer modo de interpretar las eternas repeticiones: el menos pavoroso y melodramático, pero también el único imaginable. Quiero

decir la concepción de ciclos similares pero no idénticos. Imposible formar un catálogo infinito de autoridades. Pienso en los días y noches de Brama; en los períodos cuyo inmóvil reloj es una pirámide, muy lentamente desgastada por el ala de un pájaro, que cada mil años la roza; en los hombres de Hesíodo, que degeneran desde el oro hasta el hierro; en el mundo de Heráclito que es engendrado por el fuego y que cíclicamente devora el fuego; en el mundo de Séneca y de Crísipo, en su aniquilación por el fuego, en su renovación por el agua; en la cuarta bucólica de Virgilio y en el espléndido eco de Shelley; en el Eclesiastés; en los teósofos; en la historia decimal que ideó Condorcet, en Francis Bacon y en Uspenski; en Gerald Heard, en Spengler y en Vico; en Schopenhauer, en Emerson; en los *First principles* de Spencer y en *Eureka* de Poe… (OC, 1:394)

[I now arrive at the final mode of interpreting eternal repetitions, the least melodramatic and terrifying of the three, but the only one that is conceivable. I mean the concept of similar but not identical cycles. The infinite catalogue of authorities would be impossible to complete: I think of the days and nights of Brahma; the epochs whose moving clock is a pyramid slowly worn down by a bird's wing that brushes against it every thousand and one years; I think of Hesiod's men, who degenerate from gold to iron; the world of Heraclitus, which is engendered by fire and cyclically devoured by fire, and the world of Seneca and Chrysippus, annihilated by fire and renewed by water; I think of Virgil's fourth *Eclogue* and Shelley's splendid echo; Ecclesiastes, the theosophists, Condorcet's decimal history; I think of Francis Bacon and Ouspensky; Gerald Heard and Spengler; Vico, Schopenhauer, and Emerson; Spencer's *First Principles* and Poe's Eureka... (SNF, 226)]

It should be noted that the way in which Borges groups the different authors in this passage is not arbitrary. The English translation, however, does not in every instance reflect this fact. The grouping together of Virgil and Shelley, for example, responds to the English poet's echo of the fourth Eclogue in the final chorus of his lyrical drama "Hellas" (1822): "The world's great age begins anew, / The golden years return, ..." ([1822] 1886, 51). In fact, Shelley himself acknowledges his debt to the Latin poet in an endnote, where he explains that

although prophecies about periods of regeneration and happiness are not commonly made by poets, he does so taking as an excuse the authority of Virgil and Isaiah ([1822] 1886, 57 n7). Similarly, in the Spanish original Borges puts together Oswald Spengler and Giovanni Battista Vico. This responds to the fact that the German philosopher's ideas concerning the cyclical nature of the history of human culture were greatly influenced by the Italian philosopher's theory of history, according to which human societies go through a series of stages that recur throughout history in the same order but not in exactly the same form.

Now, although it might be interesting to comment on the rest of the references in this passage, many of which we have encountered already, I shall not attempt to do so. All that need be stressed here is that they each reference is authentic and relevant in this particular context. In what follows, I shall attempt to show that by admitting one of the modes of the eternal recurrence, Borges reached at last the final stage announced by Heard, namely, the intuition of the universe under the form of eternity.

From the infinite catalog of authorities Borges cites a passage by the Stoic philosopher and Roman Emperor Marcus Aurelius:

'Aunque los años de tu vida fueren tres mil o diez veces tres mil, recuerda que ninguno pierde otra vida que la que vive ahora ni vive otra que la que pierde. El término más largo y el más breve son, pues, iguales. El presente es de todos; morir es perder el presente, que es un lapso brevísimo. Nadie puede perder el pasado ni el porvenir, pues a nadie pueden quitarle lo que no tiene. Recuerda que las mismas cosas giran y vuelven a girar por las mismas órbitas y que para el espectador es igual verla un siglo o dos o infinitamente' (*Reflexiones*, 14). (OC, 1:395)

[Though the years of your life numbered three thousand, or ten times three thousand, remember that none can lose another life than that he lives now,

nor live another than that he loses. The lengthiest and briefest periods are equal. The present belongs to all; to die is to lose the present, which is the briefest of lapses. No one loses the past or the future, because no man can be deprived of what he does not have. Remember that all things turn and turn again in the same orbits, and for the spectator it is the same to watch for a century for a century or for two or infinitely (*Reflections* II, 14). (SNF, 227)]

The passage proclaims, on the one hand, the negation of time past and time future, and on the other, the negation "como el Eclesiastés de cualquier novedad" (OC, 1:395). [of all novelty, following the author of Ecclesiastes (SNF, 227).] From our discussion in the previous chapter, we know that Borges is referring here to Ecclesiastes 1:9, which states that "that which has been is that which shall be" and therefore, there isn't anything new under the sun. We also know that Borges had implicitly agreed with Augustine's interpretation, according to which the passage does not imply eternal recurrence, but refers to the repetition of similar things, such as the passing and rising of the generations, the rotation of the sun, and all kinds of things that rise and depart. In contrast to the 1934 essay, where Borges mentions Augustine but not this passage, here he alludes to the passage without mentioning Augustine. However, he does mention "el apasionado y lúcido Schopenhauer" (OC, 1:356) [the impassioned, lucid Schopenhauer (SNF, 127)], who had written a passage similar to that of Marcus Aurelius in his main work ([1844] 1966, 1:278). As we have seen, Schopenhauer postulated the existence of one time series that repeats itself in every individual self, which implies that there is only one history of the universe, and therefore only one human destiny. Thus Borges writes: 40

⁴⁰ In the following passage, Borges uses in the Spanish original the word "vikings" rather than "vikingos." In the prologue to *Elogio de la sombra* [Praise of Darkness] of 1969, the Argentine

La conjetura de que todas las experiencias del hombre son (de algún modo) análogas, puede a primera vista parecer un empobrecimiento del mundo.

Si los destinos de Edgar Allan Poe, de los vikings, de Judas Iscariote y de mi lector secretamente son el mismo destino –el único destino posible—, la historia universal es la de un solo hombre. (OC, 1:395)

[This conjecture –that all of mankind's experience are (in some way) analogous— may at first seem a mere impoverishment of the world. If Edgar Allan Poe, the Vikings, Judas Iscariote, and my reader all secretly share the same destiny –the only possible destiny— then universal history is the history of a single man. (SNF, 227-8)]

Here again we see Schopenhauer's idea of the eternal Human multiplied in time's mirrors: the only possible destiny (history) is that of the eternal human, which repeats itself in the destiny (history) of each individual. This is the same as saying that the history of each individual mirrors the history of the universe, or that the history of the universe unfolds into other histories. In other words, the history of the universe is made of histories, which contain the history of the universe, and so on *ad infinitum*. Borges had rejected this notion because he could not accept that all individuals are the same (or even similar). However, he did recognize, in a prologue of 1949,⁴¹ that Schopenhauer's doctrine, which Emerson also professed, is not altogether negative:

poet gave the following explanation for a similar "transgression" committed in this text, which also explains the one he commits here: "Deliberadamente escribo psalmos. Los individuos de la Real Academia Española quieren imponer a este continente sus incapacidades fonéticas; nos aconsejan el empleo de formas rústicas: neuma, sicología, síquico. Últimamente se les ha ocurrido escribir vikingo por viking. Sospecho que muy pronto oiremos hablar de la obra de Kiplingo (OC, 3:345n1; format in the original). [In the original, I deliberately wrote the word "psalmos." The members of the Spanish Academy wish to impose upon the American continent their own phonetic incapacities, asking us to use such rustic mispronunciations as "neuma," "sicología," "síquico." Just recently, they decided to write "Vikingo" instead of "Viking." I fear that we will soon be hearing about the work of the writer "Kiplingo" (SP, 267n1).] ⁴¹ In Thomas Carlyle: De los heroes. Ralfph Waldo Emerson: Hombres representativos. Translated by Jorge Luis Borges. Buenos Aires: W. M. Jackson, Clásicos Jackson, 1949. First reprinted in Prólogo con un prólogo de prólogos (1975).

Nuestro destino es trágico porque somos, irreparablemente, individuos, coartados por el tiempo y por el espacio; nada, por consiguiente es más lisonjero que una fe que elimina las circunstancias y que declara que todo hombre es todos los hombres y que no hay nadie que no sea el universo. Quienes profesan esa doctrina suelen ser hombres desdichados o indiferentes, ávidos de anularse en el cosmos; Emerson era, pese una afección pulmonar, instintivamente feliz. (OC, 4:40)

[Our destiny is tragic because we are, irremediably, individuals, limited by time and space; consequently, nothing is more gratifying than a doctrine that eliminates the circumstances and declares that every man is all men, and that there isn't anyone who is not the universe. Those who profess such doctrine are usually unhappy or indifferent men, eager to disappear in the cosmos; Emerson was, despite a pulmonary disease, instinctively happy. (my translation)]

Despite this advantage, Borges never accepted that there is only one possible destiny, and (consequently) that the history of the universe is the history of a single man; however, he did accept a variation of this doctrine. In the essay under discussion, he argues that in the passage quoted above, Marcus Aurelius strictly speaking "no nos impone esa simplificación enigmática" [does not force this enigmatic simplification upon us]; and he adds:

Marco Aurelio afirma la *analogía*, no la identidad, de los muchos destinos individuales. Afirma que cualquier lapso –un siglo, un año, una sola noche, tal vez el inasible presente— contiene íntegramente la historia. En su forma extrema esa conjetura es de fácil refutación: un sabor difiere de otro sabor, diez minutos de dolor físico no equivalen a diez minutos de álgebra. Aplicada a grandes períodos, a los setenta años de edad que el Libro de los Salmos nos adjudica, la conjetura es verosímil o tolerabl*e*. Se reduce a afirmar que el número de percepciones, de emociones, de pensamientos, de vicisitudes humanas, es limitado, y que antes de la muerte lo agotaremos. Repite Marco Aurelio: "Quien ha mirado el presente ha mirado todas las cosas: las que ocurrieron en el insondable pasado, las que ocurrirán en el porvenir" (Reflexiones, libro sexto, 37). (OC, 1:395)
[Marcus Aurelius affirms the *analogous* but not identical, nature of multifarious human destinies. He affirms that any time span –a century, a year, a single night, perhaps the ungraspable present— contains the entirety of history. In its extreme form, this conjecture is easily refuted: one taste is different from another, ten minutes of physical pain are not the same as ten minutes of algebra. Applied to lengthier periods, to the seventy years of age that the Book of Psalms allots us, the conjecture is plausible and tolerable. It becomes no more than an affirmation that the number of human perceptions, emotions, thoughts, and vicissitudes is limited, and that before dying we will exhaust them all. Marcus Aurelius repeats: "To see the things of the present moment is to see all that is now, all that has been since time began, and all that shall be unto the world's end; for all things are of one kind and one form" (Reflections, VI, 37). (SNF, 228)]

Borges' quote in this passage has been replaced by the English translator with Maxwell Staniforth's translation of Marcus Aurelius' "The to myself" (from the Greek "Ta eis heauton") or *Meditations* (1964, 99), as it is known in the English-speaking world. This differs from Borges' quote in Spanish in two ways. First, the Argentine poet does not mention the beginning of time, nor the end of the world, as these concepts are incompatible with Aurelius' Stoic (i.e., cyclical) worldview; instead, he uses the word 'insondable' (unfathomable or bottomless), and 'el porvenir' (the future), respectively. Second, Borges omits the last sentence altogether, given that it does not fit his argument. An English translation from the Greek original that is closer to Borges' Spanish version is that of George Long: "He who has seen present things has seen all, everything which has taken place from all eternity and everything which will be for time without end" (1890, 123). Now, if Borges omits the last sentence, i.e., "for all things are of one kind and one form," it is because accepting it would amount to admitting that all human destinies are the same. He is not, however, willing to accept or tolerate anything

beyond the *analogy* of human destinies. This, in turn, allows him to *feel* that the universe is somehow an eternity. That is, every individual is *somehow* the species, and the nightingale of Keats is also the nightingale of Ruth. Plato's archetypes, then, are not motionless pieces in a museum: they are dynamic, for they "maintain themselves by the infinite replacement of individuals, whose engendering and death form the pulse of the undying figures." But given that the individuals are similar rather than identical, they do not share the same time. There are in fact an infinite number of time series (one in the intellect of each individual), or human destinies, which mirror the history of the universe, and may or may not be parallel to others. Together these individual histories form the history of the universe, which is "an infinite book that all men write and read and try to understand, and in which they too are written." It could be objected that individual time series (individual histories) are not infinite but finite, and consequently do not mirror the infinite time series (history of the universe). However, let us recall what Borges says about these series, namely, that the terms within each series are anterior, contemporary or posterior in relation to one another. This means that each series is a Newtonian time series, but one that does not allow subdivisions. In this case, the individual time series can unfold into other time series, but cannot unfold into other time series on an infinitesimal scale. I will have more to say about this later in this chapter. For the moment, it is important to indicate that while Newton's time series has an existence independent from us, the individual time series do not, rather, they are relative to the individuals' intellects.

Clearly, Borges finally accepted Schopenhauer's version of Plato's Forms.

However, it was only with the publication in 1953 of the second edition of his *Historia de la eternidad* [History of Eternity], that the Argentine poet openly acknowledged this fact. In the prologue to this edition Borges writes:

No sé cómo pude comparar a "inmóviles piezas de museo" las formas de Platón y cómo no sentí, leyendo a Escoto Erígena y a Schopenhauer, que éstas son vivas, poderosas y orgánicas. Entendí que sin tiempo no hay movimiento (ocupación de lugares distintos en momentos distintos); no entendí que tampoco puede haber inmovilidad (ocupación de un mismo lugar en momentos distintos).

Dos artículos he agregado que complementan o rectifican el texto: La metáfora, *de 1952;* El tiempo circular, *de 1943*. (OC, 1:351; format in original)

[I do not know how I could compare Plato's Forms to "motionless pieces of a museum", and how I could not sense, while reading Scotus Erigena and Schopenhauer, that they are alive, powerful and organic. I understood that without time there is no mobility (the occupation of different places in different moments); I did not understand that without time there couldn't be immobility either (the occupation of the same place in two different moments).

I have added two essays that complement or rectify the text: The Metaphor, of 1952; and Circular Time of 1943 (my translation; format in original)

Let us note first that Borges gives the wrong date for his essay "Circular Time", which was actually published in December of 1941. Understanding the reasons behind this inaccuracy is irrelevant to our study. Therefore, I propose to focus our attention on what Borges claims to have finally understood, namely, that both, mobility and immobility require time. We say that something is moving when it is in two different places at two different times; on the other hand, we say that something is immobile when it is in the same place at two different times. Since eternity is timeless, we cannot say that it is mobile or immobile; it is neither. In

the *Timeaus* Plato said that time is the "moving image of eternity" (1997, 1241; sec. 37D); now Borges comes to realize that in view of the fact that rest is a form of motion, time does in fact mirror eternity where there is neither rest nor motion.

From our discussion so far, we know that Borges had long been aware of the fact that rest is a form of motion. In his 1929 essay on Zeno's paradox of Achilles and the tortoise, the Argentine poet actually explains how Russell uses Cantor's theory to refute Zeno's paradox showing that, since there is a one-to-one space-time correspondence for motion as well as for rest (i.e., mathematically motion and rest are equivalent), both, Achiles and the tortoise must be at some point at every instant of time. But given that the number of points that they should successively touch is the same, Achiles does not need to touch more points than the turtoise as he travels a greater distance. Therefore, Achilles may travel much farther than his opponent and win the race. Borges did not accept Russell's refutation because it involves accepting the notion that Newton's space and time series, which have an existence independent from us, can unfold into other series. Consequently, he proposed to conceive reality in terms of time alone, rejecting the idea of the infinitesimal divisibility of time. Now he is willing to accept Schopenhauer's reformulation of Plato's theory, provided that we postulate the similarity rather than the identity of human destinies. Consequently, he can accept Russell's conclusion that rest is a form of motion, so long as the infinitely small is excluded. In other words, he can now accept the first of the transfinite numbers, Aleph-Null, which is consistent with his interpretation of Schopenhauer's thesis.

Also consistent with the German philosopher's thesis is Scotus Erigena's doctrine, which reconciles Platonism, Aristotelianism, and Christianity. In his "History of Eternity", Borges had summarized the doctrine in question as follows:

[Juan Escoto Erígena] Predicó un Dios indeterminable; enseñó un orbe de arquetipos platónicos; enseñó un Dios que no percibe el pecado ni las formas del mal; enseñó la deificación, la reversión final de las criaturas (incluso el tiempo y el demonio) a la unidad primera de Dios.[...] Esta mezclada eternidad (que a diferencia de las eternidades platónicas, incluye los destinos individuales; que a diferencia de la institución ortodoxa, rechaza toda imperfección y miseria) fue condenada por el sínodo de Valencia y por el de Sangres. (OC, 1:362-3)

[(John Scotus Erigena) proclaimed an indeterminate God who perceives neither sin nor the forms of evil, and also mused on deification, the final reversion of all creatures (including time and the demon) to the primal unity of God (...) This hybrid eternity (which unlike the Platonic eternities, includes individual destinies, and unlike the orthodox institution, rejects all imperfection and misery) was condemned by the synods of Valencia and Langres. (SNF, 134)]

In order to fully grasp how Borges interprets Erigena's doctrine, we need to turn

our attention once again to the lecture on time of 1978.

In this lecture Borges first expounds on the problem of time in the manner

that we saw in the first chapter. Then, he examines the solutions that have been

offered, about which he says:

La más antigua es la que da Platón, la que luego dio Plotino y la que dio San Agustín después. Es la que se refiere a una de las más hermosas invenciones del hombre. Se me ocurre que se trata de una invención humana. Ustedes quizá pueden pensar de otro modo si son religiosos. (OC, 4:199)

[The oldest is that of Plato, offered later by Plotinus and then by St. Augustine. It is that which refers to one of the most beautiful inventions of men. I think it is a human invention. You may think differently if you are religious. (my translation)] As has already been indicated, Plotinus' philosophy was based chiefly on Plato's theory of Forms. Augustine, on the other hand, was strongly influenced by the Neoplatonists, for he had studied their books and found in them many things in common between their philosophy and the Christian doctrine (*Confessions*, bk. 7-8). Thus, he later adapted the Platonic theory of Forms to the Christian doctrine of the Word of God as it appears in the New Testament (John 1:1-9).

Borges mentions in passing Augustine's solution to the problem of time: "No en el tiempo sino con tiempo, Dios creó los cielos y la tierra" (OC, 4:202). [Not in time but with time God created heaven and earth (my translation).] Therefore, as was explained earlier, God could not have preceded his own creation, for that would imply that He was in time. However, Borges focuses exclusively on the solution given by Plato in the *Timeaus* (1997, 1241; sec. 37E) which is similar to Augustine's but refers solely to time; in Borges' words: "Platón ha dado esta solución: el tiempo procede de la eternidad, y sería un error decir que la eternidad es anterior al tiempo. Porque decir anterior es decir que la eternidad pertenece al tiempo" (OC, 4:202). [Plato has given this solution: time originates from eternity, and it would be erroneous to say that eternity is prior to time, for that would amount to saying that eternity belongs to time (my translation).]

Accordingly, Borges sets out to "prove" that Plato's eternity "is not arbitrary." He first points out that the Greek philosopher starts with an eternal being that wants to project itself in other beings, and does so successively (*Timeaus*, 37D). In good logic, it is impossible for this absolute being to project itself all at once given that it comprises everything; therefore, all things are given to us successively. Therefore, says Borges quoting in Spanish a line from William Blake's "Milton a poem in two books": "El tiempo es la dádiva de la eternidad." ["Time is the mercy of Eternity" (Blake [1804] 1982, 121).] Then he indicates that the idea of an eternal being projecting itself in other beings could naturally lead to Pantheism. In the prologue to *Nueve Ensayos Dantescos* [Nine Dantesque Essays; 1982], he would later explain:

La noción panteísta de un Dios que también es el universo, de un Dios que es cada una de sus criaturas y el destino de esas criaturas, es quizá una herejía y un error si la aplicamos a la realidad, pero es indiscutible en su aplicación al poeta y a su obra. El poeta es cada uno de los hombres de su mundo ficticio, es cada soplo y cada pormenor. Una de sus tareas, no la más fácil, es ocultar o disimular esa omnipotencia. (OC, 3:346)

[The pantheistic idea of a God who is also the universe, a god who is every one of his creatures and the destiny of those creatures may be heresy and an error if we apply it to reality, but it is indisputable when applied to the poet and his work. The poet is each one of his men in the fictive world, he is every breath and every detail. One of his tasks, and not the easiest of them, is to hide or disguise this omnipresence. **§**NF , 270)]

As we saw in the previous chapter, Borges ruled out the idea that human beings are fictions created by some deity in virtually the same way that the fictional characters in a literary work are creations of a writer, because of his disbelief in the idea which postulates that the self can be known by other selves arranged in hierarchical order. In this lecture he rules it out because the eternal being, or God, does not belong to time. But in the passage above, his argument against this idea seems different, and at first glance it is not perfectly clear what he means. Borges, of course, does not explain the reasons behind his statement, but I think that in stating that pantheism is a heresy, he is echoing Leibniz's claim that Spinoza's Pantheism was a veil for his atheism, for theism requires a transcendental notion of God. In stating that Pantheism is an error, on the other hand, one may surmise that he is referring to the reason he gives in this lecture for rejecting Pantheism, namely, "Felizmente creemos en individuos" (OC, 4:201). [Fortunately, we believe in individuals (my translation).] And then he adds:

... por ejemplo, cada uno de nosotros puede ser una copia temporal y mortal del arquetipo de hombre. También se nos plantea el problema de si cada hombre tuviera un arquetipo platónico. Luego ese absoluto quiere manifestarse, y se manifiesta en el tiempo. El tiempo es la imagen de la eternidad. Yo creo que esto último nos ayudaría a entender por qué el tiempo es sucesivo. El tiempo es sucesivo porque habiendo salido de lo eterno quiere volver a lo eterno. Es decir, la idea de futuro corresponde a nuestro anhelo de volver al principio. (OC, 4:204)

[... for instance, each one of us can be a temporal and mortal copy of the human archetype. But then the difficulty arises, whether each man has a Platonic archetype. Then, that absolute wants to manifest itself, and it does so in time. Time is the image of eternity. I believe that this would help us understand why time is successive. Time is successive because, having emanated from the eternal, wants to return to the eternal. That is, the idea of the future corresponds to our desire to return to the beginning. (my translation)]

Although Borges does not mention Erigena, there is in this passage an obvious allusion to his doctrine, according to which eternity is the end and purpose of all things, which emanate from it and strive to return to it. Furthermore, the difficulty referred to in the passage is related to the fact that Erigena's hybrid eternity includes individual human destinies. For, if eternity does include individual destinies, then there may be an archetype for each individual. This would imply that each individual's time series can unfold into other time series, which is indeed possible because each individual's self is constantly shifting. That is, every individual has a successive plural self, a self that also multiplies in time's mirrors.

Borges alludes to this idea by the end of the lecture when he says:

Si el tiempo es la imagen de lo eterno, el futuro vendría a ser el movimiento del alma hacia el porvenir. El porvenir sería a su vez la vuelta a lo eterno. Es decir, que nuestra vida es una continua agonía. Cuando San Pablo dijo "Muero cada día", no era una expresión poética la suya. La verdad es que morimos cada día y que nacemos cada día. Estamos continuamente naciendo y muriendo. Por eso el problema del tiempo nos toca más que los otros problemas metafísicos. Porque los otros son abstractos. El del tiempo es nuestro problema. ¿Quién soy yo? ¿Quién es cada uno de nosotros? Quizá lo sepamos alguna vez. Quizá no. Pero mientras tanto, como dijo San Agustín, mi alma arde porque quiero saberlo. (OC, 4:205)

[If time is the image of eternity, the future is the movement of the soul towards the future, which in turn would be the return to the eternal. That is, our life is a continuous agony. When St. Paul said "I die every day", his was not a poetic expression. The truth is that we die and we are born every day. We are continuously being born and dying. That is why the problem of time moves us more than the other metaphysical problems, because it is our problem, while the other problems are abstract. Who am I? Who is each one of us? Perhaps we may know, perhaps not. But in the meantime – as St. Augustine said— my soul is all on fire because I want to know it. (my translation)]

Note that in this instance Borges is expressing the problem of personal identity in terms of Schopenhauer's thesis. That is, given that the individual is continuously being born and dying, the individual archetype maintains itself by the infinite replacement of individual selves on a daily basis. Furthermore, Borges links sleeping and dying, as Schopenhauer does in the second volume of his main work where Borges had found the thesis; there the German philosopher writes: "death is for the species what sleep is for the individual" ([1844] 1966, 2:476). In Borges' example, the individual archetype is a subset of the human archetype (the species).

Yet, when all of this has been said, the problem remains: we do not know what time is. In this connection, Borges also quotes in Spanish St. Augustine's famous saying to which reference was made in the previous chapter, namely: "What is time then? If nobody asks me, I know: but if I were desirous to explain it to one that should ask me, plainly I know not" (2000, 239). To put it differently: the individual archetype is being made each day; therefore we do not know who we are.

From these considerations, it becomes clear that Schopenhauer's thesis, coupled with Erigena's doctrine, not only reconciles Platonism and Aristotelianism, but also stands as a near solution to the riddle of the universe, an organic and dynamic time labyrinth that exhibits the structure of the visual and verbal labyrinths discussed at the beginning of this chapter. Like them, it is characterized by patterns within patterns within patterns, all looking the "same" like an endless series of Chinese boxes nested in one another: it is the history of the universe, and so on *ad infinitum*; an infinite sacred book that all men write and read and try to understand, and in which they too are written.

Now, if we believe that eternity is God, we could think of a Creator who does not only plan the structure of the labyrinth, but also writes our personal history, which unfolds into other histories, without this implying an endless series of Creators, for God did not precede his own creation. Borges expressed this idea in the poem "Poema conjectural" [Conjectural Poem] of 1943,⁴² where he

⁴² The poem was first published in *La Nación*, July 4, 1943, and later included in *El otro, el mismo* (1964).

imagines the final monolog of his ancestor Francisco Laprida, who was killed during a civil war in the nineteenth century; right before dying he says

... Al fin me encuentro con mi destino sudamericano. A esta ruinosa tarde me llevaba el laberinto múltiple de pasos que mis días tejieron desde un día de la niñez. Al fin he descubierto la recóndita clave de mis años, la suerte de Francisco Laprida, la letra que faltaba, la perfecta forma que supo Dios desde el principio. En el espejo de esta noche alcanzo mi insospechado rostro eterno. El círculo se va a cerrar. Yo aguardo que así sea.

(OC, 2:245-6)

[... At last I come face to face with my destiny as a South American. The complicated labyrinth of steps thatmy days weaved since one day in my childhood led me to this disastrous afternoon. At last I have discovered the long-hidden secret of my life, the destiny of Francisco Laprida, the missing letter, the key, the perfect form known only to God from the beginning. In the mirror of this night I come across my eternal face, unknown to me. The circle is about to close. I wait for it to happen.

(SP, 159,161; translation modified)]⁴³

Here, the religious faith of the speaker justifies talk about God. The eternal face, the mirror, and the closing of the circle, make reference to the individual archetype, which having emanated from the eternal, multiplies itself in time's mirrors, finally returning to the eternal. But in this particular instance, the notion

⁴³ Translating "que mis días tejieron" as 'that my days weaved', rather than "that I have traced."

of Providence utterly precludes free will, which is implied in the idea that we all write and read the labyrinthine history of the universe.

A secular version of this poem appeared in prose at a much later date in

the epilogue to El Hacedor [The Maker; 1960], where Borges writes:

Un hombre se propone la tarea de dibujar el mundo. A lo largo de los años puebla un espacio con imágenes de provincias, de reinos, de montañas, de bahías, de naves, de islas, de peces, de habitaciones, de instrumentos, de astros, de caballos y de personas. Poco antes de morir, descubre que ese paciente laberinto de líneas traza la imagen de su cara. (OC, 2:232)

[A man sets himself the task of portraying the world. Over the years he fills a given surface with images of provinces and kingdoms, mountains, bays, ships, islands, fish, rooms, instruments, heavenly bodies, horses and people. Shortly before he dies he discovers that this patient labyrinth of lines is a drawing of his own face. (SP, 143)]

This passage also reflects the idea that we get to know our individual archetype shortly before dying but here the archetype, i.e., the history of the individual, freighted with provinces and kingdoms, mountains, etc., mirrors the history of the universe as Borges had described it in his "History of Eternity": "the years freighted with cities, rivers, jubilations." Additionally, in contrast to the previous poem, free will plays a fundamental role in this passage. That is, although the same highly ordered structure is assumed (the labyrinth), our destinies are shaped by us and those with whom we interact, for they too include us in their portrayal of the world. Therefore, taken as a whole, the universe is a living labyrinth where order and chance coexist.

This labyrinth, in which time unfolds into other time series (which may or may not be parallel to others), which in turn unfold into other time series, etc. is difficult to visualize in its dynamic complexity. However, we can imagine a tree as seen from above or below. The ensuing image is that of a garden of forking paths, which displays a pattern of bifurcating paths (intersecting at certain points) that repeats itself endlessly.

Borges' collection of shorts stories with that name *El jardín de senderos que se bifurcan* [The Garden of Forking Paths] was published in 1942, and includes the celebrated story "El jardín de senderos que se bifurcan" (1941), which in turn includes a story that includes a novel also exhibiting a labyrinthine structure. Taken as a whole, this collection is the Aleph-Null, that is, the universe made of universes, which in turn contain the universe, and so on to infinity, i.e., the time labyrinth. It is here that Borges concretizes for the first time this conception, which will reappear time and again in his poetry. For instance, in the poem "La trama" [The Web] from *La Cifra* [The Limits; 1981], where Borges characterizes the web as follows:

Es el gran árbol de las causas y de los ramificados efectos; en sus hojas están Roma y Caldea y lo que ven las caras de Jano. El universo es uno de sus nombres. Nadie lo ha visto nunca y ningún hombre puede ver otra cosa.

(OC, 3:313)

[It is the great tree of causes and of branching effects; Rome and Chaldea are in its leaves and also what the faces of Janus see. The universe is one of its names. Nobody has ever seen it and yet no man can see anything else.

(my translation)]

Here, the reference to Janus further indicates that the web in question is the time labyrinth, for the two faces of this Roman God gaze at opposite directions, seeing the beginning and end of days and years with no end in sight.

From the works we have analyzed so far, it is evident that although Borges did not give a fully explicit account of his ideas on time and his understanding of Plato's theory until 1978, by the early 1940s he had already visualized them. Furthermore, by late 1941, he had already completed his time labyrinth, and with the publication in 1942 of the collection mentioned above, he introduced to the world an infinite book, an entire new universe which is also a map of the world.

In the following chapter, we will examine "The Garden of Forking Paths" which throws much light on the interplay between chance and order within the labyrinth, In this connection, we will also examine a book review of 1944 where Borges discusses the problem of free will, which, as we have seen, is implied in the idea that we all write and read the labyrinthine history of the universe. In addition, we will examine the relationship between the Aleph-Null and "The Aleph," which are in turn related to a couple of texts that Borges held in high esteem: *The Thousand and One Nights* and *The Devine Comedy*.

Chapter 5: The Garden of Forking Paths

We start this chapter with an analysis of the celebrated story "The Garden of Forking Paths," in which Borges does not only allude to his own search for the solution to the riddle of the universe, but also to the immortal bird of Keats' stanza. We shall then be in a position to discuss briefly the relationship between the collection *The Garden of Forking Paths*, *The Thousand and One Nights*, and *The Divine Comedy*. We also examine in detail the way in which Borges deals with the question of free will or human beings' ability to determine their actions. The question is important because a conception of a universe that has a first cause, be it God or eternity, and returns to the first cause, would seem to imply an unbroken chain of causation extending from beginning to end. However, an act of free will is uncaused (i.e., it is itself a cause and not an effect), and therefore, it is not part of the causal chain. Finally, by the end of the chapter, we resume our discussion of the relationship between Borges' model of the universe and modern science, taking into consideration that the model has been transformed into a time labyrinth.

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I. THE IMMORTAL BIRD SINGS IN THE "GARDEN OF FORKING PATHS"

The voice I hear this passing night was heard In ancient days by emperor and clown...

- Keats, "Ode to the Nightingale"

The story "The Garden of Forking Paths" is, according to Borges, nothing more than a detective story (OC, 1:429). Indeed, the story has all the distinctive

features of the sub-genre: a riddle and a crime to be solved, a beginning, a middle, and an end. However, the story becomes endless because in it infinity is enclosed within the finite. That is, the "The Garden of Forking Paths" is a finite entity, which includes a story, which includes an infinite novel: a labyrinth, in which time unfolds into other time series (which may or may not be parallel to others), which in turn unfold into other time series, and so on *ad infinitum*.

Placed in the context of the First World War, "The Garden" includes the fictional story of Yu Tsun, a Chinese spy employed by the Germans in England, at the time of the first Battle of the Somme (1916). The third person narrator offers information based on Liddell Hart's *A History of the World War* (1930). In particular, he tells about the first stage of the British offensive campaign aimed at breaking the German front between the French cities of Montauban and Serre. The narrator says that the British offensive

había sido planeada para el veinticuatro de julio de 1916 y debió postergarse hasta la mañana del día veintinueve. Las lluvias torrenciales (anota el capitán Liddell Hart) provocaron esa demora –nada significativa, por cierto—. La siguiente declaración, dictada, releída y firmada por el doctor Yu Tsun, antiguo catedrático de inglés en la *Hochschule* de Tsingtao, arroja una insospechada luz sobre el caso. Faltan las dos páginas iniciales. (OC, 1:472)

[had been planned for July 24, 1916, but had to be put off until the morning of the twenty-ninth. Torrential rains (notes Capt. Liddell Hart) were the cause of the delay –a delay that entailed no great consequences, as it turns out. The statement which follows –dictated, reread, and signed by Dr. Yu Tsun, former professor of English in the *Hochschule* at Tsingtao –throws unexpected light in the case. The first two pages of the statement are missing. (CF, 119)]

From this passage, it would seem that the two planes –the actual and the ideal—fuse in Borges' story as they do in Cervantes' *Quixote*. However, the historical

facts related by our narrator have been slightly distorted. First, the German front extended from Maricourt to Serre, whereas Borges has it extending only as far as Montauban. Second, the British offensive was planed for June rather than July, and the postponement was indeed significant (Hart [1930] 1935, 314-15). Therefore, this plane is not actual but ideal. In fact, it needs to be so because the story "The Garden" is a fictional story included in the collection of short stories *The Garden of Forking Paths*.

Let us turn now to the story within the story. From the statement mentioned in the passage above, we learn that one of Yu Tsun's ancestors, Ts'ui Pên, had constructed a labyrinth and written an enigmatic infinite novel entitled The Garden of Forking Paths, which the famous English Sinologist Stephen Albert, had been trying to elucidate. Yu Tsun must report to the Germans the name of the city that they should bombard next, namely, Albert, which is in fact a city located in the vicinity of the Somme River. Yu Tsun determines to kill a person with that name, expecting that the news of an enigmatic murder would serve as a clue to his German superiors. A series of random events lead the Chinese spy to Albert's house. On his way there he takes a train and when he arrives at the train station, he is advised to take the path to the left and to turn left at every intersection. This reminds Yu Tsun that this was the common way to discover the central patio of certain labyrinths. Then, he starts walking through the path, which ran downhill and bifurcated; it was, he says, "de tierra elemental, arriba se confundían las ramas, la luna baja y circular parecía acompañarme" (OC, 1:474). [of elemental dirt. Branches tangled overhead, and the low round moon

seem to walk along reside me (CF, 122).] Before going any further, let us note that in this description, there is a clear allusion to the structure of the time labyrinth which is similar to what we observe when we look to the trees above us as we walk through a forest. The reference to the moon, on the other hand, is perhaps an allusion to a Persian metaphor "the moon is the mirror of time," which Borges thinks may belong to Farid al-Din Attar, author of the *The Conference of the Birds*, which tells the story of the Simorgh (CV, 35).⁴⁴

As Yu Tsun walks "under the English trees," he hears "a keen and vaguely syllabic song." He later discovers that the music he heard was Chinese and came from a disk on a gramophone in Albert's house, which "revolved near a bronze phoenix," and he adds: "Recuerdo también un jarrón de la familia rosa y otro anterior de muchos siglos, de ese color azul que nuestros artífices copiaron de los alfareros de Persia..." (OC, 1:476). [I also recall a vase of *famille rose* and another, earlier by several hundred years, of that blue color that our artificers copied from the potters of ancient Persia.... (CF, 123).]

In Chinese mythology, the phoenix or feng is a celestial bird that visited periodically the gardens and palaces of the wise emperors during China's mythological past, and sang the sweetest melody in the five Chinese harmonic notes. In Assyrian mythology, the phoenix is also a bird, eternal and periodic, known to have a beautiful song. Another eternal bird is the Persian Simorgh, which nests in the branches of the Tree of Knowledge, and has seen several times

⁴⁴ Borges claims to have found this metaphor in Browne's *A Literary history of Persia* (1902). Although the source is correct, the metaphor was used by another of the great Persian poets of the eleventh century, known as al-Bákharzí ([1902] 1997, 2:355-6).

the destruction of the world. Finally, Keats' nightingale is also an eternal and periodic bird, which maintains itself by the infinite replacement of individuals, whose engendering and death form the pulse of the undying figure. Figuratively speaking, then, what Yu Tsun heard as he waked through the garden of forking paths under the English trees, was the exquisite song of the immortal bird, the same heard by Keats, Ruth, and the emperor and clown in antiquity.

When Yu Tsun arrives to Albert's house, the modest Sinologist, who had been a missionary in China in the city-port of Tientsin, receives him without hesitation thinking that he has come to see the enigmatic novel mentioned above, entitled *The Garden of Forking Paths*. The Sinologist shows him the novel, and explains how he first approached the study of this rather mysterious work

... yo me había preguntado de que manera un libro puede ser infinito. No conjeturé otro procedimiento que el de un volumen cíclico, circular. Un volumen cuya última página fuera idéntica a la primera, con posibilidad de continuar indefinidamente. Recordé también esa noche que está en el centro de *Las 1001 Noches*, cuando la reina Shahrazad (por una mágica distracción del copista) se pone a referir textualmente la historia de *Las 1001 Noches*, con riesgo de llegar otra vez a la noche en que la refiere, y así hasta lo infinito. Imaginé también una obra platónica, hereditaria, transmitida de padre a hijo, en la que cada nuevo individuo agregara un capítulo o corrigiera con piadoso cuidado la página de los mayores. (OC, 1: 477)

[... I had wondered how a book could be infinite. The only way I could surmise was that it be a cyclical, or circular, volume, a volume whose last page would be identical to the first, so that one might go on indefinitely. I also recalled the night at the center of the *1001 Nights*, when the queen Scheherazade (through some magical distraction on the part of the copyist) begins to retell, verbatim, the story of the *1001 Nights*, with the risk of returning once again to the night on which she is telling it –and so on, *ad infinitum*. I also pictured to myself a platonic, hereditary sort of work, passed down from father to son, in which each new individual would add a chapter or with reverent care correct his elders' pages. (CF, 125)]

Note that in this passage there is a clear allusion to the first mode of endless recurrence, and an overt reference to one of the verbal labyrinths discussed in the previous chapter. Additionally, there is a veiled reference to O'Brien's *At Swim-Two-Birds*, which includes a literary discussion of of the different ways of conceiving the Irish novel. Here, there is too a literary discussion concerning the many ways of conceiving an endless book. The reference to the platonic work, on the other hand, calls to mind Schopenhauer's human archetype maintaining itself by the infinite replacement of individuals. In this case, a single human would have written the eternal or archetypal book.

Afterwards, we learn from Albert that the author of the novel had abandoned everything in order to compose a book and a labyrinth. The Sinologist further explains: "Todos imaginaron dos obras; nadie pensó que el libro y el laberinto eran un solo objeto" (OC, 1:476; italics in the original). [Everyone pictured two projects; it occurred to no one that book and labyrinth were one and the same (CF, 124).] At first, Albert discovered that the book was in fact a narrative labyrinth where there is a central story with various possible outcomes that become the point of departure of further bifurcations, and so on to infinity. In other words, he found that the novel consists of nested stories that duplicate and reduplicate to the point of vertigo the ramification of a central story. In this sense, the novel is like *The Thousand and One Nights*; however, it does not imply the first mode of eternal recurrence, which is implied in the Arab text by night 602, where the King Schahriah hears his own story from Scheherazade's lips.

Albert had good reasons to suspect that the novel is more than just a rhetorical exercise, as he lets Yu Tsun know:

No creo que su ilustre antepasado jugara ociosamente a las variaciones. No juzgo verosímil que se sacrificara trece años a la infinita ejecución de un experimento retórico en su país, la novela es un género subalterno; en aquel tiempo era un género despreciable. Ts'ui Pên fue un novelista genial, pero también fue un hombre de letras que sin duda no se consideró un mero novelista. El testimonio de sus contemporáneos proclama –y harto lo confirma su vida— sus aficiones metafísicas, místicas. La controversia filosófica usurpa buena parte de su novela. Sé que de todos los problemas, ninguno lo inquietó y lo trabajó tanto como el abismal problema del tiempo. (OC, 1:478)

[I do not believe that your venerable ancestor played at idle variations. I cannot think it probable that he would sacrifice thirteen years to the infinite performance of a rhetorical exercise. In your country, the novel is a subordinate genre; at that time it was a genre beneath contempt. Ts'ui Pên was a novelist of genius, but he was also a man of letters, and surely would not have considered himself a mere novelist. The testimony of his contemporaries proclaims his metaphysical, mystical leanings –and his life is the fullest confirmation. I know that of all problems, none disturbed him, none gnawed at him like the unfathomable problem of time. (CF, 126)]

As we have seen, Borges published his first essay dealing with the problem of time in 1928. Thirteen years later, by 1941, he had completed his model of the universe as a time labyrinth, which is an infinite book as well. We also know that Borges thought of himself as a man of letters, and that he was a writer with metaphysical leanings. Additionally, he was too interested in mysticism, as it is evident from his reference to Brahma in the catalog of authorities concerning the third mode of eternal recurrence, and the theosophists, specifically the Spanish Cabalists, but also the Neoplatonists, whose system contain theosophical elements. Moreover, Borges had much interest in Islamic mysticism, in particular in mystic poets Farid al-Din Attar, Omar Khayyám, and Mohammed Shams od-Din also known as Hafiz, and in Chinese mysticism, in particular in Chuang Tzu and Lao Tzu. Finally, the Argentine poet also tried his hand at a 'minor' genre, namely, the short story. In fact, by 1941 he had already written impressive masterpieces, such as: "The Circular Ruins" (1940), "Tlön, Uqbar, Orbis Tertius" (1940), and "La Biblioteca de Babel" [The Library of Babel; 1941], among others. That is, by that time it was evident that he was a writer of genius (though he would not say so), deeply concerned with the unfathomable problem of time. Furthermore, Albert at last reveals that he had in fact discovered that Ts'ui Pên's *The Garden of Forking Paths* is not only a novel, but also a universe conceived as a time labyrinth:

El jardín de los senderos que se bifurcan es una imagen incompleta, pero no falsa, del universo tal y como lo concebía Ts'ui Pên. A diferencia de Newton y Schopenhauer, su antepasado no creía en un tiempo uniforme, absoluto. Creía en infinitas series de tiempos, en una red creciente y vertiginosa de tiempos divergentes, convergentes y paralelos. (OC, 1:479; italics in the original)

[The Garden of Forking Paths is an incomplete, but not false, image of the universe as conceived by Ts'ui Pên. Unlike Newton and Schopenhauer, your ancestor did not believe in a uniform and absolute time; he believed in an infinite series of times, a growing, dizzying web of divergent, convergent, and parallel times. (CF, 127)]

The reference to Newton and Schopenhauer, who had adopted a Newtonian notion of time, speaks of Borges' rejection of abstract notions of time and space, on the one hand, and his rejection of the idea that there is only one human destiny, on the other. The rest of the passage describes almost exactly Borges' conception of the universe as a time labyrinth, where time unfolds into other time series (which may or may not be parallel to others), which in turn unfold into other time

series, ad infinitum.

Albert further explains:

Esa trama de tiempos que se aproximan, se bifurcan, se cortan o simplemente se ignoran, abarca *todas* las posibilidades. No existimos en la mayoría de esos tiempos; en algunos existe usted y no yo; en otros yo, no usted; en otros, los dos. En éste, que un favorable azar me depara, usted ha llegado a mi casa ... (OC, 1:479; italics in the original)

[The fabric of times that approach one another, fork, are snipped off, or are simply unknown for centuries, contains *all* possibilities. In most of those times, we do not exist; in some, you exist, but I do not; in others I do and you do not; in others still, we both do. In this one, which the favouring hand of chance has dealt me, you have come to my home ... (CF, 127; italics in the original)]

Given that the labyrinth's structure exhibits scale-invariance we can infer two things from this passage. On a smaller scale, the implication is that we do not exist in the time series of those individuals with whom we have never interacted. On a larger scale, on the other hand, our existence depends on the interaction of others, but also in our interaction with others, which in turn depends on the decisions we all make, and on the occurrence of random events. That is, in a highly *ordered* structure like this one, where there is so much interconnectivity, both our will and *chance* play an important role. Any slight change in our decisions or in the most ordinary circumstances can have dramatic consequences, which would not only affect our own lives and the lives of other individuals, but would also change the course of history. Consequently, there are many possible *universes* or histories of the universe. This reminds us of Leibniz's contention that God had created the best of all possible worlds. In Ts'ui Pên's The Garden of

Forking Paths, all possible worlds exist, as Albert further explains:

En todas las ficciones, cada vez que un hombre se enfrenta con diversas alternativas, opta por una y elimina las otras; en la del casi inextricable Ts'ui Pên, opta –simultáneamente por todas. Crea así diversos porvenires, diversos tiempos que también proliferan y se bifurcan. (OC, 1:477)

[In all fictions, each time a man meets diverse alternatives, he chooses one and eliminates the others; in the work of the virtually impossible-todisentangle Ts'ui Pên, the character chooses –simultaneously— all of them. (CF, 125)]

In one of his *Nueve ensayos dantescos* [Nine Dantesque Essays],⁴⁵ Borges explained that something analogous happens in real life: "En el tiempo real, en la historia, cada vez que un hombre se enfrenta con diversas alternativas opta por una y elimina y pierde las otras; no así en el ambiguo tiempo del arte, que se parece al de la esperanza y al del olvido" (OC, 3:353). [In real time, in history, whenever a man is confronted with several alternatives, he chooses one and eliminates and looses the others. Such is not the case in the ambiguous time of art, which is similar to that of hope and oblivion (SNF, 279).] We need to bear in mind, however, that Borges' model of the universe is an artistic creation, and therefore, all possible universes exist in this model, but only one actually obtains. This indicates that the history of the universe is not predetermined; it can take one of an infinite number of possible courses. That is, the structure of the history of the universe is predetermined (it is a living labyrinth), but its course is not. In sum, the model is not deterministic, for that would require that both, the structure

⁴⁵ The essay in question is "El falso problema de Ugolino" [The False Problem of Ugolin], first published in *La Nación*, May 30, 1948, under the title "El seudo problema de Ugolino" [The Pseudo-problem of Ugolino].

of the history of the universe and its course, were predetermined. In such case, possibilities would be non-existent or mere illusions. I have more to say about the interplay between order and chance, and the issue of determinism and free will later in the chapter. For now, I would like to make a last comment concerning "The Garden."

At close examination, we note that in the story "The Garden of Forking Paths," like in Cervantes' Quixote, the two planes -the actual and the ideal- do in fact intermingle. In his essay "Magias parciales del Quijote", Borges writes refering to the *Quixote*: "En la realidad cada novela es un plano ideal; Cervantes se complace en confundir lo objetivo y lo subjetivo, el mundo del lector y el mundo del libro" (OC, 2:45). [In our reality, every novel is an ideal plane. Cervantes delights in fusing the objective and the subjective, the world of the reader and the world of the book (OIE, 44).] Likewise, Borges fuses the work of the reader and the world of the story. In "The Garden" the Sinologist and the Chinese spy examine a book by Ts'ui Pên, which is in turn a book by Borges, namely, The Garden of Forking Paths. This plot device is similar to that adopted by Cervantes in the sixth chapter of the first part of the *Quixote*, where the priest and the barber examine Cervantes' Galatea. Furthermore, we know that in the second part of the Quixote, the protagonists of the first part read the Quixote. Similarly, we are in a way protagonists of Ts'ui Pên's The Garden of Forking Paths, for it is an image of the universe as conceived by Borges in which we all exist, and we are reading Borges' collection The Garden of Forking Paths.

II. THE GARDEN, THE 1001 NIGHTS, AND DANTE'S DIVINE COMEDY

When I think of the Arabian Nights, the first feeling I have is one of vast freedom.

— JLB, "The Poet's Creed"

As we saw in the previous chapter, the collection *The Garden of Forking Paths* is the Aleph-Null, that is, the universe made of universes, which in turn contain the universe, and so on to infinity, i.e., the time labyrinth. This first Aleph (**No**) is related to the celebrated story "El Aleph" [The Aleph] written a few years later (1945),⁴⁶ more than just conceptually.

In the "Commentaries" added to the first edition of *The Aleph and Other Stories* (1970), Borges writes referring to "The Aleph": "What eternity is to time, the Aleph is to space. In eternity, all time –past, present, and future— coexist simultaneously. In the Aleph, the sum total of the spatial universe is to be found in a tiny shining sphere barely over an inch across" (AOS, 263). In other words, while the Aleph-Null is eternity unfolding in time, the Aleph of the story is some sort of spatial eternity where all points of space converge in a single point. Borges continues:

Thinking of the Aleph as a thing of wonder, I placed it in as drab a setting as I could imagine –a small cellar in a nondescript house in an unfashionable quarter of Buenos Aires. In the world of the *Arabian Nights*, such things as magic lamps and rings are left lying about and nobody cares; in our skeptical world, we have to tidy up any alarming or out-of-the-way element. Thus, at the end of "The Aleph," the house has to be pulled down and the shining sphere destroyed with it. (AOS, 263)

 $^{^{46}}$ The story was first published in *Sur* no.131, Sept. 1945, and was later included in the collection *El Aleph* of 1949.

From here, it becomes clear that both, the Aleph-Null and the Aleph, have some connection with *The Thousand and One Nights*. For, as we saw before, the Aleph-Null has the same structure as the Arab text, which consists of nested stories, and did not include originally the night that makes the story circular. As Borges rightly indicates, the night 602 was added to the work sometime after the fourteenth century. Additionally, Borges would add later in his lecture "Las mil y una noches" [The Thousand and One Nights] of 1977, that the title of the work itself expresses the idea of infinity, given that for all of us "one thousand" is almost synonymous to "infinity" (OC, 3:234). Nevertheless, Critics have found a connection between "The Aleph" and Dante's *The Divine Comedy*, as Borges himself says in his "Commentaries":

Critics ... have detected Beatriz Portinary in Beatriz Viterbo, Dante in Danieri, and the descent into hell in the descent into the cellar. I am, of course, dully grateful for these unlooked-for gifts.

Beatriz Viterbo really existed and I was very much and hopelessly in love with her. I wrote my story after her death. Carlos Argentino Danieri is a friend of mine, still living, who to this day has never suspected he is in the story. The verses are a parody of his verse. (AOS, 264)

What Borges does not say is that critics have compared the Aleph of the story with Dante's Rose of the Just, which is located in the Empyrean Heaven (also called the Prime Mobile) that surrounds the ninth of the concentric spheres that rotate around the earth, and opens around a point which is God (*Paradiso*, Cantos 30-33). Borges' omission is indeed significant. In the prologue to *Nueve ensayos Dantescos* (1982), he would later write:

Imaginemos, en una biblioteca oriental, una lámina pintada hace muchos siglos. Acaso es árabe y nos dicen que en ella están figuradas todas las fábulas de las Mil y unas noches; acaso es china y sabemos que ilustra una novela con centenares o millares de personajes. En el tumulto de sus formas, alguna –un árbol que semeja un cono invertido, una mezquita de color bermejo sobre un muro de hierro— nos llama la atención y de ésta pasamos a otras. Declina el día, se fatiga la luz y a medida que nos internamos en el grabado, comprendemos que no hay cosa en la tierra que no esté ahí. Lo que fue, lo que es y lo que será, la historia del pasado y del futuro, las cosas que he tenido las que tendré, todo ello nos espera en algún lugar de ese laberinto tranquilo... He fantaseado una obra mágica, una lámina que también fuera un microcosmo; el poema de Dante es esa lámina de ámbito universal. (OC, 3: 343; format in the original)

[Imagine, in an Oriental library, a panel painted many centuries ago. It may be Arabic, and we are told that all the legends of *The Thousand and One Nights* are represented on its surface; it may be Chinese, and we learn that it illustrates a novel that has hundreds or thousands of characters. In the tumult of its forms, one shape –a tree like inverted cone; a group of mosques, vermillion in color, against an iron wall— catches our attention, and from there we move on to others. The day declines, the light is wearing thin, and as we go deeper into the carved surface we understand that there is nothing on earth that is not there. What was, is, and shall be, the history of past and future, the things I have had and those I will have, all of it awaits us somewhere in this serene labyrinth. . . . I have fantasized a magical work, a panel that is also a microcosm: Dante's poem is that panel whose edges enclose the universe. (SNF, 267)]

Interestingly enough, we notice on first inspection a connection between Dante's poem and the Aleph-Null or *The Garden of Forking Paths*, rather than "The Aleph." For instance, we know that in *The Garden*, the legends of *The Thousand and one Nights* are, in a way, represented. Likewise, as Borges himself explains in his lecture "La Divina Comedia" of 1977, in the verse "dolce color d'oriental zaffiro / che s'accoglieva nel sereno aspettto / del mezzo puro infino al primo giro" (*Purgatorio*, Canto 1, 13-15):

Dante describe el cielo oriental, describe la aurora y compara el color de la aurora con el zafiro. Y lo compara con el zafiro que se llama "zafiro oriental", zafiro del oriente. En *dolce color d'oriental zaffiro* hay un juego de espejos, ya que el oriente se explica por el color del zafiro y ese zafiro

es un "zafiro oriental". Es decir, un zafiro que está cargado de la riqueza de la palabra "oriental"; está lleno, digamos, de *Las mil y una noches* que Dante no conoció pero que sin embargo ahí están. (OC, 3:211; format in the original)

[Dante describes the Eastern sky, describes the dawn, and compares the color of the dawn to a sapphire. He compares it to a sapphire called *Oriental sapphire*, a sapphire of the East. The line [*dolce color d'oriental zaffiro*] is a game of mirrors, since the Orient is the color of the sapphire and the sapphire is an oriental sky. That is to say, the sapphire is weighted with the riches of the word *Oriental*. It is full of *The Thousand and One Nights*, which Dante did not know, but which nevertheless is there. (SNE, 11; format in the original)]

In the essay "Purgatorio I, 13" (1982) from *Nueve ensayos dantescos*, he adds: "Dante, en el verso precitado, sugiere el color del Oriente por un zafiro en cuyo nombre está el Oriente. Insinúa así un juego recíproco que bien puede ser infinito" (OC, 3:364). [In the aforementioned line, Dante suggests the color of the East, the Orient, by a sapphire that includes the Orient in its name. He thus implies a reciprocal play that may well be infinite" (SNF, 292).]

Now, we also know that *The Garden* is a Chinese novel, and that it implies the existence of thousands of characters. Moreover, Yu Tsun makes this explicit when he says in the story:

Algo entiendo de laberintos; no en vano soy bisnieto de aquel Ts´ui Pên, que fue gobernador de Yunan y que renunció al poder temporal para escribir una novela que fuera todavía más populosa que el *Hung Lu Meng* y para edificar un laberinto en el que se perdieran todos los hombres (OC, 1:475)

[I am something of a *connoisseur* of mazes: not for nothing am I the greatgrandson of that who was governor of Yunan province and who renounced all temporal power in order to write a novel containing more characters than the *Hung Lu Meng* and construct a labyrinth in which all men would loose their way. (CF, 122)] The work cited in this passage, written by novelist Ts'ao Hsüe Kin in the eighteenth century, includes more than four hundred characters. In 1937 Borges wrote a book review concerning the first complete translation of this work by German Sinologist Franz Kuhn entitled *Der Traum der roten Kammer* (1934) [Dream of the Red Chamber]. In Borges' opinion, this is not only most famous novel of the millenary Chinese literature, but is also is an excellent work where dreams and the fantastic abound. However, he also calls attention to the fact that in this novel, the numerous secondary characters are not well defined.⁴⁷ In Dante's poem, on the other hand, apart from the main characters, Dante, Virgil and God, there are also "miles, centenares, una multitude de personajes" (OC, 3:213). [thousands, hundreds, a multitude of characters (SNE, 15).] Nevertheless, Borges argues that in the *Comedy* these characters are not only perfectly well defined, but also eternal, for they go on living in the memory and the imagination of all men.

Another similarity between *The Garden* and Dante's poem is that in Borges' work, as in the *Comedy*, everything that was, is, and shall be, the history of past and future, is also in it. Finally, like Dante's poem, *The Garden* is too a microcosm, that is, an image of the macrocosm or the universe as conceived by Borges.

There are, however, important differences between the two works. First, the *Comedy* is the image of the universe as imagined by Dante. This universe, as Borges himself states in the prologue cited above, is described by Ptolemaic

⁴⁷ Borges' review was published in *El Hogar*, Nov. 19, 1937, under the title "*El sueño del aposento rojo*, de Tsao Hsue Kin", and was later included in *Textos Cautivos*; see OC, 4:329.

astronomy and Christian theology. This implies, on the one hand, that in Dante's poem, time and space are absolute, and thus independent from one another, while in *The Garden*, space is an incident in time, or is one of the many things to be found in time. On the other hand, it implies that the universe's structure is that of nested spheres, with the earth in the center, while *The Garden*, implies a structure of nested stories that duplicate and reduplicate to the point of vertigo the ramifications of a central story. Second, in *The Garden*, eternity is implied, for we know that time having emanated from the eternal wants to return to the eternal, however, eternity itself is not included. In the *Comedy*, on the other hand, eternity is actually included in the Empyrean Heaven. This has certain ethical implications, which Borges examines in the essay "El verdugo piadoso" [The Pitying Torturer; 1948], also included in *Nueve ensayos dantescos*.⁴⁸ There, he discusses the contradiction implicit in the fact that Dante understands and feels compassion for sinners such as Francesca, but does not forgive them, thus consigning them to the Inferno. He argues that the poet found a solution beyond logic. He first indicates that readers of the *Comedy* feel that Francesca's sin was inevitable. Dante, says Borges, felt the same way; he continues:

Sintió (no comprendió) que los actos del hombre son necesarios y que asimismo es necesaria la eternidad, de bienaventuranza o de perdición, que éstos acarrean. También los espinocistas y los estoicos promulgaron leyes morales. Huelga recordar a Calvino, cuyo *decretum Dei absolutum* predestina a los unos al infierno y a los otros al cielo. Leo en el discurso preliminar del *Alkoran* de Sale que una de las sectas islámicas defiende esa opinión. (OC, 3:359)

⁴⁸ The essay was first published in *Sur* no. 163, May 1948.

[He felt (but did not understand) that the acts of men are necessary and that an eternity of heavenly bliss or hellish perdition incurred by those acts are similarly necessary. The Spinozists and the Stoics also promulgated moral laws. Here there is no need to bring up Calvin, whose decretum Dei absolutum predestines some for hell and others for heaven. I read in the introductory pages of Sale's *Koran* that one of the Islamic sects also upholds this view. (SNF, 286)]

In other words, Borges thinks that in Dante's universe individual destinies are predetermined by God's decree. Furthermore, the passage makes explicit reference to the so-called "double form of predestination," according to which both, salvation and glory, and condemnation and destruction, are predestined. This form of predestination was famously advocated by Calvin ([1559] 1960, 2:920-2; bk. 3, ch. 21) and his followers. Borges referred to Calvin, in his essay "History of Eternity", where he also showed his contempt for such doctrine. Additionally although he had not accepted yet the Platonic theory, he expressed his preference for Erigena's idea of an indeterminate God who perceives neither sin nor the forms of evil. This implies that God does not condemn human beings; humans possess free will, and therefore may damn themselves by their own free choice. However, since God does not perceive evil, all human beings return to Him, as do all other things including time and the devil.

In *The Garden*, the Chinese spy Yu Tsun is condemned to death, but it is clear that he decides his own destiny. After he has decided to kill Albert, Yu Tsun makes the following comment:

El ejecutor de una empresa atroz debe imaginar que ya la ha cumplido, debe imponerse un porvenir que sea irrevocable como el pasado. Así procedí yo, mientras mis ojos de hombre ya muerto registraban la fluencia de aquel día que era tal vez el último, y la difusión de la noche. (OC, 1:474; italics in the original)

[*He who is to perform a horrendous act should imagine to himself that it is already done, should impose upon himself a future as irrevocable as the past.* That is what I did, while my eyes –the eyes of a man already dead—registered the flow of that day perhaps to be my last, and the spreading of the night. (CF, 121-2; italics in the original)]

In The Garden, then, as in the Comedy, the universe has an order. However, Borges thinks that in Dante's poem human destinies are predetermined; in his story and by extension in his time labyrinth, they are not. That is, human beings possess the ability to select from among a number of alternatives without being subject to the restraints imposed by divine predetermination. Nevertheless, in Borges' time labyrinth, chance plays a central role, and this seems to affect somehow our personal history, and thus the history of the universe. In the passage above, we learn that Yu Tsun decides his own destiny, imposing upon himself a future as irrevocable as the past, that is, a future in which he manages to communicate the name of the city the Germans should bombard, by killing a person with the name of Albert, which in turn results in his eventual execution. Yu Tsun in fact succeeds, but his success is in part subject to the occurrence of a series of random events that favor that particular outcome. Yu Tsun, for instance, selects Stephen Albert's name at random form the phone book, and this person happens to be the Sinologist who had studied and deciphered the labyrinth of one of his ancestors. Therefore, when he arrives at Albert's house, the Sinologist receives him well, for he found it natural that a Chinese person would come to his house to see "the garden," and this makes things easier for Yu Tsun. Moreover, on his way to Albert's house, Yu Tsun arrives at the train station a few minutes before his adversary, the officer Richard Madden, who intends to arrest him. Once

in the train, he reflects:

Me dije que ya estaba empeñado mi duelo y que yo había ganado el primer asalto, al burlar, siquiera por cuarenta minutos, siquiera por un favor del azar, el ataque de mi adversario. Argüí que esa victoria mínima prefiguraba la victoria total. Argüí que no era mínima, ya que sin esa diferencia preciosa que el horario de trenes me deparaba, yo estaría en la cárcel, o muerto. Argüí (no menos sofísticamente) que mi felicidad cobarde probaba que yo era un hombre capaz de llevar a buen término la aventura. (OC, 1:474)

[I told myself that the duel had begun, and that in dodging my adversary's thrust –even by forty minutes, even thanks to the slightest smile from fate— the first round had got to me. I argued that this small win prefigured total victory. I argued that the win was not even so small, since without the precious hour that the trains have given me, I'd be in gaol, or dead. I argued (no less sophistically) that my cowardly cheerfulness proved that I was a man capable of following this adventure through to its successful end. (CF, 121)

In this passage, there are two things to note. First, the rendering of Borges' original "siquiera por un favor del azar", as "even thanks to the slightest smile from fate" is problematic, for although this expression generally means that an event happens by chance (azar), it implies fatalism, which is inconsistent with Borges' model of the universe. Fatalism is generally understood as the doctrine that assumes that events are unrelated to one another and happen according to a fix inevitable destiny, which rules out human will. Fatalism differs from predestination in that it does not assume the law of causality, according to which every event is connected with its immediate antecedents and the events that follow. However, in Borges' model of the universe, there is free will, and therefore preceding events do not definitely determine events that follow. Furthermore, as Borges explains in his lecture "La Divina Comedia", what we call

chance "es nuestra ignorancia de la compleja maquinaria de la causalidad" (OC, 3:208). [is our ignorance of the complex machinery of causality (SNE, 8).] In other words, there is in fact an order that connects events, but we ignore the relationship that holds between causes and effects; hence, events that seem random to us are really "governed by a secret order." Such events, do affect our personal history, and the course of history, but do not cancel our ability to choose between different alternatives; therefore the future is not predetermined. The second thing to notice in the passage is that although Yu Tsun's line of reasoning is fallacious, the fact that his adventure was favored by chance is not. The fallacy consists in assuming that the chance event foreshadows the future, for this would imply that the future is predetermined, which in turn implies that there is no chance. However, chance events do occur, but given that we do not know how causality works, we cannot say that seemingly random events prefigure the future. This does not mean that random events do not affect the course of history; they do, and may in fact have dramatic consequences. If Yu Tsun, for instance, had not arrived to the train station a few minutes before his adversary, then he would perhaps have been arrested or killed. Consequently, the entire history would have changed, but we do not know exactly what would have happened next.

To sum up then, *The Garden*, which is the image of the universe as conceived by Borges, is a time labyrinth. Within this labyrinth, there is a precise secret law that links together causes and effects, but this does not cancel our ability to choose between different alternatives. Therefore, preceding events do not definitely determine the events that follow, but do have some effect in the

course of history. This effect manifests itself through the occurrence of random events, which are in fact governed by a secret order.

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III. THE GARDEN, THE PROBLEM OF FREE WILL, AND SCIENCE

We also have those lines by Manrique: Our lives are the rivers that flow into the sea which is death.

— JLB, "The Metaphor"

In a book review of 1944 entitled "M. Davidson: *The free will controversy* (Watts, London, 1943)",⁴⁹ Borges discussed the problem of free will, which, as is evident from our discussion above, is related to other important notions such as causality and chance, necessity and contingency (alternate possibilities of action), and moral responsibility. For this reason, the problem in question is very complex, and has in fact been a subject of considerable debate among metaphysicians, ethical philosophers, theologians, and scientists. The review is of particular interest because it is the only place where Borges discusses this issue at length, and gives his personal opinion on this subject.

It is interesting to note, in the first place, that the book in question was in fact published in London by Watts & Co., as Borges indicates; however, it was published in1937 rather than 1943, and under the title *Free Will or Determinism*. Borges points out that Davidson's book pretends to be a history of the secular polemic between supporters of free will and determinists, and that it limits itself

⁴⁹ The book review, was first published in *Sur* no. 16, Jun. 1944, and was later included in the second edition of *Discusión*.
to the presentation of the diverse philosophical schools, and their particular doctrine concerning the problem. This is more or less accurate, for the book does in fact examine the views of naturalists, materialists, evolutionists, realists, and idealists. Borges, however, does not indicate that the idealists in this book are the new physicists, whose theory of quantum mechanics changed our conception of matter, making it lose its substance. Dr. Davidson further explains: "From the solid atoms and ether of space we now come to electrons, photons, probability waves, mind-the only reality" (1937, 6; emphasis added). This development in atomic physics appears to offer an escape from the determinism implied by the mechanical theory of the universe, which made of human beings mere automatons devoid of will and creativity. There are two arguments based on the so-called uncertainty principle formulated by German physicist Werner Heisenberg. According to this principle, we can never know ahead of time the exact behavior of an electron because human observers perturb it with their measuring instrumentation. British astronomer and physicist Arthur S. Eddington argued as follows: "If the atom has indeterminacy surely the human mind will have an equal indeterminacy, for we can scarcely accept a theory which makes out the mind to be more mechanistic than the atom" (1937, 84). Now, the atom's indeterminacy violates the law of causality at the subatomic level, but this does not translate to the macroscopic level where there seems to be a steady ordered cause-effect progress. German physicist Max Planck argued that the indeterminacy translates to human behavior because, if one tries to determine the causal connection in one's personal behavior, the observing subject would perturb the object of research, who is also the observing subject. Moreover, according to Plank "Even if we possessed super-intelligence we should still be obliged to renounce the idea of studying the activities of our own ego at the moment we contemplated the activities of our mortal ego. The existence of a Supreme Being who sees the succession of cause and effect in all we do would not invalidate our sense of responsibility for our own actions... The causal principle is of little use in the conduct of our lives, because we cannot lay the causal foundations of our own future nor can we foresee the future as definitely resulting from the present" (1937, 82).

Borges does not mention that Davidson examines the evidence and criticism of other philosophical schools concerning the contribution of the theory of quantum mechanics to the question of human free will. His own stress is on the fact that the author presents the particular doctrine of the different philosophical schools concerning the problem of free will. This allows him to provide a good argument for dismissing the book; Davidson's method, he says

es erróneo o insuficiente porque se trata de un problema especial cuyas mejores discusiones deben buscarse en textos especiales, no en algún párrafo de las obras canónicas. Que yo sepa, esos textos son el ensayo *The Dilemma of Determinism* de James, el quinto libro de la obra *De consolatione Philosophiae* de Boecio, y los tratados *De divinatione* y De *Fato* de Cicerón. (OC, 1:282)

[iserroneous or insufficient becaus e free will is a specific problem, the best discussions of which should be searched for in specialized texts, not in some paragraph of the canonical works. As far as I know, those texts are James' essay *The Dilemma of Determinism*, the fifth book of Boethius' *De consolatione Philosophiae*, and Cicero's treatises *De divinatione* and *De fato*. (my translation)] From this point on, Borges limits himself to the discussion of these texts, establishing points of contact between them, and the book he is reviewing. He indicates, for instance, that Davidson does not explain with clarity the Stoic doctrine of portents, and omits mentioning Cicero, who had explained it in his De *divinatione* (On Divination). In the introduction to his book, Davidson explains briefly the deterministic doctrine of the Stoics, which has much in common with the mechanistic determinism of Naturalism (1937, 3-4). In his explanation, however, Davidson implies that by the time the Stoics formulated their doctrine, they had ceased to believe in a divine being. Nevertheless, reading Cicero, whose treatises are famous for offering a detailed account of the doctrines of the major schools of Hellenistic philosophy, we learn that for the Stoics the world itself is not only rational and divine, but also operates according to providence. The Stoics, however, did not allow for divine intervention, as Cicero makes clear in his treatise On Divination. There, he reports that for the Stoics divination is based on systematic observation, and that they think it is possible because the universe was created as a unified whole in such a way that certain results would be preceded by certain signs. Therefore, each part of the universe prefigures the history of the others (Cicero 2001, 351). From this doctrine, the Stoics reached the following conclusion: "si existiese un mortal cuyo espíritu pudiera abarcar el encadenamiento general de las causas, sería infalible; pues el que conoce las causas de todos los acontecimientos futuros, prevé necesariamente el porvenir" (OC, 1:282). [if there were a man whose soul could discern the links that join each cause with every other cause, then surely he would never make a mistake. For he who knows all the causes of future events necessarily knows what every future event would be (2001, 361).] Interestingly enough, as Borges rightly indicates, French mathematician and astronomer Pierre Simon de Laplace came to the exact same conclusion. He did so after he had developed the mathematical analysis of Newton's gravitational astronomy, finding that the solar system has a stable complicated cycle of motion that keeps repeating endlessly. From here he conjectured that an individual knowing at any given instant all the forces that animate nature, could condense "en una sola fórmula matemática todos los hechos que componen un instante del mundo, para luego extraer de esa fórmula todo el porvenir y todo el pasado" (OC, 1:282). [in a single mathematical formula all the events that comprise an instant of the world, and could later deduce from such formula the entire future and the entire past (my translation).] Laplace's work on celestial mechanics came to confirm the idea that the universe is a well-oiled machine, which keeps running on its own according to deterministic laws, which are also applicable to human behavior. Laplace, however, showed that divine intervention was not required, as Newton and other natural philosophers before him had thought. There is a famous anecdote around this issue that is worth mentioning. When Napoleon asked Laplace why in his Treatise on Celestial Mechanics (1799-1825) he had not mentioned the author of the universe, he replied, "Sire, I had no need of that hypothesis" (Bell [1937] 1986, 181).⁵⁰ Davidson, an astronomer and theologian, does not mention this development so

⁵⁰ Borges published a book review of Bell's *Men of Mathematics* in *El Hogar*, July 1938; see OC, 4: 375.

relevant to his discussion, and refers only indirectly to Laplace's idea of the vast intellect (1937, 4-5).

Davidson also examines in his book the criticism concerning Eddington's observation that the idealistic philosophy derived from quantum physics appears "to be hospitable towards a spiritual religion" (1937, 43). Borges merely indicates that Davidson (who in fact touches on the subject of predestination) does not mention Boethius, to whom the theologians owe "the most elegant argument" that reconciles free will with Divine Providence. In the fifth book of the Consolation of Philosophy, written in 524, while its author was awaiting execution, the Roman philosopher states that God foreknows everything but since he is outside of time, he knows everything at once. Consequently, our future, like our past and present, is part of God's eternal present, and just as present knowledge does not impose necessity on current events, it does not impose necessity on future events. Therefore, God foresees but does not predetermine our destiny; hence, there is freedom of the will (1997, 405-9; bk. 5, sec. 4, lines 1-73). In this argument, says Borges, Boethius "da a la palabra *providencia* el valor etimológico de *previsión*; ahí está la falacia, pues la Providencia, como los diccionarios lo han divulgado, no se limita a prever los hechos; los ordena también" (OC, 1:283; italics in the original). [assigns to the word *providence* the etymological value of the word foresight; here lies the fallacy, for the (Divine) Providence, as defined by the dictionaries, does not only foresees the events, but also orders them (my translation; italics in the original).]

Finally, Borges refers to William James, "misteriosamente ignorado por Davidson" [mysteriously ignored by Davidson]. One may surmise that the reason behind this mystery is related to the fact that in his essay "The Dilemma of Determinism" (1884), James reconciles free will and determinism. For Davidson, as is evident from the title of his book, *Free Will or Determinism*, these two cannot coexist; he is in fact a determinist inclined towards the mechanistic theory of the universe. Moreover, in his book Davidson concludes, from an "impartial" consideration of the evidence and criticism of other philosophical schools, that the contribution of quantum mechanics to the question of human free will has been practically nothing (1937, vii, 187-8). James, on the other hand, reaches a conclusion consistent with Planck's contention, derived from Heisenberg's principle, that the existence of a Supreme Being who sees the succession of cause and effect at the macroscopic level and in all we do, does not invalidate our free will and moral responsibility.

Borges explains:

Los deterministas niegan que haya en el cosmos un solo hecho posible, *id est*, un hecho que pudo acontecer o no acontecer. James conjetura que el universo tiene un plan general, pero que las minucias de la ejecución de ese plan quedan a cargo de los actores. ¿Cuáles son las minucias para Dios?, cabe preguntar. ¿El dolor físico, los destinos individuales, la ética? Es verosímil que así sea. (OC, 1:283)

[Determinists deny that there may exist in the cosmos a single possible event, *id est*, an event that might have or might have not happened. James conjectures that the universe has a general plan, but that the carrying out of the insignificant details of that plan is the responsibility of the actors. Which are the insignificant details for God? Are they perhaps: physical pain, individual destinies, and ethics? In all likelihood they are. (my translation)] In a footnote, he adds:

El principio de Heisenberg –hablo con temor y con ignorancia— no parece hostil a esa conjetura. (OC, 1:283n1)

[Heisenberg's principle – I speak with trepidation and lack of knowledge— does not seem hostile to that conjecture. (my translation)]

Borges closes his review with this passage. Only those readers familiar with Davidson's book, or with the debate around the contribution of the theory of quantum mechanics to the question of human free will, would understand Borges' reference to Heisenberg's principle. However, Borges provides the reader with clues throughout the text. The doctrine of the Stoics, for instance, corresponds to the mechanistic theory of the universe after Laplace, to whom Borges explicitly refers. The reference to Boethius, whose text is based on pagan philosophy rather than Christian theology, draws attention to Plank's idea that the idealistic philosophy derived from quantum physics is hospitable to the existence of a Superior Being. Davidson's major objection to this idea is that he cannot imagine what particular form of religion Plank could advocate that would completely fulfill the condition that its dogmas not oppose the law of causality at the macroscopic level (1937, 83). James had in fact postulated a conception of God which fulfills that condition. In his essay, he argues that the difference between determinists and indeterminists is as follows. The former think that "the parts of the universe already laid down absolutely appoint and decree what the other parts shall be"; therefore, in their universe, possibilities (i.e., things that may but need not to be), do not exist. The latter, on the other hand, think that "the parts have a certain amount of loose play on one another, so that the laying down of one of them does not necessarily determine what the others shall be"; therefore, their universe admits possibilities, which implies that the future may really be ambiguous (([1894] 1956, 150-1). James says that it is reasonable to assume that the universe has to satisfy postulates of coherence and uniformity, as the determinists think, but he provides arguments against the idea that it should also satisfy postulates of morality. In his opinion if we are to think of the universe as a whole, it is more rational to postulate a universe where individuals are free to choose between different alternatives and assume responsibility for their own behavior. With this in mind, he asks the reader to consider a God who creates the universe thinking that He would lead things to a certain end but would not decide at the moment of creation on all the steps thereto. He reasons:

At various points, ambiguous possibilities shall be left open, either of which, at a given instant, may become actual. But whichever branch of these bifurcations become real, I know what I shall do at the next bifurcation to keep things from drifting away from the final result I intend. ([1894] 1956, 181-2)

The problem here is that although God does not interfere in our free will and moral responsibility, He does interfere every now and then, and this leaves the creative mind, as James says, subject to the law of time ([1894] 1956, 181n1). This is, I think, the reason why Borges does not give an in-depth explanation of James' conjecture. In Borges' universe, individuals have free will and thus moral responsibility, and eternity, or God, does have a plan, i.e., that the absolute wants to manifest itself, and does so in time, which, having emanated from the eternal, wants to return to the eternal; however, there is no divine intervention. We could think that the occurrence of random events is a sign of God's intervention, but this would entail a contradiction because in Borges' model of the universe God is not subject to the law of time. Random events do occur, but they are part of the complex machinery of causality, which we do not understand.

As we saw in the previous chapter, one conception of God or eternity (as Borges prefers) that is consistent with his model is that of Erigena, which presupposes that God (eternity) is indeterminate, outside of time, and neither perceives sin, nor the forms of evil (e.g. physical pain). Furthermore, since God is impersonal, indeterminate and totally removed from the world of creation, he cannot be blamed for the evil of this world. In this conception, creation is a timeless event and hence ongoing and always contemporary because the Platonic Forms or prime causes, give rise to the world of individuals, whose individual archetypes are always in the making. Individuals shape their own destinies; that is, over the years they fill "a given surface with images of provinces and kingdoms, mountains, bays, ships, islands, fish, rooms, instruments, heavenly bodies, horses and people," and discover at the end that the resulting image is a drawing of their own face. In the process, they affect other people's lives because the universe is an organic whole, but since they have free will, they alone are morally responsible for their actions.

The development of quantum theory led to a deep revision of our conception of the universe and of our relation to it. Matter lost its substance, and came to be conceptualized merely as a way of grouping events. The uncertainty principle revealed that there is a complicated web of relations between the various parts of the whole, including the human observer. Relativity theory, on the other hand, revealed that time and space are not separate entities, and that there is no universal flow of time as in the Newtonian model, but different temporal sequences for different observers. Additionally, it revealed that Euclidean geometry could no longer describe our universe, and adopted non-Euclidean geometry as an abstract tool to describe our relativistic universe. By the late 1930's, modern physics left us with a universe that consists solely of events that happen in time, and which we specify in a particular system of reference that includes three measurements of space, which has no objective significance as a separate physical entity. The problem is that at the subatomic level, events do not seem to follow the law of causality, as they do at the macroscopic level. Thus, seen from the point of view of relativity, the universe is a deterministic system that works according to precise laws. Seen from the point of view of quantum mechanics, on the other hand, the universe is a non-deterministic system where chance reigns supreme.

Borges was aware of these developments, and as a man of letters, he was interested in literature, the visual arts, mathematics, mysticism, and philosophy, and was deeply concerned by the unfathomable problem of time. All of these factors contributed to the development of a model of the universe that does not only reconcile Aristotelianism and Platonism, but also the divergent points of view of relativity theory and quantum mechanics. His universe is like that of modern physics in that it is made of time, and consists of different temporal sequences that take on attributes of space (i.e., space is an incident in time). Additionally, it is a unified organic whole where there is a complicated web of relations governed by a precise secret law. In other words, in this universe, the law of causality holds, and chance events occur, which we cannot explain because of our ignorance of the precise secret law that links together causes and effects. However, since this precise law does not cancel our ability to choose between different alternatives, there is in fact indeterminacy within the model. In sum, in Borges´ universe, lawless behavior occurs in a model ruled by a deterministic law. Therefore, it is not possible to predict the future as Laplace and the Stoics thought.

Borges' labyrinthine universe has a very particular geometry. It exhibits the same structure as those verbal labyrinths such as *The Thousand and one Nights*: it is a living time labyrinth, or the history of the universe made of tiny histories of the universe, which in turn contain the history of the universe, and so on *ad infinitum*. Equivalently, it can be described as a pattern of bifurcating paths that repeats itself endlessly. The labyrinth, as we have seen, has two fundamental properties: it exhibits scale-invariance, and it encloses infinity within the finite. This geometry, is quite different from Euclidean geometry, which, as Einstein showed, cannot describe our universe. In fact, Euclidian geometry is also inadequate for describing the vast majority of the objects around us. In the natural world, scarcely any object has the form of a perfect geometric figure such a sphere, a cone, a square, etc.; things have irregular shapes. However, it was not until the early 1970's that French-American mathematician Benoit Mandelbrot developed a new geometry called Fractal Geometry, which is capable of describing the shape of the structured irregularities of the natural world. Such structured irregularities are called fractal objects, and are characterized by patterns within patterns within patterns, all looking the same, like an endless series of Chinese boxes. A fractal object can also be described as an object that displays patterns that repeat themselves ad infinitum regardless of magnification. These objects have the same fundamental properties as Borges' labyrinth: they exhibit scale-invariance, and enclose infinity within the finite. Fractal Geometry played an important role in the development of its mathematical cousin the Theory of Chaos, which also grapples with the structure of irregularity. Chaos may be defined as a theory of complex dynamic systems where lawless irregular behavior governed entirely by chance occurs in deterministic systems, i.e., in systems where behavior is ruled by exact laws. In Chaos Theory and in Fractal Geometry, Cantor's theory of transfinite numbers and the geometrical structure derived from it play a central role; however, in chaos theory the geometry is subservient to the dynamics, while in fractals the geometry dominates. The shape of trees and water in fast motion, are examples par excellence of fractals and chaotic systems respectively. Borges' time labyrinth resembles both, a fractal, i.e., a garden of forking paths, and a chaotic dynamic system, i.e., the great river of Heraclitus, where lawless behavior occurs in a model ruled by a deterministic law. This is in fact remarkable, particularly because it seems to indicate that human destinies (i.e., the course of a human life), and universal history, follow the same behavior as complex dynamic systems, such as water flowing in fast motion. In these systems, there is a nonlinear relation between causes and effects, and insignificant events may lead to dramatic changes; therefore, despite their deterministic nature, the behavior of the system remains unpredictable. Scientists use non-linear equations to model the behavior of chaotic systems, and when they map such behavior, what they obtain is a tree structure with infinitely many branches, just as in Borges' time labyrinth.

Evidently, Borges anticipated fractal geometry and chaos theory in his famous *Garden of Forking Paths*, which is also a map of the universe. In 1975 when chaos theory was not yet fully developed, the Argentine poet published a poem that encapsulates his "Cosmogonía" [Cosmogony]; it reads as follows:⁵¹

Ni tiniebla ni caos. La tiniebla Requiere ojos que ven, como el sonido Y el silencio requieren el oído, Y el espejo, la forma que lo puebla. Ni el espacio ni el tiempo. Ni siquiera Una divinidad que premedita El silencio anterior a la primera Noche del tiempo, que será infinita. El gran río de Heráclito el Oscuro Su irrevocable curso no ha emprendido, Que del pasado fluye hacia el futuro, Que del olvido fluye hacia el olvido. Algo que ya padece. Algo que implora. Después la historia universal. Ahora.

(OC, 3:80)

[Neither darkness, nor chaos. Darkness Requires eyes that see, like sound And silence require the ear, And the mirror, the form that inhabits it. Neither space, nor time. Not even A divine being who premeditates The silence that precedes the first Night of time, which would be infinite. The great river of Heraclitus the Obscure

⁵¹ From *La rosa profunda* [The Unending Rose, 1975]

Its irreversible course has not begun, That from the past flows towards the future, That from oblivion flows towards oblivion. Now, something that suffers. Something that implores. Then, the history of the universe. The present moment.

(my translation)]

Borges uses Heraclitus' river as a metaphor for the history of the universe, and individual destinies. The universe does not begin in time but with time, and it starts anew with each individual, whose self also starts anew every day. Like the river, it springs from the eternal source, grows, moves, changes, describing as it flows an intricate pattern, until it reaches its final destination: the eternal sea. Its nested stories or individual destinies repeat the same intricate weaving, flowing, growing, moving, and changing, until finally flowing into the eternal sea, which is death.

Apart from this metaphor, the Argentine poet uses other metaphors for his time labyrinth: "la trama" (the web) i.e., the great tree of causes and of branching effects; "la vida es sueño" (life is a dream), i.e., life is the dream of the human generations; and "un mapa" (a map), for the garden of forking paths is a map of the dynamic universe. Additionally, the metaphor "la muerte es sueño" (death is a dream) is a fundamental part of the time labyrinth, which entails Schopenhauer's comparison: "death is for the species what sleep is for the individual." This calls attention to the fact that Borges, unlike the philosophers who being puzzled by reality give an answer in logical way, used the metaphor to give a poetic answer, which he dubbed the time labyrinth.

In the following chapter, we examine the essay "The Metaphor," which is critical in understanding how Borges came to conceive world's literature as a "Garden of Forking Paths," i.e., as a living labyrinth.

Chapter 6: The Metaphor and the Literary Labyrinth

What is really important is the fact not that there are a few patterns, but that those patterns are capable of almost endless variations.

JLB, "The Metaphor"

In the previous chapters we considered how Borges came to conceptualize the universe as a time labyrinth. The theme of this last chapter is the literary labyrinth. As stated in the introduction, Borges thought of the world's literature as a living labyrinth, a growing forest. Here we discuss how the Argentine poet developed this concept. Our starting point is the essay "The Metaphor" (1953), which Borges also included in the second edition of his *History of Eternity*, in order to complement or rectify the text in which he had erroneously compared Plato's Forms to "motionless pieces of a museum."

In this essay, the Argentine poet first discusses some functional metaphors known as *kenningar*, which he had examined in detail in an essay of 1932 included in the first edition of his *History of Eternity*.⁵² The kenningar are complex periphrases that were widely used by the court poets of Scandinavia (Skalds) between the ninth and the thirteenth centuries. Originally each *kenning* was a simple compound word used in place of a single noun. Later they became more complex. For instance, the Saxon poets called the sea "the whale road," and the Norse called the battle "the web of men." In Borges' estimation, these two kenningar, unlike others that may be found scattered around old Germanic

⁵² The essay in question is "Las kenningar," first published in *Sur* no. 6, Nov. 1932.

literature, are fine metaphors. In the first, "the hugeness of the whale suggested and emphasized the hugeness of the sea." In the second, on the other hand, "in the idea of the web we get the pattern of the medieval battle: we have the swords, the shields, the crossing of the weapons." Additionally, "there is the nightmare touch of the web being made of living beings" (CV, 37-8). Nevertheless, most kenningar, and particularly those more complex ones invented by the Skaldic poets, such as "the bison of the seagull's prairie" (the vessel of the sea), do not reveal or communicate anything. They are, says Borges, "verbal objects" that spring from a mental process that merely combines words (OC, 1:382). This differs from Aristotle's observation that metaphors spring from an "intuitive perception" of the analogy between dissimilar "things." In this form, Aristotle's observation may be found in his *Poetics* (1984, 2:2237), rather than the third book of the *Rhetoric*, as Borges indicates. Nevertheless, this work does include a similar remark (1984, 2:2334), and in both works it is clear that the Greek philosopher, as Borges says, "funda la metáfora sobre las cosas y no sobre el lenguaje" (OC, 1:382; emphasis added). [bases the metaphor on *things* rather than language (my translation; emphasis added).]

Borges then focuses on the question concerning the number of *things* that may be found in the universe. To make things simple, he refers to one of the Chinese classics where Leibniz discovered binary notation, namely, the *I Ching* or *Book of Changes*: "En el *I King*, uno de los nombres del universo es los Diez Mil Seres" (OC, 1:382). [In the *I King* one of the names of the universe is the Ten Thousand Beings (my translation).] In one of the Norton lectures, "The Metaphor" (1967), where he expounds on the same topic, Borges explains:

We may accept, I suppose, the very conservative estimate of ten thousand. Surely there are more than ten thousand ants, ten thousand men, ten thousand hopes, fears, or nightmares in the world. But if we accept the number ten thousand, and if we think that all metaphors are made by linking two different things together, then, had we time enough, we might work out an almost unbelievable sum of possible metaphors. I have forgotten my algebra, but I think that the sum should be 10,000 multiplied by 9,999, multiplied by 9998, and so on. Of course the sum of possible combinations is not endless, but it staggers the imagination. So we might be left to think: Why on earth should poets all over the world, and all through time, be using the same *stock metaphors*, when there are so many possible combinations? (CV, 21-2; emphasis added)

In sum, despite the enormous amount of metaphors that may actually be invented, poets use the same stock metaphors, which are "eternidades" or archetypal metaphors that presuppose an "essential affinity" between certain things: women and flowers, eyes and stars, old age and dusk, time and water, life and dream, death and sleep (dream). Each one of these archetypal metaphors keep repeating and changing throughout time, and therefore, although the number of archetypes (which Borges also calls patterns) is finite and small, the number of metaphors that stem from them is endless. To illustrate this, Borges provides several concrete examples of metaphors that look very different, but can be traced back to the same pattern, namely, the archetype death-sleep:

En el Antiguo Testamento se lee (1 Reyes 2:10): Y *David durmió con sus padres y fue enterrado en la ciudad de David*... Hermano de la Muerte dijo del Sueño, Homero, en la *Iliada*... Heine había escrito: *La muerte es la noche fresca; la vida, el día tormentoso*... Schopenhauer, en su obra repite la ecuación muerte-sueño, básteme copiar estas líneas: *Lo que el sueño es para el individuo, es para la especie la muerte (Welt als Wille*, II, 41). El lector ya habrá recordado las palabras de Hamlet; *Morir, dormir*,

tal vez soñar, y su temor de que sean atroces los sueños del sueño de la muerte. (OC, 1:383; format in the original)

[In the Old Testament one reads (I Kings 2:10): And David slept with his parents, and was buried in the city of David... Sleep, own brother to Death, said Homer in the Iliad. ... Heine had written: Death is the cool night; life is a sultry day... In his work, Schopenhauer repeats the equation death-sleep; it suffices to copy the following lines: What sleep is for the individual, death is for the species (Welt als Wille, II, 41). The reader must have recalled Hamlet's words: To die, to sleep, to sleep perchance to dream, and his fear that the dreams of death's dream might be atrocious. (my translation; format in the original)]⁵³

We know that the penultimate example in this passage refers to Schopenhauer's explanation of Plato's theory. As we have seen, in Borges' interpretation the human archetype maintains itself by the infinite replacement of similar individuals, whose self keeps repeating and changing throughout time, thus forming the individual archetype. Likewise, the archetypal metaphor maintains itself by the infinite replacement of similar metaphors, because, as Borges says by the end of the essay, the modes in which the "secret affinities" between these things may be indicated or suggested "resultan, de hecho, ilimitados" [turn out, in fact, to be unlimited]. He continues:

Su virtud o flaqueza está en las palabras; el curioso verso en que Dante (*Purgatorio*, I, 13), para definir el cielo oriental invoca una piedra oriental, una piedra límpida en cuyo nombre está, por venturoso azar el Oriente: *Dolce color d'oriental zaffiro* es, más allá de cualquier duda admirable; no así el de Góngora (Soledad, I, 6): *En campos de zafiro pace estrellas*, que es, si no me equivoco, una mera grosería, un mero énfasis.

Algún día se escribirá la historia de la metáfora y sabremos la verdad y el error que estas conjeturas encierran. (OC, 1:384)

⁵³ See: Homer (1992, 337; bk. 14, lines 195-256); Heine (1999, 92-3); Shakespeare (1996, 1705; act 3, scene 1, lines 66-7).

[Their virtue or weakness is in the words; the curious verse in which Dante (*Purgatory*, I, 13) in order to define the Oriental sky invokes a clear Oriental gemstone, which, by a fortuitous chance, includes the Orient in its name: *Dolce color d'oriental zaffiro*, is, beyond any doubt, admirable; Góngora's verse (Soledad, I, 6): *In fields of sapphires grazes on stars*, is not. It is, if I am not mistaken, indelicate, a mere emphasis.

The history of the metaphor would be written some day, and we would know what is truth and false in these conjectures. (my translation)]

Let us recall that according to Borges, the sapphire in this verse "is weighted with the riches of the word *Oriental*", which amounts to saying that "it is full of *The Thousand and One Nights*," where a central story ramifies to the point of vertigo. This suggests that the few stock metaphors, which are always shifting, ramify into other metaphors, *ad infinitum*. That is, the history of the metaphor follows the same behavior as the Arab text, the history of the universe, and the structured irregularities of the natural world, in which chance plays a central role. Within this history, the history of each metaphor follows the same behavior as the history of every human life. In sum, the history of the metaphor is a living labyrinth, complex, dynamic and unpredictable; hence, the "fortuitous chance" mentioned in the passage above.

One important implication derived from this conclusion is that there is no novelty in writing, or more precisely, that no novelty is entirely novel. As Borges points out, in the three thousand years of Western literature, which started with Homer's *Iliad*, all essential affinities between things have been already perceived, and written. Poets create novel variations of the same old patterns, which keep endlessly returning: women-flowers, eyes-stars, old age-dusk, time-water, lifedream, death-sleep, and a few other patterns that we might be able to find "had we time and learning enough" (CV 33). Some of these may not be as common as

those discussed so far. In the passage above, for instance, Dante's and Góngora's comparison, is not very common, but both verses derive from the Old Testament: "'Y vieron al Dios de Israel; y había debajo de sus pies como un embaldosado de zafiro, semejante al cielo cuando está sereno (Éxodo, 24:10)" (OC, 1:384n2). [And they saw the God of Israel; and there was under his feet as it were a paved work of sapphire stone, similar to the sky when it is serene (Exodus, 24:10).]

Borges, however, does not rule out the possibility of inventing new metaphors. On the one hand, poets may "find other affinities that are merely astonishing," but these metaphors do not last, for "astonishment hardly lasts more than a moment" (CV, 33). On the other, it may also happen, "and why not hope for this as well?" that a poet is given the opportunity "to invent metaphors that do not belong, or that do not yet belong, to accepted patterns" (CV, 41). Like the other archetypal metaphors, these would be everlasting. That is, they would endlessly ramify into other metaphors. But the most important thing says Borges, is that the metaphors derived from the pattern or archetype, make us feel and imagine different things. To illustrate this, Borges considers the time-honored comparison, of eyes and stars, of which he provides the following examples: "I wish I were the night, so that I might watch your sleep with thousand eyes"; "The stars look down"; and "But I shall not grow too old to see enormous night arise, / A cloud that is larger than the world / And a monster made of eyes." He then explains:

The fact that I would like to emphasize ... is that although the pattern is essentially the same, in the first case, the Greek example "I wish I were the night," what the poet makes us feel is his tenderness, his anxiety; in the

second, we feel a kind of divine indifference to things human; and in the third, the familiar night becomes a nightmare. (CV, 24-5)

To summarize, then: every archetypal metaphor ramifies into other metaphors, each one of which makes us feel and imagine different things. From our discussion in previous chapters, we know that there is an infinite number of "things," i.e., of ideas that are applicable to human experience: imaginings, emotions, perceptions, sensations. We also know that the ramifications of each stock metaphor are infinite. Therefore, these archetypal metaphors and their infinite ramifications are capable of making us feel and imagine *all* things. This is, I think, what Borges meant when he wrote in the epilogue to *Otras inquisiciones* of 1952:

Dos tendencias he descubierto, al corregir las pruebas, en los misceláneos trabajos de este volumen.

Una, a estimar las ideas religiosas y filosóficas por su valor estético y aun por lo que encierran de singular y de maravilloso. Esto es quizá indicio de un escepticismo esencial Otra, a presuponer (y a verificar) que el número de fábulas o de metáforas de que es capaz la imaginación de los hombres es limitado, pero que esas contadas invenciones pueden ser todo para todo como el Apóstol. (OC, 2:153)

[As I corrected the proofs of this volume, I discovered two tendencies in these miscellaneous essays.

The first tendency is to evaluate religious or philosophical ideas on the basis of their aesthetic worth and even for what is singular and marvelous about them. Perhaps this is an indication of a basic skepticism. The other tendency is to presuppose (and to verify) that the number of fables or metaphors of which men's imagination is capable is limited, but that these few inventions can be all things for all men, like the Apostle. (OIE, 189)]

We notice two interesting things in this passage. On the one hand, there seems to be contradiction between the two tendencies discovered by Borges. For one cannot be a skeptic and "verify" or establish the truth of a presupposition at the same time. Borges, however, uses the word "essential," thus suggesting that his skepticism goes beyond any proof. But then again, the use of the word "perhaps" suggests that this is only probable. We are thus left with an ambiguity that allows for multiple interpretations. I have more to say about this later in this chapter. For now let us note, on the other hand, the reference to the "Apostle" in connection to the limited number of inventions of which men's imagination is capable. Those familiar with Borges' short story "Biografía de Tadeo Isidoro Cruz (1829-1874)" (1944),⁵⁴ would know that this reference comes from I Cor. 9:22, where St. Paul says: "I have become all things to all men." In the story, the third person narrator, who is about to tell an episode of Cruz's life, says alluding to the *Marítn Fierro*: "La aventura consta en un libro insigne; es decir, en un libro cuya materia puede ser todo para todos (I Corintios 9:22), pues es capaz de casi inagotables repeticiones, versiones, perversiones" (OC, 1:561). [The adventure is recorded in a very famous book –that is, in a book whose subject can be all things to all men (I Corinthians 9:22), for it is capable of virtually inexhaustible repetitions, versions, perversions (CF, 212).] Two years later, in his essay "El primer Wells" (1946) Borges writes: "La obra que perdura es siempre capaz de una infinita y plástica ambigüedad; es todo para todos como el Apóstol; es un espejo que declara los rasgos del lector y es también un mapa del mundo" (OC, 2:76). [Work that endures is always capable of an infinite and plastic ambiguity; it is all things to all men, like the Apostle; it is a mirror that reflects the reader's own traits and it is also a map of the world (OIE, 87).] Taken together, these statements seem to

⁵⁴ The story was first published in *Sur* no. 122, Dec. 1944, and later included in *El Aleph*, 1949.

indicate that all lasting metaphors, fables, and literary works, ramify endlessly, becoming *all* things to all men. In other words, literature, like the universe, which is made of time or music (i.e., the succession of imaginings, perceptions, emotions, sensations), is both, a complex dynamic system and a fractal, that is, a living labyrinth and a garden of forking paths or map of the universe.

Literature, then, mirrors the universe, not only because it has the same structure, but also because it mirrors the traits of the reader (emotions, imaginings, etc.). But as we know, the reader is a microcosm that mirrors the macrocosm, which being made of time is the moving image of eternity. Literature, then, mirrors the traits of the reader, who in turn mirrors the universe, which in turn mirrors eternity.

Now, we know that eternity includes the human archetype, which in turn includes the individual archetypes. Likewise, the universe includes the individual destinies, which in turn include the individuals' selves, which are always changing. Therefore, the universe reflects the traits of the eternal face (or individual archetype) of every individual, but it does so in time. For this reason, we do not get to know our eternal face until the last day of our lives, and only shortly before dying. Literature, however, reflects at a given point in time the traits of the readers, but obviously it does not reflect in its entirety their eternal face. This is in fact impossible because the individual archetype is being made each day.

In the story mentioned above, Borges suggests that the individuals may see their destiny reflected in a book or else in a given event or in other individuals. He opens the story with an epigraph that comes from Yeats' poem "Before the World was Made," which reads as follows:

I am looking for the face I had Before the world was made. Yeats: *The winding stair*

The third person narrator explains: "Cualquier destino, por largo y complicado que sea, consta en realidad *de un solo momento*: el momento en que el hombre sabe para siempre quien es" (OC, 1:562; italics in the original) [Any life, however long and complicated it may be, actually consists of *a single moment* –the moment when a man knows forever more who he is (CF, 213)] Then, he tells about Alexander the Great who saw his "futuro de hierro en la fabulosa historia de Aquiles" [iron future reflected in the fabulous story of Achilles], and about Charles XII of Sweden, who saw his in the story of Alexander. By the end of the story, Cruz sees his destiny reflected in a fight and in a man, namely, Martín Fierro. What he saw, however, was not his entire destiny, but only that his destiny was to be "un desertor" [a deserter] like Fierro. In fact, this is the reason why Cruz, who had come to arrest the famous gaucho, suddenly begins to fight against his own soldiers alongside Fierro. The story, of course, is fictional. In the *Martín Fierro*, Hernández does not give an explanation for Cruz's sudden decision, though he certainly suggests it in the following verses:

Tal vez en el corazón lo tocó un santo bandito a un gaucho que pegó el grito y dijo: "¡Cruz no consiente que se cometa el delito de matar ansí un valiente!" Y áhi no más se me aparió dentrandolé a la partida; yo les hice otra embestida pues entre dos era robo; y el Cruz era como lobo que defiende su guarida.

([1872] 1997, 30-1)

[In his heart, maybe, a blessed saint touched one of the gauchos, who cried out and said: "Cruz won't stand for this! I won't let you bastards kill a brave man like this!"

And so then he joined with me, and fought against the police; I charged at them again, and between the two of us it was a steal; this guy Cruz fought like a wolf defendin' his den.

(1974, 67)]

These and other verses where Cruz tells his own story, which, happens to be analogous to that of Fierro, as Borges himself indicates in his study *El "Martín Fierro"* of 1953, allowed Borges to imagine a poetic explanation for Cruz's behavior. In his study, Borges gives what he believes to be the real cause behind Cruz's decision: "Su decisión se debe a que en estas tierras el individuo nunca se sintió identificado con el estado" (MF, 538). [His decision is due to the fact that in this province, the individual never identified with the state (my translation).]

Likewise, Borges imagined having seen his destiny as a man of letters at a very young age, when he heard the penultimate stanza of Keats' "Ode to a Nightingale." Those verses, says Borges came to me through their music. I have thought of language as being a way of saying things, of uttering complaints, of saying that one was glad, or sad, and so on. Yet when I heard those lines (and I have been hearing them, in a sense, ever since), I knew that language could also be a music and a passion. And thus poetry was revealed to me.

And he adds:

I have toyed with an idea –the idea that although a man's life is compounded of thousands and thousands of moments and days, those many instants and those many days may be reduced to a single one: the moment when a man knows who he is, when he sees himself face to face... When I heard those lines of Keats, I suddenly felt that that was a great experience. I have been feeling it ever since. And perhaps from that moment (I suppose I may exaggerate for the purposes of a lecture) I thought of myself as being "literary." (CV, 99-100)

Keats' stanza, then, revealed to Borges that great experience which he calls in English poetry or the aesthetic emotion (in lieu of his Spanish "el hecho estético," which has no exact translation) and also that it is possible to "weave words into poetry." It was only later that he imagined having seen his destiny as a man of letters in the celebrated stanza. Moreover, we have in fact good reason to suspect that he actually imagined the whole episode. In another of his Norton lectures, "The Riddle of Poetry" (1967), Borges tells that he realized that "poetry, language, was not only a medium of communication but could also be a passion and a joy" (CV, 5), when he heard his father reading Keats' sonnet "On First Looking into Chapman's Homer," where the English poet writes:

Then felt I like some watcher of the skies When a new planet swims into his ken; Or like stout Cortez when with eagle eyes He stared at the Pacific –and all his men Look'd at each other with a wild surmise— Silent, upon a peak in Darien.

([1819] 1985, 72; lines 9-14)

Here, Borges refers exclusively to poetry understood as the aesthetic experience, for this is what Keats' sonnet is about. In other words, what the sonnet revealed to Borges is what he calls the "thrill," which he explains thus: "I do not think I understood the words, but I felt that something was happening to me. It was happening not to my mere intelligence, but to my whole being" (CV, 5-6). In the previous instance, on the other hand, Borges evidently refers to both meanings of the word poetry.

Be this as it may, two things are clear. First, that by 1936 when Borges discusses Plato's theory for the first time, he was already thinking of Keats' Ode, and was trying to find an explanation for its ambiguity concerning the problem of universals. His first explanation was based in Schopenhauer's idea that since animals are oblivious to death and memory, they are immortal; hence, there is no difference between the individual and the species. Second, the fact remains that for Borges literary works that endure reveal something about our selves, but do not reveal our eternal face. What they reveal is that which "cannot be translated into concepts," namely, our emotions, imaginings, and sensations at the particular point in time when we are in contact with the work. But this revelation escapes us at the moment we try to seize it, for our "self" is always shifting. This constitutes the aesthetic experience or poetry, i.e., the thrill, which, as we have seen "is in the exchange of the poem with the reader, not in the series of symbols registered in the pages of a book," just as the "flavor of the apple is in the contact of the fruit with the palate, not in the fruit itself."

In his essay "La muralla y los libros" [The Wall and the Books] of 1950, where Borges examines the reasons behind the emotion he felt when he read that the Emperor Shi Huang Ti had ordered the construction of The Great Wall of China, and also the burning of all books, he suggests that the aesthetic experience not only happens when we are in contact with a artworks where form and substance are one and the same, but may also occur in our contact with certain events or with individuals that have reached an old age, which is not to say that we see our eternal face in them, for in fact this revelation does not occur. In the closing passage to this essay he writes:

La música, los estados de felicidad, la mitología, las caras trabajadas por el tiempo, ciertos crepúsculos y ciertos lugares, quieren decirnos algo, o algo dijeron que no hubiéramos debido perder, o están por decir algo; esta inminencia de una revelación, que no se produce, es, quizá el hecho estético. (OC, 2:13)

[Music, states of happiness, mythology, faces worn by time, certain twilights and certain places, all want to tell us something we shouldn't have lost, or are about to tell us something; that imminence of a revelation as yet unproduced is, perhaps, the aesthetic fact. (SNF, 346)]

We see again in this passage the ambiguity mentioned above: "this is *perhaps* the aesthetic fact." Borges, on the one hand, seems certain that his time and literary labyrinths, along with the aesthetic ideas associated with them, are not arbitrary. For instance, the idea that the aesthetic experience may happen in our contact with "faces worn by time," finds explanation in the way in which Borges relates the problem of personal identity to Schopenhauer's thesis. Let us recall that he quotes St. Paul saying: "I die every day," and adds that that the Apostle's expression was not poetic. "The truth" says Borges "is that we die and we are

born every day. We are continuously being born and dying." That is, the individual archetype maintains itself by the infinite replacement of individual selves on a daily basis. It follows that every individual becomes in the long run "all things to all men" as St. Paul said. Or as Borges says in his essay "Cyclical Time," in the seventy years of age that the Book of Psalms allots us, every individual exhausts all human perceptions, emotions, thoughts, and vicissitudes. As we have seen, it is also "true" or verifiable that works of art that endure "become all things to all men." Furthermore, Plato's solution to the problem of time, (offered later by Plotinus and then by St. Augustine and Erigena), "is not arbitrary," as Borges set out to "prove" in his lecture on time. On the other hand, he thinks that this solution is a beautiful human invention, and claims that his tendency to evaluate religious or philosophical ideas on the basis of their aesthetic worth is "perhaps" an indication of an essential skepticism. Like Hume, however, Borges did not entirely abandon the belief in a design of the universe, for, as he says in his essay on Wilkins, "The impossibility of penetrating the divine scheme of the universe cannot, however, dissuade us from planning human schemes, even though it is clear that they are provisional." This would seem to indicate that Borges, like the Scottish philosopher, did not abandon the belief in some kind of intelligent Being, a belief that Hume thought was reasonable to have. Modern science, on the other hand, does not rule out the existence of a Supreme Being either. Perhaps "the universe has a general plan" and "the carrying out of the insignificant details of that plan is the responsibility of the actors," as William James and Borges have it, but then again, as Borges says, it is only "verosímil que

así sea," i.e., it is merely plausible that this is the case, not certain. This draws attention to a fact that should be kept in mind, namely, that Borges' conception of the universe as a time labyrinth and of literature as a living labyrinth is plausible because it is based on thought rather than classification, which is completely arbitrary. This does not imply, of course, that Borges was a philosopher or that he was affiliated to some philosophical school. He was a man of letters who felt – like Keats, and arguably like every one— the force of fundamental questions such as those that have in one way or another occupied the attention of philosophers and artists throughout the ages. Thus, as he tried to find a foundation for his own puzzlement, he arrived at a poetic answer that reconciles Platonism and Aristotelianism. In so doing, he came to conceive both the universe and literature as a living labyrinth or growing forest. This conception comprises poetic and metaphysical elements that may be clearly discerned in the poem "Arte poética" [The Art of Poetry],⁵⁵ which encapsulates Borges' poetic vision:

Mirar el río hecho de tiempo y agua Y recordar que el tiempo es otro río Saber que nos perdemos como el río Y que los rostros pasan como el agua.

Sentir que la vigilia es otro sueño Que sueña no soñar y que la muerte Que teme nuestra carne es esa muerte De cada noche que se llama sueño.

Ver en el día o en el año un símbolo De los día del hombre y de sus años, Convertir el ultraje de los años En una música un rumor y un símbolo.

⁵⁵ From *El Hacedor* [The Maker] of 1960.

Ver en la muerte el sueño, en el ocaso Un triste oro, tal es la poesía Que es inmortal y pobre. La poesía Vuelve como la aurora y el ocaso.

A veces en las tardes una cara Nos mira desde el fondo del espejo; El arte debe ser como ese espejo Que nos revela nuestra propia cara.

Cuentan que Ulises, harto de prodigios, Lloró de amor al divisar su Itaca Verde y humilde. El arte es esa Itaca De verde eternidad, no de prodigios.

También es como el río interminable Que pasa y queda y es cristal de un mismo Heráclito inconstante, que es el mismo Y es otro, como el río interminable.

[To gaze at the river made of time and water and remember Time is another river, To know that we stray like the river and our faces vanish like water.

To feel that waking is another dream that dreams of not dreaming and that the death we fear in our bones is the death that every night we call a dream.

To see in every day or year a symbol of all the days of man and his years, and convert the outrage of the years into a music, a sound and a symbol.

To see in death a dream, in the sunset a golden sadness –such is poetry humble and immortal, poetry returning, like dawn and sunset.

Sometimes at evening there's a face that sees us from the deeps of a mirror.

(OC, 2:221)

Art must be that sort of mirror, disclosing to each of us his face.

They say that Ulysses, wearied of wonders, wept with love on seeing Ithaca, humble and green. Art is that Ithaca a green eternity, not wonders.

Art is endless like a river flowing, passing, yet remaining, a river to the same inconstant Heraclitus, who is the same and yet another, like the river flowing.

(PA, 199)]

§

Before concluding this study, it is necessary to refer briefly to another aspect of Borges' reconciliation of Platonism and Aristotelianism, which is closely related to the metaphor. As was noted in the second chapter, Borges thought that words were originally metaphors, which amounts to saying that language was originally an artistic creation. Therefore, language is, as Borges says, an "arbitrary system of symbols" rather than "a system of arbitrary symbols," i.e., what is arbitrary is the system, not the symbols. In his essay on Keats' nightingale, where Borges focuses on the metaphysical aspect of the Platonist-Aristotelian controversy, he states that for the Aristotelians language "no es otra cosa que un aproximativo juego de símbolos" [is nothing but an approximate set of symbols], and for the Platonists "es un mapa del universo" [it is a map of the universe] (OC, 2:123; OIE, 123). From our discussion in Chapter 2, it is evident that Borges takes language to be an approximate set of symbols, for given that the things or ideas that are applicable to human experience are infinite in number, there cannot be a symbol for each and every one of them; therefore, language is not "a map of the universe," as the Platonists have it.

Now, in the Middle Ages the Aristotelian-Platonist controversy developed into the debate between nominalists and realists pertaining abstract concepts. The question was to determine whether genre and species were mind-independent, corporeal or sensible. In general, nominalists maintained that they are logical constructions, general terms or words without corresponding essence. Realists, on the other hand, thought that general terms have a real independent existence outside the mind. In his essay "De las alegorías a las novelas" [From Allegories to Novels] of 1948, where Borges focuses on this particular aspect of the controversy, he explains that for the Aristotelians (nominalists) "el lenguaje es un sistema de símbolos arbitrarios" [language is a system of arbitrary symbols], while for the Platonists (realists) language "es el mapa del universo" [is a map of the universe] (OC, 2:123; SNF, 339). We note that Borges takes sides neither with the nominalists nor with the realists For him language is not a map of the world, nor is it system of *arbitrary symbols*, but an approximate set of symbols.

To summarize, then: Borges' reconciliation of the Aristotelian-Platonist controversy was based on metaphysics rather than language. That is, he did not arrive at his conception of the time labyrinth starting from the presuppositions of language, for he was aware of the fact that it is humanly impossible to do so. Only God can have a perfect dictionary that registers a word for every thing. However, there is a way in which the approximate set of symbols that constitute language is also a map of the world. Let us recall that for Borges each symbol stand for something for which we have some experience. This experience, is not only accompanied by emotions, sensations, imaginings, etc., but is also concrete in that it springs from our contact with reality, and it varies from individual to individual, and even in the life of a single individual; hence, it is as fluid as the universe. Furthermore, since language was originally artistic creation, or, as Borges says, "language is not the invention of academicians or philologists," but "has been evolved through time, through a long time," its words have endured and ramified into other words, and keep on doing so. As he says in his "Inscription" to *Los Conjurados* [1985]:

Escribir un poema es ensayar una magia menor. El instrumento de esa magia, el lenguaje, es asaz misterioso. Nada sabemos de su origen. Sólo sabemos que se ramifica en idiomas y que cada uno de ellos consta de un indefinido y cambiante vocabulario y de una cifra indefinida de posibilidades sintácticas. Con esos inasibles elementos he formado este libro. (OC, 3:453)

[To write a poem is to attempt a minor magic. The instrument of that magic, language, is quite mysterious. We know nothing of its origin. We know only that it ramifies into diverse languages and that each one of them comprises an indefinite and changing vocabulary and an undefined number of syntactic possibilities. With those evasive elements I have formed this book. (my translation)]

In other words, language, like "The Garden of Forking Paths," is a map of the dynamic universe, and resembles a fractal and a chaotic dynamic system. Therefore, language is and is not a map of the world. With this result, we have covered all aspects of Borges' solution to the problem of universals versus particulars, which, as was noted in the introduction, implies that the individual is somehow the species, the universe is somehow an order and a chaos (in the traditional sense of the word chaos), and language is and is not a map of the

world. This solution was anticipated by Keats in his "Ode to the Nightingale", and by Schopenhauer in his main work, but was fully developed by Borges giving rise to the conception of the universe as a time labyrinth and to the conception of literature as a living labyrinth.
Conclusion

This study has examined Borges' solution to the age-old problem of universals versus particulars, the species versus the individual, Platonists versus Aristotelians. It has also looked at how, in all Borges' discussions of these questions, his concern for the nature of time is somehow always present. The analysis of Borges' writings and his sources reveals that as early as 1928 the Argentine poet discarded Newton's notions of uniform and absolute time and space, and envisioned an artistic model of the universe made of subjective time or the succession of the individual's emotions, sensations, passions and imaginings. Aware of the fact that the feelings and ideas that are applicable to human experience are not only infinite in number, but also the result of incontrollable and infinite actions, Borges concluded that the universe is chaotic and admitted that we arbitrarily impose an order on it. Our analysis shows that Borges based his aesthetic ideas concerning the art of narration and the aesthetic emotion on this conclusion. However, Borges did not stick to this conclusion, but looked into the metaphysical aspect of the Aristotelian-Platonist controversy, for he knew that although everything is always changing, something seems to endure. Additionally, he realized that nothing can dissuade us from planning human schemes of the universe, even when we know that they are provisional. At first, Borges did not find arguments to support Plato's theory of ideas and the related ideas of eternity and eternal recurrence. Nevertheless, he later found that the poetic feeling that life is a dream and Cantor's theory of transfinite numbers are consistent with Schopenhauer's interpretation of Plato's theory and Erigena's doctrine, which do not necessarily imply that human destinies are identical. This realization, led him to conceive the universe as an organic whole where chaos and order co-exist, just as determinism coexists with free will -not as mutually exclusive polarities but as inextricably connected points in an ongoing fertile tension This new artistic model of the universe, which he dubbed the time labyrinth, has the further advantage of reconciling the divergent points of view of relativity theory and quantum mechanics while also revealing an artistic space where fiction lives within fiction and within the structured irregularities of the natural world. Additionally, like his earlier model of the universe, this model is made of time or music, as Schopenhauer has it; therefore, it does not contradict his early aesthetic ideas. However, this new way of conceiving reality changed Borges' understanding of the role of the metaphor in literature. He realized that although poets cannot invent new metaphors, they can create novel variations of existing patterns and may even be given the opportunity to create a new pattern. Since the same holds for fables or stories, he came to conceptualize the world's literature as a living labyrinth or growing forest, humble, green and immortal. The role of the poet in Borges' view is that assigned to it by the classical writers, for whom poets serve literature and not the aggrandizement of their own ego. However, Borges also realized that no poet is irreductible, inassimilable and unique, for given that all things are given to all man their destinies are similar. But then again, given that their destinies are not identical, all poets retain their individuality. Perhaps no poem illustrates these ideas better than "El otro poema de los dones" [The Other Poem of the Gifts], one of Borges' longest poems from

which I quote a few lines:

Gracias quiero dar al divino laberinto de los efectos y las causas por la diversidad de las criaturas que forman este singular universo, por la razón que no cesará de soñar con un plano del laberinto, por el rostro de Elena y la perseverancia de Ulises, por el amor, que nos deja ver a los otros como los ve la divinidad. Por Schopenhauer, que acaso descifró el universo, por Whitman y Francisco de Asís, que ya escribieron el poema, por el hecho de que el poema es inagotable y no llegará jamás al último verso y varía según los hombres... por la música, misteriosa forma del tiempo. (OC, 2:314-15) [I want to thank the divine Labyrinth of causes and effects For the diversity of creatures That form this singular universe, For the human mind, which will not cease to dream With a plane of the labyrinth, For Hellene's face and Ulysses' perseverance, For that feeling called love, which allows us to see others As the divine being see them, For Schopenhauer, Who perhaps deciphered the universe, For Whitman and Francisco of Asís, who have already written the poem, For the fact that the poem is inexhaustible And will never get to the last verse And varies according to men...

For that mysterious form of time which is music.

(my translation)]

The poem is inexhaustible because a work that endures ramifies into other works endlessly, just as the author ramifies into other authors, and just as Borges writes a poem that was already written by Whitman and St. Francis. Additionally, the poem varies whenever poets write and readers read, just as the self of poets and readers is also in constant flux. Therefore every reading changes the poem. Furthermore, as Borges says in his lecture "El libro" of 1978, readers keep enriching the book with each reading (OC, 4:171).

Borges' works are no doubt inexhaustible. His essays, short stories, and poems, have been subject of numerous readings, each of which deepens our understanding of them, and will most certainly be subject of more readings in the future. As regards this study, my reading of Borges' works in light of his own sources, attempts to contribute to the understanding of his conception of the labyrinth in general. But it should not go unnoticed that, as a reader, the Argentine poet also enriched our understanding and appreciation of those works that were very dear to him, such as Keats' poems, Schopenhauer's works, Dante's *Comedy*, *The Thousand and One Nights* –and we could go on and on. For, like the poem that never ends, Borges' reading –and our reading of Borges— are also inexhaustible.

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Vita

Isela Maria Verdugo was born in Culiacán, Sinaloa (México) on December 17, 1964, the daughter of Luis Verdugo Leal and Blanca Verdugo Palazuelos. After completing her work at Colegio de Bachilleres de Sinaloa in 1984, she entered Instituto Tecnológico y de Estudios Superiores de Monterrey, campus Monterrey (ITESM). She received her degree of Licenciada en Economía, and her degree of Master of Business Administration from ITESM, in 1987 and 1992, respectively. In 1993 she entered the Graduate School of Economics of Universidad Autónoma de Nuevo León. During the following years she was employed as a teacher of algebra and probability and statistics at Colegio Inglés in Garza García Nuevo León, and as lecturer at ITESM teaching Macroeconomic Theory. From 1996 to 2001 she was a tenured faculty member of the Department of Economics at ITESM, where she taught Macroeconomic Theory, Economic Policy and Economic Growth Theory. In 1997 she was awarded a Fulbright scholarship and entered the Doctoral Program in Economics at The University of Texas at Austin. In 1998 she was awarded a scholarship from CONACyT, and entered the Doctoral Program of Latin American Studies at The University of Texas at Austin, where she specialized in Literature, Art History and Economics.

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