

THE MISSING MEMO: AN ANALYSIS OF ITALO
CALVINO'S WORK AND PROPOSAL FOR THE CONTENT
OF CONSISTENCY

by

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A THESIS

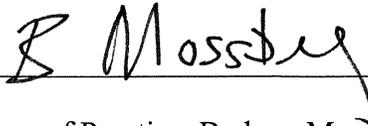
Presented to the Department of Philosophy
and the Robert D. Clark Honors College
in partial fulfillment of the requirements for the degree of
Bachelor of Arts degree

December 2015

An Abstract of the Thesis of

Jeff Hodson for the degree of Bachelor of Arts
in the Department of Philosophy to be taken December 2015

Title: The Missing Memo: An Analysis of Italo Calvino's Work and Proposal for the
Content of Consistency

Approved:  _____

Professor of Practice, Barbara Mossberg

In 1985, Italo Calvino set out to write six lectures for the upcoming Charles Eliot Norton lectures at Harvard University. As an allegorical fiction writer, literary analyst, and essayist, Calvino intended to discuss his faith in the future of literature in the coming millennium and advocate that there are things that only literature can give us, by means specific to it. Thus, he devoted his lectures to certain values, qualities, or peculiarities of literature that are close to his heart and situate them within the perspective of the new millennium. Unfortunately, he died from the effects of a stroke in September 1985, before he was able to complete his sixth and final lecture. Now, fifteen years after the turn of the millennium, I will imaginatively engage with a representative collection of Italo Calvino's work including, unfinished lectures, literary essays, allegorical fiction, published letters in order to derive a proposal for the content of his missing sixth memo "Consistency." My purpose is to provide a deductive inquiry—not a speculative piece—supported by Calvino's own words and a logically based methodology. Towards this end, my own preparation necessitates a mathematical and classical education to which I have added my own personal interest in the convergence of philosophy and science. In pursuit of this convergence between philosophical and scientific discourses I am applying to graduate programs that share a similar affinity for interdisciplinary studies.

Acknowledgements

First, I would like to thank Professor Alejandro Vallega for introducing me to a variety of Italo Calvino's works, and in particular *Six Memos for the Next Millennium*. I would also like to thank him for his time, insight, and encouraging words—his philosophy and literature class was the only class in which I emailed my professor and asked if it would be acceptable if I wrote about more than what was required for the final paper. I would also like to thank Professor Louise Bishop for meeting with me periodically and not only discussing the content of the work product, but also the intentional stylistic approach to this thesis, which is unique blend of a philosophical analysis, purposeful exhibition, and creative emulation, and ordering. I would like to thank Dean Terry Hunt, who unfortunately could not attend the defense, but who was my prospectus instructor and was kind enough to discuss the nature of my project as it evolved on multiple occasions. I would like to thank my parents for encouraging me to attend the Clark Honors College—which has without a doubt been the most rewarding component of my undergraduate education—and their willingness to read some of Calvino's work in order to talk about my project with me. But I would like to thank above all, Professor Barbara Mossberg. Her ability to tease out the very best in people, but particularly young students, is unrivaled by any professor, teacher, or mentor that I have ever had or heard about. She has assisted me throughout this entire thesis process, including the two other thesis ideas I was originally working on and encouraged me to pursue an academic path that focuses on my interest in the convergence of science and philosophy. Thank you to everyone for your time, assistance, and willingness to read my work.

Table of Contents

Acknowledgements	iii
Introduction	1
SECTION I: METHODOLOGY	4
Elements of Consistency in Calvino's Literary Analysis Essays	5
Elements of Consistency in Calvino's Fiction	6
Elements of Consistency in <i>Six Memos for the Next Millennium</i>	7
Section II: Inquiry into the Nature of Consistency	9
Section III: Proposal for the Content of Consistency, Including Likely Topics of Discussion	34
Bibliography	87

Introduction

In 1984, the Italian allegorical fantasy writer and literary analyst Italo Calvino was selected to deliver the 1985 Charles Eliot Norton Lectures at Harvard University—an annual lectureship given by distinguished creative figures and scholars in the arts regarding the topic of “poetry in the broadest sense” and named after the former professor of fine arts. His wife, Esther Calvino, stated that after Italo “settled on a scheme to organize the lectures, he devoted most of his time to their preparation” and from the first of January 1985 Calvino practically did nothing else.¹ Apparently the approaching lectures became an obsession for Calvino and at one point he even announced to his wife that he had ideas and material for *eight* lectures—even though the Charles Eliot Norton lectures are customarily composed of six. Here is the title for what she claims might have been his eighth lecture: “On the Beginning and the Ending of Novels,” although no text or notes on the eighth lecture concept has been found.

Calvino completed the five of the six lectures contained in *Six Memos for the Next Millennium* by September of 1985, at the moment of his departure for the United States and Harvard University. Tragically, Calvino died on September 19th from the complications of a stroke he suffered earlier that month in a hospital in Siena, Italy before he was able to write his sixth lecture. According to Esther Calvino, Italo wanted to call his sixth lecture “Consistency,” and he had planned to write it in Cambridge. She found the first five memos, all in perfect order, in the Italian original, neatly stacked on his writing desk ready to be put into his suitcase. Here is the introduction to *Six Memos for the Next Millennium*:

¹ Calvino, Italo. "Introduction." *Six Memos for the Next Millennium*.

“We are in 1985, and barely fifteen years stand between us and a new millennium. For the time being I do not think the approach of this date arouses any special emotion. However, I’m not here to talk of futurology, but of literature. The millennium about to end has seen the birth and development of the modern languages of the West, and of the literatures that have explored the expressive, cognitive, and imaginative possibilities of these languages. It has been the millennium of the book; in that it has seen the object we call a book take on the form now familiar to us. Perhaps it is a sign of our millennium’s end that that we frequently wonder what will happen to literature and books in the so-called postindustrial era of technology. I don’t feel much like indulging in this sort of speculation. My confidence in the future of literature consists in the knowledge that there are things that only literature can give us, by means specific to it. I would therefore, like to devote these lectures to certain values, qualities, or peculiarities of literature that are very close to my heart, trying to situate them within the perspective of the new millennium.”²

Now, fifteen years after the turn of the millennium, I am returning to Calvino. In this project, I will imaginatively engage with a representative collection of Italo Calvino’s work including, unfinished lectures, literary essays, allegorical fiction, published letters in order to derive a proposal for the content of his missing sixth memo “Consistency.” My purpose is to provide a deductive inquiry—not a speculative piece—supported by Calvino’s own words and a logically based methodology. Towards this end, my own preparation necessitates a mathematical and classical education to which I have added my own personal interest in the convergence of philosophy and science. In pursuit of this convergence between philosophical and scientific discourses I am applying to graduate programs that share a similar affinity for interdisciplinary studies.

This project contains three sections. The first section seeks to justify my qualifications, as an undergraduate and thorough reader of Calvino’s work and secure my method of inquiry. It demonstrates that large portions of the content of *Six Memos for the Next Millennium* references and utilizes ideas, excerpts, and analyses from Calvino’s own literary works and analytical essays. Furthermore, it exposes the

² Calvino, Italo. *Six Memos for the Next Millennium*. 1.

entangled nature of *Six Memos for the Next Millennium*, by demonstrating that elements of its composition were not only derived from his essays and literature, but that the individual memos themselves are actually interdependent on each other like a ball of tangled yarn.

In the second section, I use the conclusion that Calvino's lectures allude to the nature of each other as a basis for an inquiry into the nature of consistency. I wanted to use Calvino's own words reveal the nature of consistency. This section is mostly analytical and although it logically pursued ideas, it had to follow a very nonlinear path through the text. I was forced to jump and twist, back and forth throughout the text following the densely packed concepts and ideas that wove the memos together. I was able to identify common threads that I could perpetuate into consistency and discern unexplained yet relevant topics to the allusions to consistency imbedded within the text. The analytical journey teased out eight requirements for the nature of consistency and thanks to the first section of my thesis, I was permitted to propose elements from Calvino's essays, literature, and the text of *Six Memos for the Next Millennium* that fulfill them.

And the third section utilizes Calvino's essays and literature to propose, justify, and explain content that—based on the requirements determined in Section II—I believe would have been included in “Consistency” and fit snugly within the framework of *Six Memos for the Next Millennium* as well as the entirety of Calvino's works.

SECTION I: METHODOLOGY

I believe that Calvino alludes to the nature of consistency throughout *Six Memos for the Next Millennium* and that a significant portion of the content can be found in his literary essays and his own fiction. Before investigating the nature of consistency, I would first like to justify the methodology of my inquiry in order to demonstrate that a similar methodology can and will be used in the search for consistency.

The following three sections are lists of examples that validate my intentions and process of analysis. They proceed in the following order: Literature Analysis in *Six Memos for the Next Millennium*, Calvino's Fiction in *Six Memos for the Next Millennium*, and what I call Hints for Other Values in *Six Memos for the Next Millennium*. These sections will each be expanded and elaborated significantly more in the final version of my thesis, but for now, that they suffice to support and justify my analytical process.

Let me present a quote that provides insight into Calvino's vision for writing and his emphasis on using primary documents over secondary documents. This line is from Calvino's 1980 essay entitled "Why Read the Classics?":

"...No book, which discusses another book, can ever say more than the original book under discussion."³

In the spirit of Calvino, I have set about reading as much of his own text as I can in order to understand it, relying on only a single secondary source for assistance in placing Calvino's work within the context of his life and world events. I have focused

³ Calvino, Italo. "Why Read the Classics?"(1980). *Why Read the Classics?* 5.

on his own words, entrusting the integrity of these words to the translators since I do not speak Italian.

Elements of Consistency in Calvino's Literary Analysis Essays

In the beginning of "Multiplicity" Calvino begins with a quote from Carlo Emilio Gadda's *That Awful Mess on the Via Merulana* (1946), and justifies his selection of Gadda because of his perception and portrayal of the world as "a system of systems...a knot, a tangled skein of yarn," but this opening section actually mirrors the opening of both Calvino's 1963 essay "The World is an Artichoke" as well as his essay in 1984 "Carlo Emilio Gadda, 'The Pasticciaccio.'"⁴ Similarly, the emphasis on the Gadda's description of the stolen jewels in chapter nine of *That Awful Mess* provided in *Six Memos for the Next Millennium* is highlighted almost identically in the 1984 essay "Carlo Emilio Gadda *The Pasticciaccio*." Uses and references like the two presented above are scattered throughout *Six Memos for the Next Millennium*, though these are definitely some of the most felicitous.

Elements from Calvino's Eugenio Montale essays (1976 and 1981), his Jorge Luis Borges essay (1984), the essay on Francis Ponge (1979), the city as a novel in Balzac (1973), knowledge as a dust-cloud in Stendhal (1980), the Book of Nature and Galileo (1985), his essay on the Philosophy of Raymond Queneau (1981), Ludovico Ariosto/*Orlando Furioso* essays (1974 and 1975), his essay on Cyrano and the moon (1982), his essays on the mathematician Geralamo Cardano and Voltaire's *Candide* (1976 and 1974 respectively), and his essay on Gustave Flaubert (1980) are all (among

⁴ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium* (1985). "The World is an Artichoke." (1963) "Carlo Emilio Gadda, *The Pisticciaccio*." (1984) *Why Read the Classics?* 197 & 207.

others) utilized throughout all of the five memos contained in *Six Memos for the Next Millennium*.

Also, his explanation for the most iconic scene in "Lightness" in which Calvino praises Ovid and dubs Perseus holding the decapitated head of Medusa the symbol for lightness (5-6)—when Perseus creates a bed of seaweed and gently places the head of the Medusa face down to protect it from the rough stone and the nymphs flock to it with tiny plant matter to touch to the head and turn to coral an ornament themselves with—is derived from Calvino's 1979 essay "Ovid and Universal Contiguity."⁵

It is quite evident that Calvino is using his literary essays as notes and references for *Six Memos for the Next Millennium* and that it is far from farfetched to propose that hints, elements, ideas and content for the sixth memo: "Consistency", are also embedded within these literary analysis pieces.

Elements of Consistency in Calvino's Fiction

Calvino mentions nine of his own pieces of allegorical fiction thirteen times in four sections of *Six Memos for the Next Millennium: Italian Folktales* (36), *Cosmicomics* (49), *Invisible Cities* (49), and *Mr. Palomar* (49) are discussed in "Quickness"; *Invisible Cities* (72-74) and *Mr. Palomar* (75) again in "Exactitude", *The Cloven Viscount* (88-89), *The Baron in the Trees* (88-89), *The Nonexistent Knight* (88-89), *Cosmicomics* (89-90), and *The Castle of Crossed Destinies* (94) are considered in "Visibility", and *If on a winter's night a traveler* (120) and *The Castle of Crossed Destinies* (120) are examined in "Multiplicity". Although Calvino does not reference

⁵ Calvino, Italo. "Ovid and Universal Contiguity." (1979). *Why Read the Classics?* 32.

any of his own fiction in “Lightness” it is the section most densely packed with references and allusions—all in all 28 different references explained and analyzed in varying levels of detail—each dedicated to other prose writers, poets and work that he admires.

These thirteen instances are very important because they are some of the few times where Calvino reflects directly on his intentions, purpose and execution of his fictional pieces. Furthermore, Calvino has placed these nine works within his lectures alongside the works of others he greatly admires and respects as examples of his own utilization of these memos. I think it is justifiable to assume that Calvino would have identified elements of “Consistency” in his own fiction as well and used at least a handful of examples.

Elements of Consistency in *Six Memos for the Next Millennium*

On a similar thread, Calvino alludes to memos to come in sections prior to their formal introduction. For example, even in as early as “Lightness”, Calvino begins to warm up the audience’s brain to the concept of multiplicity. He states:

“It is therefore not a dense, opaque melancholy, but a veil of minute particles of humors and sensations, a fine dust of atoms, like everything else that goes to make up the ultimate substance of the multiplicity of things.”⁶

In “Quickness”, Calvino discusses how a magical object is often used in myth or fiction as an outward sign that reveals the connection between people or between events. He expands on this notion by saying:

⁶ Calvino, Italo. "Lightness." *Six Memos for the Next Millennium*. 20.

“The moment an object appears in a narrative, it’s charged with a special force and becomes like the pole of a magnetic field, a knot in the network of invisible relationships.”⁷

Here we see the symbol of the world as a knot that was discussed in the beginning of “Multiplicity” and the reasoning for the selection of Gadda’s text 73 pages before its introduction in connection with the fifth value.

The values selected ultimately reference, allude to, and depend on each other so each section contains some aspect of one or the other: quickness can be seen as a tool for rendering lightness, or quickness as a form of exactitude that focuses on rhythm and order rather than image and word selection, lightness comes from precision (read as exactitude) and determination, the ability to create an encyclopedic world in your writing that is manifold, complex and intertwined comes from the use of techniques discussed in lightness, quickness, exactitude, and visibility. Thus, because *Six Memos for the Next Millennium* is such an entangled text, I think that references, teasers, and allusions to “Consistency” also exist within the five lectures.

⁷ Calvino, Italo. "Quickness." *Six Memos for the Next Millennium*. 33.

Section II: Inquiry into the Nature of Consistency

Our inquiry into consistency will require us to nimbly navigate back and forth and then back again throughout *Six Memos for the Next Millennium* in order to determine the certain qualities and aspects relevant to the value of consistency. We will also need to search for elements that pertain to inconsistency, as well as to the nature of the opposition between consistency and inconsistency since Calvino makes a point to never establish a hierarchy between a value and its antithesis. This in fact is the first thing he does in his text:

“I will devote my first lecture to the opposition between lightness and weight, and will uphold the value of lightness. This does not mean that I consider the virtues of weight any less compelling, but simply that I have more to say about lightness.”⁸

Thus, we too will remain vigilant for elements of both consistency and inconsistency as well as the nature of their opposition. But, let us begin our inquiry into *Six Memos for the Next Millennium* near the end of multiplicity.

In order to provide context and perspective I feel compelled to first briefly mention topics discussed just before the allusion. Calvino concludes his discussion of the encyclopedic novel and the unfinished encyclopedic works of Carlo Emilio Gadda, Robert Musil, and Marcel Proust. Then he returns to a discussion of the epic poems of Lucretius and Ovid and the idea of “a system of infinite relationships between everything and everything else” found in both *De Rerum Natura* and *Metamorphoses* (*Six Memos*, Calvino, 112). This is in order to show that literature in our own times is attempting to realize an ancient desire to represent the multiplicity of relationships both

⁸ Calvino, Italo. "Lightness." *Six Memos for the Next Millennium*. 3.

in effect and potentiality reflected in both Lucretius' atomism and Ovid's continuity of forms.

This thread of continually returning to Lucretius and Ovid is a thread that connects all five memos, strung from Lightness to Multiplicity. It even extends beyond *Six Memos for the Next Millennium* to entirety of his work. In a 1985 interview, discussing his novel *Mr. Palomar*, Calvino stated:

“I have two bedside books: Lucretius' *De Rerum Natura* and Ovid's *Metamorphoses*. I would like everything I write to be related one or the other, or better to both.”⁹

Ovid and Lucretius will play a significant role in the formulation of the content of consistency as they played a large role in the formation of the other memos.

“Multiplicity” concludes—and thus “Consistency” begins—with Calvino's final reference to Ovid and Lucretius. First, Calvino asks the reader to consider the notion of a work conceived outside the *self*, a work that would allow us escape the limited perspective of the individual ego, not only to enter into other selves like our own but to give speech to that which has no language. He then asks:

“Was this not what Ovid was aiming at when he wrote about the continuity of forms? And what Lucretius was aiming at when he identified himself with that nature common to each and every thing?”¹⁰

Now to set aside Ovid and Lucretius until a later part of the argument, the consideration of what a work conceived beyond the *self* would look like brings us back to the original train of thought; back to the earlier part of multiplicity. After Ovid and Lucretius, Calvino advocates that the realm of literature remains the only field left

⁹ Weiss, Beno. “Conclusion: The Unredeeming Author: *Mr. Palomar*.” *Understanding Italo Calvino*. 210.

¹⁰ Calvino, Italo. “Multiplicity.” *Six Memos for the Next Millennium*. 124.

in which overambitious projects are not objected. He claims that literature remains alive only if:

“We set ourselves immeasurable goals far beyond all hope of achievement...the grand challenge of literature is to be capable of weaving together the various branches of knowledge, the various ‘codes,’ into a manifold and multifaceted vision of the world.”¹¹

Calvino then proceeds to talk about the encyclopedic books of both Mallarme and Gustave Flaubert. Mallarme, whose poems succeeded in giving a “crystalline form too nothingness” attempted to write the Absolute Book, as the ultimate goal of the universe, though he ended up destroying the mysterious book before it was completed; and Flaubert, who wanted to write a book about nothing and then conversely, “devoted the last ten years of his life to the most encyclopedic book ever written, *Bouvard and Pecuchet*.”¹² For Calvino, knowledge is a multiplicity. He mentions the idea of an open encyclopedia, a work that embraces the concept of a totality that is potential, conjectural, and manifold. A text where:

“...Even if the overall design has been minutely planned, what matters is not the enclosure of a work within a harmonious figure, but the centrifugal force produced by it—a plurality of languages as a guarantee of truth that is not merely partial.”¹³

With all of these concepts in mind, I would now like to designate the starting point for our inquiry into consistency. The allusion appears shortly after an important transitional moment in multiplicity. The moment is as follows

“It is time to put a little order into the suggestions I have put forward as examples of multiplicity.”¹⁴

¹¹ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 112.

¹² *Ibid.* 113.

¹³ *Ibid.* 116-117.

¹⁴ *Ibid.* 117.

This transition is indicated in three ways. First, the new text is physically removed from the previous text above by a clear page break. Second, there is an identifiable shift in Calvino's tone as he regains control of the text and proposes a new course of action for the text to come. And third, there is a change in content as the text then proceeds according to the proposition. Promptly following this transition we are given an allusion to the content of "Consistency":

"Among the values that I would like passed on to the next millennium, there is above all: a literature that has absorbed the taste for mental orderliness and exactitude, the intelligence of poetry, but at the same time that of science and philosophy."¹⁵

The exact placement of this text occurs on the 118th page of *Six Memos for the Next Millennium*, the contents of which have thus far introduced, explained, and justified his personal selection of the first five memos: lightness, quickness, exactitude, visibility, and multiplicity. Now, with less than six pages remaining, Calvino mentions, but fails to name, a value that he places above all others: a literature that possesses mental orderliness and exactitude, as well as the intelligence developed by the convergence of poetic, philosophic, and scientific discourses. This is a transitional tactic in which he shifts the trajectory of the text toward the content of the next memo, while still maintaining relevance to the current memo.

Calvino implements a similar tactic near the conclusion of exactitude in order to foreshadow the proceeding content of visibility. In his discussion of Leonardo da Vinci he explains the inventor's struggle to accurately map language to the images he conjures in his imagination.

¹⁵ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 118.

On folio 265 of the Codex of Atlanticus, Leonardo compiles evidence to provide a theory for the growth of the earth. He provides examples of buried cities found in the ground, marine fossils found in the mountains and in particular a reference to certain bones that he supposes must have belonged to a sea monster. At this moment, his imagination is taken by a vision of this sea monster, and he turns the page upside down and tries to verbally capture the image he has of the animal three different times. Each time he manipulates the order of words, the selection of adjectives, and the rhythm of the lines. While remaining relevant to his discussion of exactitude, Calvino concludes the section of the same name with Leonardo's pursuit of the apparition of the sea monster in his mind. Thus, allowing him to smoothly transition into visibility: an in depth exploration of the source of mental images and the battle that poets and writers wage with language in their attempts to construct verbal reflections of their imagination.¹⁶

This transitional strategy occurs near the end of all of the preceding memos. In lightness, Calvino makes a point to state that he has elected to follow a path that corresponds to his vision for the proper use of words; then, in quickness he explains the importance of rhythmic ordering and structuring of words in sentences.¹⁷ In quickness, the necessity of a saturnine temperament and the craftsmanship of Vulcan in order to document the aerial flight of Mercury correspond to the three key aspects of exactitude and the symbol of the crystal.¹⁸ Similarly, visibility ends by embracing the possibilities of multiplicity; exposing the written word as a form in which all realities and fantasies

¹⁶ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 79-80.

¹⁷ Calvino, Italo. "Lightness." *Six Memos for the Next Millennium*. 26.

¹⁸ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 52-53, 55, 70.

are composed of the same verbal material like “grains of sand on a surface that is always the same and always different—dunes shifted by the desert wind.”¹⁹

So too, I believe that allusions to consistency exist in multiplicity and this value he introduces and places “above all” is an allusion to the content of next memo.²⁰ Since Calvino’s widow, Esther, has clarified that Calvino intended to call the sixth memo: “Consistency”, we will proceed under the assumption that the value he is referring to is most likely consistency. Furthermore, as in the previous memos, I believe that the text that follows this allusion is incredibly relevant to the nature of consistency. We will return to multiplicity and the content of the text that follows this allusion, but first I would like to move our inquiry to the discussion of exactitude since we know now that we must consider exactitude, mental orderliness and the intelligence of poetry science, and philosophy relevant components of “Consistency”.

For Calvino, Exactitude means three things:

- 1) “A well-defined and well-calculated plan for the work in question;
- 2) An evocation of clear, incisive, memorable images;
- 3) A language as precise as possible both in choice of words and in expression of the subtleties of thought and imagination”²¹

He feels compelled to emphasize these aspects of exactitude as a response to his hypersensitivity to the mistreatment and misuse of words and images in modern language and media. Calvino observes that language is being used frivolously—in a random, approximate, and careless manner. It has become a generic, automated, and anonymous expression that has both diluted the meaning of words and revealed in

¹⁹ Calvino, Italo. "Visibility." *Six Memos for the Next Millennium*. 99.

²⁰ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 118.

²¹ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 55-56.

humans, a lack of cognition. No doubt for Calvino, politics, ideology, bureaucratic uniformity, the monotony of mass media, and school culture have contributed to this pestilence that plagues humanity's most distinctive faculty—the use of words.

However, he believes that a literature with an emphasis on precision possesses the capacity to battle this blight and potentially become a form of media that can “transform the world into images and multiply it by means of the phantasmagoric mirrors.”²²

Calvino's memo on exactitude begins at its antithesis, with an argument from Giacomo Leopardi, who maintained that the more vague and imprecise language is, the more poetic it becomes. He explains that in Italian, the word *vago* (vague) also means “lovely, attractive” and is associated with uncertainty and indefiniteness as well as with gracefulness and pleasure. However, Leopardi's argument for the poetic value of vagueness quickly shifts into a discussion of the indefinite. For Leopardi:

“The words ‘faraway’, ‘ancient’, and similar words are highly poetic and pleasurable because they evoke vast, indefinite ideas...The words ‘night’, ‘nocturnal’, and other descriptions of the night are highly poetic because, as night makes objects blurred, the mind receives only a vague, indistinct, and incomplete images of night, itself, and what it contains. Thus the same is true of ‘darkness’ and ‘deep’.”²³

Calvino demonstrates Leopardi's passion for the indefinite in a large excerpt from the *Zibaldone*, in which Giacomo lists a number of situations that for him spark an indefinite state of mind. They include the exposure to light, directly or refractory, from an unknown source or through an indeterminate medium, places and times where and when light and shadow intermingle, and other situations or occurrences that stimulate our perception in a way that is uncertain, indistinct, incomplete, or out of the ordinary.

²² Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 57.

²³ *Ibid.* 58.

However, Calvino uses the thread of Leopardi's conception of vagueness to unravel the argument in favor of exactitude. For Calvino, the expression of the vague and indefinite requires:

“A highly exact and meticulous attention to the composition of each image, the minute definition of details, to the choice of objects, to the lighting and the atmosphere, all in order to attain the desired degree of vagueness.”²⁴

Thus, Calvino exposes Leopardi's true identity; the poet of vagueness is actually the poet of exactitude, one who is able to grasp and verbalize the subtlest perceptions of the world. The search for expression of the indefinite becomes the observation of all that is minute and multifaceted. It requires the embrace of Lucretius' conception of the universe. We should note that here, Calvino is already hinting at the role of multiplicity and its connection to exactitude. The need for exactitude is a response to the manifold nature of a knowledge derived from an atomistic conception of the universe—one composed of multiple, invisible particles moving, colliding, and deviating from their trajectories.²⁵

Calvino continues to explore Leopardi's fascination with vagueness and his famous argument for the difference between the infinite and the indefinite. He regards the infinite as an absolute and believes that what we really value in the infinite is its vastness and we project our own desires into it. However, since we cannot conceive of the absolute nature of the infinite, we must settle for the indefinite which is only an illusionary impression of time and space. This problem is a speculative and metaphysical one: the relationship between the idea of infinity as absolute space and

²⁴ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 60.

²⁵ Lucretius. "Book II: The Dance of Atoms." *The Nature of Things*. 37.

absolute time and our empirical knowledge of space and time. Leopardi begins with the rigorous abstraction of a mathematical notion of space and time, and compares this with the vague, undefined flux of sensations.²⁶

This is the first instance in which Calvino begins to define the two diverging paths –each in correspondence with a particular type of knowledge—that dominate the rest of the discourse contained in exactitude. The paths are deliberately defined as follows:

“One path goes into the mental space of bodiless rationality, where one may trace lines that converge, projections, abstract forms, and vectors of force. The other path goes through a space crammed with objects and attempts to create a verbal equivalent of that space by filling the page with words, involving a most careful, painstaking effort to adapt what is written to what is not written, the sum of what is sayable and not sayable.”²⁷

In exactitude, Paul Valéry exemplifies the first path when he puts his Monsieur Teste face to face with pain, making him combat the physical suffering with an exercise in “abstract geometry.”²⁸ The Monsieur Teste counts the tenths of seconds to which each sensation of pain occurs and he divides the regions of his body into different sectors, each with its own level and type of pain. He tries to shift his attention away from the uncomfortable sensation to some meaningless mathematical task like counting grains of sand, but the pain forces him to pay attention, and in observing and geometrically analyzing the pain he can derive something from it. And on the other hand, the second path can be seen in Leopardi’s poetry; he demonstrates exactitude in

²⁶ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 63-64.

²⁷ *Ibid.* 74.

²⁸ *Ibid.* 65.

the highest degree when meticulously describing all of the indefinite sensations that give him pleasure.²⁹

Furthermore, both pathways are simultaneously embodied in the protagonist of Robert Musil's *The Man Without Qualities*. Ulrich exists as a finite being with the intellectual habits and temperament of exactitude. Thus he operates as a paradoxical combination of precision and indefiniteness, constantly oscillating between the poles of exactitude and lack of definition. The French essayist Paul Valery in his analysis of Edgar Allan Poe observes the same paradoxical combinations. In Poe he sees:

“The demon of lucidity, the genius of analysis, and the inventor of the newest, most seductive combinations of logic and imagination, of mysticism and calculation; the psychologist of the exceptional; the literary engineer who studied and utilized all the resources of art.”³⁰

The use of paradoxical combinations is not a foreign concept to Calvino. In fact, the structure of each memo blends together the value focused on and its antithesis usually in a somewhat complementary way. In exactitude this was evident in Calvino's use of Leopardi's poetic philosophy. Calvino used Leopardi's avocation for vagueness to support his own vision of exactitude. In lightness, Calvino implements weight; since for him, lightness goes with precision and determination, along with the individual weighing of each word.³¹ Dante for example, tries to give language the weight, density, and concreteness of things, bodies and sensations. Additionally, visibility attempts to tap into the unseen realm of the imagination in order to verbally convey the invisible images in the imagination.

²⁹ Ibid. 65-66.

³⁰ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 67.

³¹ Calvino, Italo. "Lightness." *Six Memos for the Next Millennium*. 16.

This inquiry into the infinite although necessary, changes the trajectory of Calvino's discussion of exactitude. In the very beginning of the memo he asserts three key aspects of exactitude and proceeds under the pretense that he is going to then explain and exemplify those elements. However, the text immediately takes a turn away from exactitude and into the realm of vagueness, where it reveals that vagueness and indefiniteness are actually the products of exactitude. But he is still unable to return to the original path as the leap into vagueness brings into discussion the topic of the indefinite, which in turn leads Calvino to another discussion of the infinite and the role of cosmogony in literature. The two paths of exactitude take him into infinitely vast mental spaces and then conversely, into infinitesimal spaces on a quest for the details of the details. Calvino even admits that his discussion has wandered off topic:

“This talk is refusing to be led in the direction I set myself. I began speaking of exactitude, not of the infinite and the cosmos.”³²

However, this is not the first time that Calvino has gone off-track in his lectures. Towards the end of *Lightness*, Calvino mentions four different threads that he has already introduced thus far in *Lightness*. The first thread is the one that connects the moon, Leopardi, Newton, gravitation and levitation. The second is the thread of Lucretius, atomism, Cavalcanti's philosophy of love, Renaissance magic, and Cyrano. The third thread is that of writing as a metaphor of the “powder-fine substance of the world”—this idea not only stems from Lucretian atomism, but also is discussed at great length in his 1980 essay titled “Knowledge as a Dust-cloud in Stendhal.”³³ For

³² Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 68.

³³ Calvino, Italo. "Knowledge as a Dust-cloud in Stendhal." (1980) *Why Read the Classics?* 119.

Lucretius, letters were like atoms in continual motion, creating the most diverse words and sounds through their collisions, connections and dispersions. This third thread is a notion taken up by a long tradition of thinkers including Galileo and Leibniz; thinkers who believed that the world's secrets were contained in the combinatoria of the signs used in writing—this particular notion is thoroughly explored and explained in Calvino's 1985 essay titled "The Book of Nature in Galileo."³⁴ Calvino asks:

"Which thread should I pull on to find the end in my hand?"

Before he introduces a fourth thread, he pauses in order to inform the reader that he does not intend to follow any of these three paths for two particular reasons. The first reason is that he is concerned that these roads will lead to all too obvious conclusions: that of writing as a model for every process of reality and potentially the only reality we can know. His second reason is that he is afraid that following the direction of these paths will take him too far away from the use of words as he understands it—words as the perpetual pursuit of things, as a perpetual adjustment to their infinite variety.³⁵ The fourth thread, the one that he claims he intends to pursue, is literature as a search for knowledge and literature as an existential function: the search for lightness as a reaction to the weight of living. However, the pursuit of this fourth thread leads Calvino down all of the roads he assured us he would not stray into.

With regards to the topics contained within the first thread, we should note that levitation appears in the discussion of the existential function of literature carries him to the anthropological topic of the link between the levitation desired and the privation

³⁴ Calvino, Italo. "Book of Nature in Galileo." (1985). *Why Read the Classics?* 83.

³⁵ Calvino, Italo. "Lightness." *Six Memos for the Next Millennium*. 26.

actually suffered.³⁶ We have already discussed at length the topic of Giacomo Leopardi in exactitude.³⁷ The topic of the moon and gravitation are explored in “Visibility” when Calvino explains that the inspiration for his most surrealistic story in *Cosmicomics*—“The Distance of the Moon”—came from reading certain theories on gravitational physics.³⁸

Similarly, elements of the second thread become topics of discussion throughout later in the text as well. In the beginning of quickness, he discusses the legend of Charlemagne’s love for a German girl, but the specific topic of the discussion revolves around an analysis of a magical ring, the properties of which vary between different Renaissance writers.³⁹ Also, Lucretius and Ovid are arguably the biggest inspirational threads that weave themselves throughout the entirety of Calvino’s work. They are the first introduced and the last reference in multiplicity. Between the two of them, they share at least twelve references in *Six Memos for the Next Millennium* alone. Recall the quote previously mentioned from the 1985 interview with Calvino:

“I have two bedside books: Lucretius’ *De Rerum Natura* and Ovid’s *Metamorphoses*. I would like everything I write to be related one or the other, or better to both.”⁴⁰

The focus of the third thread: writing as a metaphor of the powder-fine substance of the world is analogous to Calvino’s description of the encyclopedic novel, particularly Gadda’s in which the world becomes a “system of systems” and Proust’s in which everything dissolves into abstraction (*Six Memos*, 105-106). Although Calvino

³⁶ Ibid. 27

³⁷ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 57-64.

³⁸ Calvino, Italo. "Visibility." *Six Memos for the Next Millennium*. 90.

³⁹ Calvino, Italo. "Quickness." *Six Memos for the Next Millennium*. 31-34.

⁴⁰ Weiss, Beno, “Conclusion: The Unredeeming Author: Mr. Palomar.” *Understanding Italo Calvino*. 210.

wanted to avoid the conclusion of “writing as a model for every process in reality”, he ultimately comes to the conclusion at the very end of “Visibility”:

“All ‘realities’ and ‘fantasies’ can take on form only by means of writing, in which outwardness and innerness, the world and I, experience and fantasy, appear composed of the same verbal material. The polymorphic visions of the eyes and the spirit are contained within the uniform lines of small or capital letters, periods, commas, parentheses—pages of signs, packed as closely together as grains of sand, representing the many-colored spectacle of the world on a surface that is always the same and always different, like dunes shifted by the desert wind.”⁴¹

What is Calvino doing? He seems to make a promise and then almost immediately break it. But perhaps it is a little more complex than that...

Calvino is strategically stepping outside of his own text in order to evaluate it with the reader and present the appearance of a text that develops organically. As we read, we have the impression that Calvino is wandering through the text with us, uncertain himself as to where the text will lead. The fourth thread dissolves at the end of lightness into quickness where an abundance of new threads are introduced, followed, and connected in various ways. The text becomes more of a thoughtful discussion that seems grows and changes as we read on. However, Calvino does remain steadfast to his promise to stay relevant to the use of words, as he understands it—“words as a perpetual pursuit of things, as a perpetual adjustment to their infinite variety.”⁴²

This is the real common thread that connects the five memos. “Quickness” is charged with the difficult task of creating verbal equivalents of mental speed in text.⁴³

⁴¹ Calvino, Italo. "Visibility." *Six Memos for the Next Millennium*. 99.

⁴² Calvino, Italo. "Lightness." *Six Memos for the Next Millennium*. 26.

⁴³ Calvino, Italo. "Quickness." *Six Memos for the Next Millennium*. 45.

“Visibility” focuses on creating verbal equivalents of mental images in text.⁴⁴

“Multiplicity” is concerned with encyclopedic texts that contain verbal equivalencies of the complex, manifold, and dynamic world in which we live.⁴⁵ And “Exactitude”, (the current location of our inquiry into the content of “Consistency” mind you) attempts to do exactly what Calvino set out in lightness. Recall that it begins with all the intentions creating precise verbal equivalents for things and images.⁴⁶ However, somewhere along the way in “Exactitude” the reader has no choice but to wander off the designated path and get lost in the concept of the infinite with Calvino. And it is precisely the impression of this unintended deviation from the path that dictates the direction of the following two memos: “Visibility” and “Multiplicity”, as well as “Consistency”. The departure from the original trajectory of the lecture begins here:

“...Rather than speak to you of what I have written, perhaps it would be more interesting to tell you about the problems that I have not yet resolved, that I don’t know how to resolve, and what these will cause me to write...”⁴⁷

And so “Exactitude” takes off, continuing to explore the two divergent paths of exactitude:

“One path goes into the mental space of bodiless rationality, where one may trace lines that converge, projections, abstract forms, and vectors of force. The other path goes through a space crammed with objects and attempts to create a verbal equivalent of that space by filling the page with words, involving a most careful, painstaking effort to adapt what is written to what is not written, the sum of what is sayable and not sayable.”⁴⁸

⁴⁴ Calvino, Italo. "Visibility." *Six Memos for the Next Millennium*. 84.

⁴⁵ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 112.

⁴⁶ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 55.

⁴⁷ *Ibid.* 68.

⁴⁸ *Ibid.* 74.

Both of these diverging paths attempt to resolve the main thread of *Six Memos for the Next Millennium*, that is, the use of language for Calvino. However, Calvino realizes that these two drives toward exactitude will never attain complete fulfillment. The first because “natural” languages always seem to say something *more* than formalized languages can, and the other because in representing the density and continuity of the world around us, language is revealed as defective and fragmentary, always saying something *less* with respect to the sum of what can be experienced. Calvino continually switches back and forth between two trying to fully explore one and then rushing across and trying to fully explore the other. This explains Calvino’s attempts to alternate between the emphasis on structure or on description in his stories (*Six Memos*, 75).⁴⁹

This problem is never really resolved. In fact, Calvino spends the rest of exactitude describing examples of exemplary thinkers’ “battle with language,” (*Six Memos*, 77). He discusses Gustave Flaubert in accordance to the second path of exactitude claiming that “the good god is in the details.”⁵⁰ Eugenio Montale’s “L’anguilla”—the poem consisting of a very long sentence in the shape of an eel following the entire life of the eel—makes an appearance in accordance to the second pathway as well. He examines Mallarme’s work in which the word attains the highest degree of exactitude through abstraction and considers it a member of the first path. Finally, he describes Francis Ponge’s *The Purpose of Things* and associates his Lucretian style with the second path of exactitude.

⁴⁹ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 75.

⁵⁰ *Ibid.* 69.

Exactitude concludes with an anecdote on Leonardo da Vinci's struggle to map words to both things and the images in his head, but the battle remains unresolved. Thus exactitude fails to adequately demonstrate and explain two of its three defining aspects:

- 1) "A well-defined and well-calculated plan for the work in question;
- 2) An evocation of clear, incisive, memorable images;
- 3) A language as precise as possible both in choice of words and in expression of the subtleties of thought and imagination"⁵¹

While Calvino explains the necessity of exactitude in response to the current state of language, the majority of his memo steers off course onto the topic of the infinite and examples of the "battle with language."⁵² Elements of the third aspect of exactitude are covered throughout the entirety of the text—lightness emphasizes the individual weighing of words, quickness involves the ordering of words and the proper representation of the speed of mental thoughts, visibility discusses expressing the subtleties of the imagination, and multiplicity attempts to express the complexity of the world. In exactitude, Calvino repeats his emphasis on the proper use of language—one that enables us to approach things (present or absent) with discretion, attention, and caution, with respect for what things (present or absent) communicate without words.⁵³ Although the second aspect of exactitude is touched on in a transitional moment at the end of the memo, its discussion is explored in greater depth in "Visibility". And finally, an explanation for the first aspect of exactitude never comes to fruition throughout the entirety *Six Memos for the Next Millennium*.

⁵¹ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 55-56.

⁵² *Ibid.* 77.

⁵³ *Ibid.*

There is however, a distinct moment in “Exactitude” where Calvino admits that his lecture is veering of track and discloses his original intentions for the discussion of exactitude. Before moving forward with his explanation into the infinite Calvino states:

“This talk is refusing to be led in the direction I set myself. I began by speaking of exactitude, not of the infinite and the cosmos. I wanted to tell you of my fondness for geometrical forms, for symmetries, for numerical series, for all that is combinatory, for numerical proportions; I wanted to explain the things I had written in terms of my fidelity to the idea of limits, of measure...But perhaps it is precisely this idea of forms that evokes the idea of the endless: the sequence of whole numbers, Euclid’s straight lines...Rather than speak to you of what I have written, perhaps it would be more interesting to tell you about the problems that I have not yet resolved, that I don’t know how to resolve, and what these will cause me to write.”⁵⁴

I believe that this is the second allusion to the nature of the content of “Consistency”. I apologize for not arriving at our second allusion sooner; however, a broader understanding of the topics covered throughout *Six Memos for the Next Millennium* and a particular focus on the aspects of exactitude addressed throughout the text was necessary to reveal that elements of exactitude are not completely discussed. For example: a well-defined and well-calculated plan for the work in question. Additionally, this unexplored avenue of exactitude pairs nicely with our first allusion to consistency, that is, a literature that has absorbed the taste for mental orderliness and exactitude, the intelligence of poetry, but at the same time that of science and philosophy.

Before continuing, I would first like to address a potential criticism a thoughtful reader may have regarding my proposition of this excerpt as relevant to the content of “Consistency”—Why would consistency include the discussion of a topic that Calvino

⁵⁴ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 68.

explicitly states he does not intend to cover? Ordinarily I would agree with this analysis. However, Calvino has already revealed himself as a somewhat unreliable source for the content of his text. Recall the examination of the four threads in his section on lightness: Calvino explicitly states that he will no longer follow three of the established threads, yet the texts end up discussing elements of each thread as it develops into other memos. Calvino is masterful at creating the illusion of a new trajectory, while secretly following his own within the course of *Six Memos for the Next Millennium*. Although he never truthfully discloses the avenues his lectures will follow, he rarely introduces a concept without exploring it.

Furthermore, the content of this excerpt lines up almost directly with the transitional moment discussed at the end of multiplicity when Calvino is presumably preparing the reader for the next memo. At the point in exactitude in which Calvino alludes to the nature of consistency, he shifts trajectory and takes off in the pursuit of the explanation of the infinite. The concept for his two diverging paths of exactitude emerge from his own problems with writing:

“Sometimes I try to concentrate on the story I would like to right, and realize that what interests me is something else entirely or, rather, not anything precise but everything that does not fit in with what I ought to write—the relationship between a given argument and all its possible variants and alternatives, everything that can happen in time and space. This is a devouring and destructive obsession, which is enough to render writing impossible. In order to combat it, I try to limit the field of what I have to say, divide it into still more limited fields, then subdivide these again and so on and on. Then another type of vertigo seizes me, that of detail of the detail of the detail, and I am drawn into the infinitesimal, the infinitely small, just as I was previously lost in the infinitely vast.”⁵⁵

⁵⁵ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 68.

This devouring obsession with infinite variants and the pursuit of both the infinite and the infinitesimal corresponds to two other writers with a prominent place in multiplicity—Robert Musil and Carlo Emilio Gadda. The first branch of exactitude embraces Musil’s own philosophical attempt to step beyond the borders of a particular system in order to objectively assess and describe the infinite relationships and interactions between the things contained within.⁵⁶ For Calvino, this side of the path is the reduction of secondary events to abstract patterns according to which one can carry out operations and repeatedly demonstrate applicable theorems. It corresponds to a particular type of knowledge for both Musil and Calvino; one that “goes into the mental space of bodiless rationality, where it may trace lines that converge, projections, abstract forms, and vectors of force.”⁵⁷ For both writers, this branch is concerned with determining mathematical understandings of relations in the world.

Conversely, his second branch is comparable to Gadda’s approach to the novel as an encyclopedia, or a method of knowledge that reveals the world as a network of connections between events, people, and things.⁵⁸ Like Gadda’s encyclopedism which requires him to meticulously describe everything precisely in both space and time, Calvino’s second branch concerns the effect made by words to present the tangible aspect of things as precisely as possible. This path goes through a “space crammed with objects and attempts to create a verbal equivalent of that space by filling the page with words...a painstaking effort to adapt what is written to what is not written.”⁵⁹ Both Gadda and Calvino attempt to exploit the semantic potential of words in all varieties of

⁵⁶ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 110.

⁵⁷ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 74.

⁵⁸ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 105.

⁵⁹ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 74.

their verbal and syntactical forms in order to map language to reality as completely as possible.

Yet both Musil and Gadda fail to complete their encyclopedic novels. For Musil, the structure of a novel continuously changes and thus, can never be completed; and for Gadda, the outline of the novel is lost when descriptions of every single detail proliferate in his attempt to fill up the entire picture of the world. Similarly, Calvino states that both of his own paths toward exactitude will never attain fulfillment, the first because “natural” languages always say something more than formalized languages can, and the other because in representing the density and continuity of the world around us, language is revealed as fragmentary—always saying something less with respect to the sum of what can be experienced.⁶⁰

The unfinished encyclopedic works of Musil, Gadda, and Proust—for whom the density of the world expanded until it could no longer be grasped—exemplify the devouring obsessions mentioned in exactitude that make writing impossible for Calvino.⁶¹ The two engineer-writers and the French Novelist uniquely epitomize the battle with language that stems from the use of language established by Calvino in “Lightness”, explored in “Quickness”, expanded upon in “Exactitude,” and then continued through “Visibility” and into “Multiplicity.” This establishes a connection between the original content for exactitude mentioned before the discussion of the infinite continues and the content of multiplicity. The problem of the two divergent paths has been strung along from exactitude through visibility and into multiplicity.

⁶⁰ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 74-75.

⁶¹ Calvino, Italo. "Exactitude." "Multiplicity." *Six Memos for the Next Millennium*. 68 & 111.

In an attempt to put a little order into the suggestions that Calvino has put forward for multiplicity, he divides exemplary works into four categories. The first Calvino calls the “unified text”, a text written as the expression of a single voice, but reveals itself as open to interpretation on several levels. He uses the example of Alfred Jarry’s *L’amour absolu* (1899), a fifty-page novel that can be read as three completely different stories. Second, Calvino introduces the concept of a “manifold text”, one that replaces the oneness of thinking “I” with a multiplicity of subjects, voices, and views of the world. These texts are referred to as “polyphonic” or “carnavalesque” and traces their roots from Plato’s dialogues and can be exemplified by Dostoevsky’s *Brothers Karamazov*. There is another type of work that, like Gadda and Musil, attempts to contain everything possible, but fails to take form, create outlines for itself, and thus remains incomplete by its very nature.⁶²

The fourth type of work is a literature that corresponds to the philosophy of “nonsystematic thought, which proceeds by aphorisms, sudden discontinuous flashes of light.”⁶³ Calvino uses the prose of Paul Valéry’s essays as an example, and his emphasis on the need for a philosophy to that portable as well as his continuous search for what he calls a “Total phenomenon”, that is:

“The Totality of conscience, relations, conditions, and impossibilities; (Cahiers, XII. 722)”⁶⁴

Valéry’s quest sparks the first allusion to consistency, that of “a literature that has absorbed the taste for mental orderliness and exactitude, and the intelligence of

⁶² Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 117-118.

⁶³ Ibid. 118.

⁶⁴ Ibid.

poetry, but at the same time that of science and philosophy.”⁶⁵ It is at this moment in *Six Memos* that the elements of the second allusion to consistency in exactitude and the first allusion in multiplicity align. Calvino finally connects the necessary tangent of his inquiry into the infinite back to his original proposal for the content of exactitude through his elaboration of the battle of language in “Exactitude”, “Visibility”, and most of “Multiplicity.” However, it is the content that he chooses to conclude “Multiplicity” with that ultimately exposes his return to the original content of “Exactitude” and connection to the second allusion to “Consistency.”

I believe that in the last few pages of multiplicity Calvino introduces the concept of the hypernovel as a key component of the first aspect of exactitude—a well-defined and well calculated plan for the work in question—and as a resolution to the two diverging paths of exactitude and the failures of Musil, Gadda, and Proust. The discussion of the hypernovel also simultaneously picks up the where the text first diverged in exactitude by introducing Georges Perec’s novel *Life, Directions for use*, and using the philosophy of Raymond Queneau to emphasize the importance of implementing rules and constraints when writing. Calvino even begins to discuss his fondness for geometrical forms and all that is combinatory in his own works, citing both *If on a winter’s night a traveler* and *The Castle of Crossed Destinies* as examples of the hypernovel.

We know that *Six Memos for the Next Millennium* is an unfinished text and was intentionally written to be read by Calvino as a series of six lectures. We also know that Calvino died before he wrote “Consistency”, although seems that he had a very idea for

⁶⁵ Ibid

where his five memos were going to lead. Although I have only directly cited two distinct allusions that will provide partial explanations for the nature of consistency, we have actually spent a large amount of textual analysis breaking down key aspects of *Six Memos for the Next Millennium* and deciphering the common threads that connect the individual memos. We have used our first allusion to justify our search for the second, but the second allusion has in turn justified our original assumption that there existed a transitional point in multiplicity that contained hints to the elements of “Consistency.” Thus, we must regard the content that concludes the section of multiplicity as relevant to consistency because it is relevant to our excerpt from exactitude. So we not only have our two allusions and the common threads that wind throughout the progression of the memos, but we also have Calvino’s explanation of his fondness for Jorge Luis Borges, his reasoning for keeping his writing short, the concept of the hypernovel, *If on a winter’s night a traveler*, *The Castle of Crossed Destinies*, his discussion of Georges Perec’s novel and the use of rules, Raymond Queneau’s philosophy that suggests that the imposition of rules creates more freedom in writing, Lucretius and Ovid, and Calvino’s avocation for the creation of a novel that is conceived from outside the self.⁶⁶

After reflecting on our inquiry into the nature of the content of consistency, I have compiled eight requirements that we have determined must categorize consistency.

1. Consistency must briefly discuss its antithesis—inconsistency—and the nature of their opposition.⁶⁷

⁶⁶ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 118-124.

⁶⁷ Calvino, Italo. "Lightness." *Six Memos for the Next Millennium*. 3.

2. Consistency must pertain to the ultimate thread of *Six Memos*: the use of words according to Calvino. The proper use of language as:

“...The perpetual pursuit of things, the perpetual adjustment of words to the infinite variety of things.”⁶⁸

“...One that enables us to approach things (present or absent) with discretion, attention, and caution, with respect for what things (present or absent) communicate without words.”⁶⁹

3. Consistency must involve Calvino’s fondness for geometrical forms, symmetries, numerical series, all that is combinatory, numerical proportions.⁷⁰
4. Consistency must address Calvino’s fidelity to the idea of limits, constraints, and rules.⁷¹
5. Consistency must resolve the battle with language and the failure of Calvino’s two divergent paths of exactitude as well as other failed encyclopedic novels.⁷²
6. Consistency must relate to mental orderliness, exactitude, and the intelligence of poetry, science, and philosophy.⁷³
7. Consistency must include the topic of the Hypernovel with an explanation of examples like *If on a winter’s night a traveler*, *The Castle of Crossed Destinies*, and Georges Perec’s *Life, Directions For Use*.⁷⁴
8. Consistency must relate to Lucretius and Ovid, as well as Calvino’s final proposition regarding the composition of an objective work conceived outside the self and beyond the individual ego.⁷⁵

⁶⁸ Ibid. 26.

⁶⁹ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 77.

⁷⁰ Ibid. 68.

⁷¹ Calvino, Italo. "Introduction." "Exactitude." "Multiplicity." *Six Memos for the Next Millennium*. 68, 121-123.

⁷² Calvino, Italo. "Exactitude." "Multiplicity." *Six Memos for the Next Millennium*. 75, 110-112.

⁷³ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 118.

⁷⁴ Ibid. 120-122.

⁷⁵ Ibid. 124.

Section III: Proposal for the Content of Consistency, Including Likely

Topics of Discussion

In September of 1967, Calvino submitted an essay titled “Philosophy and Literature” to the *Times Literary Supplement* (in a special issue entitled “Crosscurrents”). The essay begins very concisely with this line: “Philosophy and literature are embattled adversaries.”⁷⁶ Calvino’s assertion stems from his conception of the dueling nature of the two opposing disciplines. He believes that philosophy attempts to see through the opaqueness of the world in order to reduce the variety of all things to a network of relationships between general ideas and to establish fixed rules according to which a finite amount of things move within a system, in a potentially infinite number of combinations. Conversely, literature replaces these abstractions with specifics; it focuses on particulars rather than generalities and consequently emphasizes the expansion of content within a text rather than its reduction. Calvino properly exemplifies this disparity between the two disciplines with the inclusion of an explanatory metaphor pertaining to the game of chess.⁷⁷

In philosophy, the finite numbers of generic pawns exhaust a number of combinations that may be infinite, but in literature, “abstract chessmen are replaced with kings and queens, knights and castles, all with a name, a particular shape, and a series of attributes royal, equine, ecclesiastical; instead of a chessboard they roll out great dusty battlefields or stormy seas.”⁷⁸

⁷⁶ Calvino, Italo. "Philosophy and Literature." (1967). *The Literature Machine*. 39.

⁷⁷ Ibid

⁷⁸ Ibid. 39-40.

The game of chess is a prominent theme in Calvino's literature and essays; *Invisible Cities*, *Cybernetics and Ghosts*, and *Six Memos for the Next Millennium* all utilize analogies involving chess. In "Exactitude" of *Six Memos for the Next Millennium*, Calvino references a passage in *Invisible Cities* (1972) in which Kublai Khan—"who personifies the intellectual tendency toward rationalization, geometry, and algebra"—reduces the knowledge of his empire to the combination of pieces and their movements on a chessboard.⁷⁹ Kublai represents the cities Marco Polo describes in great detail with the various arrangements of chess pieces on the black and white squares of a chessboard.⁸⁰ The repetition of this particular theme likely corresponds to Calvino's fondness for the vast number of potential outcomes that can be derived from the combinatorial play of a small number of basic elements, for "no chess player will ever live long enough to exhaust all the combinations of possible moves for the thirty-two pieces on the chessboard."⁸¹

Calvino believes that the literary writer upsets the rules of the philosopher's game and in turn, reveals a new order of things quite different from their original suppositions; however, this overhaul of the system prompts the philosopher to again, seek out and determine the new rules of the game and then attempt to demonstrate that the manipulative operations implemented by the literary writer can still be reduced to a set of philosophical operations. And so it goes, perpetual games of hide and seek, now treated like a war of disciplines. Philosophy and literature remain locked in this bitter confrontation with both sides unable to approach and grapple with the subject of the

⁷⁹ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 72.

⁸⁰ Calvino, Italo. ". . . ." *Invisible Cities*. 131-132.

⁸¹ Calvino, Italo. "Cybernetics and Ghosts." (1967). *The Literature Machine*. 8.

opposition. For example, a literature that attempts to compete with philosophy by launching its characters into profound debates and circumstances is unable to completely shed the gravity of the habitual thoughts and tedium of everyday life, and thus fails to adequately permeate into the layer of abstraction that philosophers occupy.⁸² Similarly, when philosophy is “too fully clothed in human flesh, too sensitive to the immediate, lived experience” it is a less exciting challenge for literature than when it engages in the abstraction of metaphysics and pure logic.⁸³

Favor toward one discipline over the other wavers back and forth, with each side confident that it has outmaneuvered the other in its own quest for truth, while simultaneously remaining aware that “the raw material of its own constructions is the same of that of the opposition: words.”⁸⁴ For Calvino, words are like crystals. Before talking about words, I would like to briefly talk about Calvino and crystals.

The crystal is another recurring icon that appears throughout Calvino’s work. In *Exactitude*, the emblem of the crystal is cherished as a model for perfection—especially since the discovery that certain properties of the birth and growth of crystals resemble those of the most basic biological creatures, establishing a kind of bridge between the mineral world and living matter. Calvino also values it as a form of perfect beauty, a representation of growth in time, and the expenditure of the matter that surrounds it. The discussion of the crystal as a sigil for Calvino’s writing directly proceeds the short explanations of Jorge Luis Borges’ famous invective against the infinite in *Avatars of the Tortoise*, Paolo Zellini’s *Short History of the Infinite*, the philosophy of Giordano

⁸² Calvino, Italo. “Philosophy and Literature.” (1967). *The Literature Machine*.

⁸³ *Ibid.* 41.

⁸⁴ *Ibid.* 40

Bruno concerning his conception of the infinite as the composition of infinite finites, a short explanation of Gustave Flaubert's emphasis on the details. Two vertigos seize Calvino and leave him adrift in the impossibilities of writing: the infinitely vast and the infinitely small, and Calvino's admission that:

“This talk is refusing to be led in the direction I set myself. I began by speaking of exactitude, not of the infinite and the cosmos. I wanted to tell you of my fondness for geometrical forms, for symmetries, for numerical series, for all that is combinatory, for numerical proportions; I wanted to explain the things I had written in terms of my fidelity to the idea of limits, of measure...”⁸⁵

Calvino believes that there is an inherent bond between the formal choices of literature and the need for a cosmological model or general mythical framework even in writers who do not explicitly declare it. Furthermore, he asserts that this inclination toward geometrical composition and order is imbedded in a long history of world literature, but is also a reactionary consequence of the contrast of order and disorder fundamental to contemporary science. He states that in science:

“The world disintegrates into a cloud of heat, it falls inevitably into a vortex of entropy, but within this irreverent process there may be areas of order, portions of the existent that tend toward a form, privileged points in which we seem to discern a design or perspective.”⁸⁶

For Calvino, literature is one of these minimal portions in which the existent “crystallizes into a form” and acquires a meaning that is not fixed, definitive, or hardened into a mineral immobility, but alive as an organism.⁸⁷ As a partisan and advocate of the crystal, Calvino uses this symbol to categorizes and classify facts, ideas, styles, and feelings. In the context of the reevaluation of logical, geometrical, and

⁸⁵ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 68.

⁸⁶ *Ibid.* 69.

⁸⁷ *Ibid.* 70.

metaphysical procedures in literature, the emblem of the crystal is used to distinguish numerous poets and writers very different from one another, such as Paul Valery in France, Wallace Stevens in the United States, and Jorge Luis Borges in Argentina. The crystal represents both the “self organizing system” and the “invariance of specific structures”, but more importantly, it links Calvino’s fondness for geometrical forms, symmetries, combinations, and limits to the concepts of the infinitely vast and the infinitely small; the bond between the formal choices of literature and cosmological models/mythological frameworks; the order and disorder fundamental to contemporary science; and the inanimate world to the animate world.⁸⁸

So, when Calvino claims that words—the raw material of both philosophy and literature—are “like crystals”, one must recall Calvino’s allusion in *Six Memos* to Hofmannsthal who said: “Depth is hidden. Where? On the surface.” Thus, the connotations of the simile “words are like crystals,” contain far deeper implications than the similarities shared between the two that rest on the surface; namely, that they have facets and axes of rotation with various properties, each that refracts light differently according to how these word crystals are formed, manipulated, and ordered.⁸⁹ In the beginning of his essay, Calvino suggests that perhaps this perpetual battle between philosophy and literature does not need a resolution, but rather, that their continuous refutations protect words and ourselves from verbal stagnation.⁹⁰ But this conclusion does not hold as the essay continues.

⁸⁸ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 68-70.

⁸⁹ Calvino, Italo. "Philosophy and Literature." (1967). *The Literature Machine*. 40.

⁹⁰ *Ibid.* 40.

The fact that literature has taken an interest in philosophy is only a sign of its “voracious eclecticism” according to Calvino.⁹¹ Literary writers draw inspiration from the latest philosophical works, without toppling the systems of the world we exist in. The philosophical literature of the world has the capacity to both confirm and question what we already know, independently of the philosophy that inspired it. Philosophical depth in literature depends on how the writer penetrates below the surface of things. Calvino states that James Joyce for example:

“Projected onto a desolate beach all the theological and ontological conundrums he had learned at school, things very far from his concerns at the time of writing. Yet everything he touched—old shoes, fish eggs, old pots and pans—was utterly transformed to the very depths of its being.”⁹²

Writers like Joyce are, for Calvino, evidence that literature is no longer tied down to the outcries of tragedy or the fantasies of happiness, but that it has been freed and uplifted into the realm of impassive speculative activity. Thus, the original proposition for the repetitive confrontations between philosophy and literature has been exposed as impossible, since literature now appears to possess its own capacities for philosophical endeavors independent from that of philosophy. Yet it is at this moment of the text that Calvino introduces an unexpected—given the title “Philosophy and Literature”—element into his proposition for literature. He tosses the discipline of science into the ring with philosophy and literature and proposes a convergence of all three disciplines:

“What I have described in terms of a twin-bed marriage must be seen as an *ménage a trois*: philosophy, literature, and science.”⁹³

⁹¹ Ibid. 44.

⁹² Calvino, Italo. "Philosophy and Literature. (1967)." *The Literature Machine*. 44.

⁹³ Ibid. 45.

But before explaining the manifold interactions between these disciplines and writers who embody this philosophy of interdisciplinary convergence, perhaps I should first explain—in a manner similar to the explanation of Calvino’s impression of the relationship between philosophy and literature—his stance on the rapport that science and literature have with each other. Conveniently, in a 1968 Roman television interview, Calvino was asked:

“In your opinion, what is the relationship today between science and literature?”⁹⁴

Calvino begins his response by first describing the opposing schools of thought of two of his most influential mentors at the time: Roland Barthes and Raymond Queneau. The discussion unfolds when Calvino mentions that he had recently read an article by Roland Barthes called “Literature versus Science”. In the article Barthes, who was a French literary theorist, philosopher, linguist, critic, and semiotician, explains the opposing conceptions of language in literature and science. Calvino explains that Barthes tends to view literature as the awareness that language has of being a language—it has both an autonomous existence and density of its own. Furthermore, the use of language in literature is never “transparent” and is never used as merely an instrument to convey a “meaning, fact, thought, or truth”; that is it cannot mean anything other than itself.⁹⁵

Conversely, Barthes suggests that the idea of language provided by science is that of language as a neutral device for saying something else, for conveying a meaning that is extraneous to it. Calvino states that it is this different conception of language that

⁹⁴ Calvino, Italo. “Two Interviews on Science and Literature.” (1968). *The Literature Machine*. 28.

⁹⁵ *Ibid.* 29.

differentiates science from literature for Barthes. The explanation continues and Barthes argues that in this particular way, literature is more scientific than science because literature recognizes that language is never oblivious to itself, and writing can never say something foreign to writing or express something that does not have to do with the art of writing.⁹⁶

But Calvino questions Barthes' claim and wonders whether science can really be defined by such "trust in an absolute code of references", or whether or not it is in itself a continual "questioning of its own linguistic conventions."⁹⁷ Calvino is under the impression that Barthes' vision of science is one that is far more "compact" and certain than it really is; and with regard to mathematics, Calvino suggests that we find science constantly fiddling with its own formulaic processes rather than claiming to base an argument on a truth beyond itself.

The above-mentioned article by Barthes was included in an a 1968 issue of the *Times Literary Supplement* that was devoted to continental European literature and the relations between literature and other fields of research. Interestingly, an article by Raymond Queneau, the French novelist, poet and founder of Oulipo—The Workshop of Potential Literature in which the ten members carry out mathematic-literary research—was also included in the same 1968 issue of the *Literary Times Supplement*. Calvino explains that the perspective of the Oulipo towards science is very different than the perspective held by Roland Barthes and the writings of the Tel Quel group of authors. The dominant feature of Raymond Queneau's Oulipo is "play, and the acrobatics of

⁹⁶ Calvino, Italo. "Two Interviews on Science and Literature." *The Literature Machine*. 29.

⁹⁷ *Ibid.* 29.

intellect and imagination.”⁹⁸ This Workshop of Potential Literature is actually a branch of the College of Pataphysics, an academy of mockery and practical joking that was founded in memory of Alfred Jarry, the French writer and dramatist who coined the term and philosophical concept of “Pataphysics”—an absurdist, pseudo-scientific literary trope with multiple changing definitions. The magazine of the College of Pataphysics publishes the work of the Oulipo, and Calvino provides an example of the type of work Oulipo pursued:

“A study of the mathematical problems posed by the series of rhymes in the metrical form of the sestina in the work of Provençal poets (and Dante), a series can be represented as a spiral.”⁹⁹

Calvino admits that he finds himself oscillating between these two poles of Barthes and Queneau and although he feels the attraction of both, he simultaneously attempts to remain aware of the limitations of each type of thinking. He suggests that Barthes and his followers in the Tel Quel group can be viewed as the “enemies”—or at least harsh critics—of science, even though they think and talk with scientific precision. Conversely, there is Queneau with his friends of science in Oulipo, who think and talk in terms of the whimsical and pursue the playful gymnastics and mathematical manipulation of language and thought.¹⁰⁰ Yet, this continual oscillation between two starkly different pathways is another intrinsic theme of Calvino’s writing and temperament.

In “Quickness” of *Six Memos for the Next Millennium*, Calvino unites the concepts of lightness and quickness under the sign of the Olympian god that he

⁹⁸ Ibid.

⁹⁹ Calvino, Italo. "Two Interviews on Science and Literature." *The Literature Machine*. 30.

¹⁰⁰ Ibid. 31.

particularly honors: Mercury, the god of communication and mediation. Mercury's winged feet allow the messenger god to establish the relationships between the gods themselves, between gods and men, between universal laws and individual deities, between the forces of nature and the forms of culture, and between the objects of the world and all its thinking subjects.¹⁰¹

Calvino explains that for the ancients, Mercury's nature was the most indefinite and variable and contrasted with the solitary, contemplative, and melancholy temperament of Saturn. These characteristics correspond with Calvino's own character, and he admits that he is a saturnine by nature, but aspires to be mercurial. Additionally, there is another god who shares family ties with Saturn for whom Calvino feels great affection: Vulcan, the god of fire and the forge who resides not in the clouds, but in the underworld. To Mercury's aerial flight, Vulcan replies with his limping gait and the rhythmic beat of his hammer.¹⁰²

The complex interplay between these three deities exemplifies Calvino's tendency to fluctuate back and forth between polar opposites and it symbolically provides insight into whom he is and who he would like to be, how he writes and how he would like to write. He is a Saturn who strives to be like Mercury. He reveals that the concentration and craftsmanship of Vulcan are needed to record Mercury's adventures and transformations. Similarly, Mercury's swiftness and mobility are necessary to make Vulcan's endless labors achieve meaning; "from the formless mineral matrix, the gods' symbols of office acquire their forms: lyres or tridents, spears

¹⁰¹ Calvino, Italo. "Quickness." *Six Memos for the Next Millennium*. 51.

¹⁰² *Ibid.* 52-53.

or diadems.”¹⁰³ Thus, Calvino finds necessity in these strikingly different divinities. The intricate connections between these symbols are further complicated when one considers another mercurial quality that Calvino fails to mention. Mercury was considered an interpreter for the gods who epitomized the power of language; however, he was also considered by the ancients to be a notorious and deceptive thief—throughout various mythological narratives, he stole the bow and quiver of Apollo, the girdle of Venus, the trident of Neptune, the tools of Vulcan, and the sword of Mars.¹⁰⁴

Further evidence for Calvino’s tendency to perpetually alternate between divergent pathways can be found in his admission regarding the destructive obsession to get lost in the infinitely vast or the infinitely small. He also concedes that in *Invisible Cities* “every concept and value turns out to be a double—even exactitude.”¹⁰⁵ His search for exactitude branches out in two directions and his writing has “always found itself facing two divergent paths that correspond to two different types of knowledge.”¹⁰⁶ Additionally, the entirety of *Six Memos for the Next Millennium* refuses to hierarchically place one value over another, even its antithesis. Rather, Calvino expends a great amount of effort pursuing an inquiry into the invisible relations between the selected value and its antithesis: lightness and weight, quickness and lingering, exactitude and vagueness, visibility and opacity, multiplicity and dearth.

It is time for this discussion to return to the topic of the relationship between science, literature, and philosophy. Recall Calvino’s proposition for a

¹⁰³ Ibid. 54.

¹⁰⁴ Weiss, Beno. “Calvino’s Ultimate Hypernovel; *If on a winter’s night...*” *Understanding Italo Calvino*. 174.

¹⁰⁵ Calvino, Italo. “Exactitude.” *Six Memos for the Next Millennium*. 72.

¹⁰⁶ Ibid. 74.

polygamous love affair between these three disciplines.¹⁰⁷ Calvino believes that science suffers troubles very similar to literature. It attempts to make patterns of the world that are called into question; it maneuvers back and forth between the methods of induction and deduction, and must remain ever vigilant lest it mistake its own linguistic conventions for objective laws. In order to construct a literature that remains valid in the present and the future Calvino advocates the need to compare the basic problems of science, philosophy, and literature together in order to call them all into question. In *Six Memos for the Next Millennium*, Calvino states:

“Among the values I would like passed onto the next millennium, there is this above all: a literature that has absorbed the taste for mental orderliness and exactitude, the intelligence of poetry, but at the same time, that of science and of philosophy.”¹⁰⁸

This is Calvino’s vision for literature, but he admits that we are still waiting for its arrival. However, Calvino says that while we wait, we can embrace the spirit of his aspirations embodied in contemporary authors who strive towards this dream. We must abide in “a literature that breathes the air of philosophy and science but at the same time keeps its distance, while with a gentle puff it blows away both theoretical abstractions and the apparent concreteness of reality.”¹⁰⁹ He explains that he is speaking of the fantastic and indefinable area of human imagination that produced the works of Lewis Carroll, Raymond Queneau, and Jorge Luis Borges. And for Calvino, this convergence of philosophy, literature, and science all began with Lewis Carroll.

Charles Lutwidge Dodgson—better known by his pen name Lewis Carroll—was a nineteenth century English writer, poet, mathematician, and logician.

¹⁰⁷ Calvino, Italo. "Philosophy and Literature." (1967). *The Literature Machine*. 45.

¹⁰⁸ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 118.

¹⁰⁹ Calvino, Italo. "Philosophy and Literature." (1967). *The Literature Machine*. 46.

His most famous writings are *Alice's Adventures in Wonderland*, its sequel *Through the Looking-Glass*, which includes the poem *Jabberwocky*, and the poem *The Hunting of the Snark*. Certainly, Calvino admired these fantastical works for their poetic intelligence, inventive structure, mathematical puzzles, nonsensical language, and complex patterns of logical play.

In *Alice's Adventures in Wonderland*, after a curious exchange with the Cheshire Cat Alice stumbles upon the house of the March Hare and finds herself joining the March Hare and his friend the Hatter at an unusual tea party. At the tea party, various linguistic logic games occur, mostly involving the misuse of language and inquiry into the equivalency of sentence structure. At one point in the discussion, the March Hare urges Alice to “say what you mean” to which she responds, “I do, at least—at least I mean what I say—that’s the same thing you know.”¹¹⁰ The Hatter quickly (and correctly) disagrees with Alice’s statement that “I say what I mean” and “I mean what I say” hold a verbal equivalence; he extrapolates that she may as well say that “I eat what I see” is the same as “I see what I eat.”¹¹¹ The Hatter is correct according to standard philosophic and mathematical systems of logic, but the true brilliance of Carroll resides within the creation of a fantastic space in which these logic-linguistic puzzles occur, making the discussion of linguistic validity according to mathematical and philosophical logic, a kind of game that is engaging for almost all ages.

Another example of Carroll’s cleverness occurs at an earlier point in her journey through Wonderland. Alice finds herself tired and treading water in a pool of

¹¹⁰ Carroll, Lewis. "A Mad Tea-Party." *Alice's Adventures in Wonderland & Through the Looking-Glass*. 54.

¹¹¹ Ibid.

her own tears. Suddenly, she spots a mouse bobbing in the water near her. She attempts to get the attention of the mouse, and when she does, asks if it knows a way to shore. As they swim, the mouse reveals that he hates both cats and dogs, and promises to explain to Alice this long history of hatred once they reach land. Upon reaching land, the mouse is shown to be a history aficionado and in an attempt to help dry off Alice and the other tear-soaked creatures she swims ashore with—a Dodo, a Lory, and an Eaglet—with the “driest” lecture he knows concerning William the conqueror.¹¹² When the lecture fails to dry the crowd, a Dodo solemnly rises to his feet and proposes a Caucus-race, a race with no track, no pathways, no regulations and in which when it is finished—that is, when the Dodo decides it is over—everyone wins a prize. Once the Caucus race is finished, Alice sits down and begs the mouse to tell the crowd something more; she then requests that he explain the reasons for his disdain for cats and dogs.

“ ‘Mine is a long and sad tale!’ said the Mouse, turning to Alice, and sighing.

‘It is a long tail, certainly,’ said Alice, looking down with wonder at the Mouse’s tail; ‘but why do you call it sad?’ And she kept puzzling about it while the Mouse was speaking, so that her idea of the tale was something like this...”¹¹³

(*Alice in Wonderland*, Carroll, 20)

What follows directly on the next page of the text is a poem that bends back and forth down the page in the shape of a mouse’s tail with the font of the words decreasing in font size as the poem concludes in order to complete the structure of the text as an image for the tail of a mouse. Carroll’s imaginative capacity to create a “tail-

¹¹² Carroll, Lewis. "A Caucus Race and a Long Tale." *Alice's Adventures in Wonderland & Through the Looking-Glass*. 117.

¹¹³ Carroll, Lewis. "A Caucus Race and a Long Tale." *Alice's Adventures in Wonderland & Through the Looking-Glass*. 20.

tale” poem combines content with verbal structure and an affinity for illustrative order that is shared by Calvino and admired by Calvino in other exemplary thinkers. Recall that one of the projects of Raymond Queneau’s Oulipo was a study that revealed that the mathematical structure of Dante’s *Inferno* as series of rhymes in the metrical form of the sestina that could be represented in the shape of a spiral.¹¹⁴ Thus, as the imagination of the reader accompanies Dante on his descent into the different layers of hell, the physical text adopts a structure that mirrors the imaginative journey; both follow the pathway of a downward spiral. Likewise, Carroll presents a mouse’s tale that resembles a mouse’s tail. In *Six Memos for the Next Millennium*, Calvino pays homage to a similar literary device present in Eugenio Montale’s poem “L’anguilla.” The poem consists of a single very long sentence in the shape of an eel and the content of the poem depicts the entire life of the eel, which for Calvino turns the eel into a kind of moral symbol.¹¹⁵ Similarly, the tail of a mouse and a downward spiral also acquire a deeper meaning since they not only physically contain the text but also become powerful images and emblems of their own.

Calvino has a particular fondness for powerful emblems. In his requirements for the values of lightness and exactitude, he explicitly includes the use of either “a visual image that acquires emblematic value” or “a clear, incisive, memorable visual image.”¹¹⁶ Furthermore, the topic is explored for the majority of visibility. The symbolic instance when Cavalcanti nimbly leaps over the tombstone, the aquatic emblem of the dolphin wrapped around the anchor, of the unique symmetry of the

¹¹⁴ Calvino, Italo. "Two Interviews on Science and Literature." (1968). *The Literature Machine*. 30.

¹¹⁵ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 75-76.

¹¹⁶ Calvino, Italo. "Lightness." "Exactitude." *Six Memos for the Next Millennium*. 16 & 56.

butterfly paired with the crab, the crystal, and the world as a tangled ball of yarn are all significant symbols used throughout Calvino's *Six Memos for the Next Millennium*. In a way, the three examples of a text in which the physical structure resembles the content actually unite both of Calvino's diverging paths of exactitude. By combining geometrical structure with thoughtful description, these texts are able to bridge the two diverging paths of exactitude by encompassing both abstract forms and projections as well as creating a text that is the verbal equivalent of a space crammed with objects.¹¹⁷

In *Through the Looking Glass*, Alice travels through a mirror and finds herself in an alternate wonderland populated by anthropomorphic red and white chess pieces. The entirety of the story is structured around the game of chess and depicted accordingly in the illustrations. In the preface to the story, Carroll presents a chess problem to the reader accompanied by the following note: "White pawn (Alice) to play, and win in eleven moves." This series of eleven moves roughly corresponds to the twelve chapters contained within *Through the Looking Glass*, and although the various chess moves that organize the structure of the narrative display a disregard for the actual rules of chess in certain instances, the moves make sense within the broader context of the narrative. Both the structure of the chessboard and the structure of the narrative simultaneously dictate the nature of the operations contained within each other. This interdependence creates a complex entangled system in which the structure of the novel and the actions of the characters within are determined by both the potential sequences of finite moves available to individual pieces at particular times and the characteristics bestowed to them in the construction of the narrative.

¹¹⁷ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 74.

For Calvino, the various adventures of Alice revealed a new relationship between philosophy and literature. Although Calvino mentions other philosophical novels—*Robinson Crusoe*, *Don Quixote*, and *Hamlet*—Calvino asserts that Carroll most effectively demonstrated that “philosophical reason can have the loveliest of daydreams, absolutely worthy of its loftiest moments of speculation.”¹¹⁸ Calvino recognizes the philosophic qualities of Raymond Queneau and Jorge Luis Borges, who have different relationships with different philosophies and use these to create diverse imaginative linguistic worlds. Moreover, the prominent characteristic in these writers is the habit of engaging their speculative and scholarly appetites without dogmatism. The philosophical aspects emerge in their work through their “allusions to great texts, metaphysical geometry, and erudition... a game played between signs and meanings, myths and ideas.”¹¹⁹ Furthermore, these writers treat their own work with a certain detachment that is the product of a thoughtful recognition of their own fallibility concerning the complexity of the world that they have attempted to simulate in their writing.

In *Six Memos for the Next Millennium*, Calvino states:

“If I had to say which writer has perfectly achieved Valery’s aesthetic ideal of exactitude in imagination and in language, creating works that match the rigorous geometry of the crystal and the abstraction of deductive reasoning, I would without hesitation say Jorge Luis Borges.”¹²⁰

Jorge Luis Borges was an Argentinian short-story writer, essayist, poet, translator, and a monumental figure in Spanish literature. His philosophical literature

¹¹⁸ Calvino, Italo. "Philosophy and Literature." (1967). *The Literature Machine*. 47-48.

¹¹⁹ *Ibid.* 48.

¹²⁰ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 118-119.

was comprised of short stories each interwoven by complex themes like dreams, labyrinths, mirrors, fiction, philosophy, and religion and contributed significantly to the entire fantasy genre. The content of Borges' writing can be understood as a reaction to the literary tendencies toward realism and naturalism that dominated the 19th century. According to Calvino, Borges has had an incredible influence on creative literature in Italian and on the very nature of literature—Calvino admits that writers that belong to his own generation have been “profoundly shaped” by Borges.¹²¹

Borges plays a significant role throughout Calvino's literary essays and *Six Memos for the Next Millennium*, which contains references to Argentinian's masterful technique, precision, and density in “Quickness”, “Exactitude”, and “Multiplicity”. Near the end of *Multiplicity*, Calvino quickly summarizes the reasons for his own personal affinity for Borges, but a substantial portion of this section in *Six Memos for the Next Millennium* is actually drawn from his 1984 essay titled “Jorge Luis Borges”. In the essay, Calvino recognizes in Borges the idea of literature as a “world constructed and governed by intellect,” an idea that runs contradictory to the common idea in 20th century literature which attempts to provide a language, a series of narrated events, or an exploration into the subconscious that is equivalent to the chaotic flow of existence.¹²² Borges' literary tendencies, which are wholeheartedly supported by French essayist and prosewriter Paul Valery, champion the “victory of mental order over the chaos of the world.”¹²³

¹²¹ Calvino, Italo. "Jorge Luis Borges." (1984). *Why Read the Classics?* 237.

¹²² *Ibid.* 238.

¹²³ *Ibid.*

The emphasis of the victory of mental order over the chaos of the world potentially reveals the nature of the opposition between consistency and inconsistency for Calvino. “Multiplicity” regards the novel as an encyclopedia, a method of knowledge, and a network of connections between the events, the people, and the things of the world. But maintaining that the nature of the world is complex, indeterminate, manifold, and deeply entangled consequently produces a chaotic experience and perception of things. Carlo Emilio Gadda attempted to develop a linguistic and literary style that matched his complex epistemology, yet all of his novels are unfinished or left in fragments. Robert Musil maintained a similar vision of the world and attempted to create a general mathematics composed of the combination of single solutions, and although he believed that each particular system drew him closer to his ideal mathematics he was always unable complete his project. Similarly, for Marcel Proust, the density of his text expanded the dimensions of space and time until the world could no longer be grasped and knowledge was lost to intangibility. In pursuit of the network that links all things, all three writers failed to complete their literary works. The world they attempted to create within each of their literary endeavors was inconsistent with the world they experienced and lived in.

A paradox begins to emerge. The models and principles we construct in order to convey the perceptual flux of our experience and accurately account for the complex and entangled nature of things are derived from the subjectivity of our own mind and are thus, often inconsistent. The battle of language Leonardo da Vinci struggled with in *Exactitude* directly concerns Calvino’s understanding of the use of words in *Lightness*—words as the perpetual pursuit things, as a perpetual adjustment to their

infinite variety. But how does one perfectly map their own words, mathematical models, and ideas to the chaotic experiences and uncertainty of the world while simultaneously embracing a vision of the world derived from “Multiplicity”?

For example, we express the limit as n approaches infinity of the sequence $\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \dots + \frac{1}{2^n}$ as equal to 1; however, through experience we know that the limit never actually reaches 1. Our experience often defies our intellectual models and vice versa. We attempt to adjust the subjectivity of our language, but we struggle to perfectly embrace the objectivity of reality when limited by the particular agency of our own mind. Attempts to perfect exactitude still do not yield perfect descriptions or general solutions to the world around us. Are we doomed to continuously shatter our limited evaluations and interpretations in a perpetual struggle against the randomness, uncertainty, and the vastness of the world, which if we agree with multiplicity is more complex than we can possibly understand?

Recall Calvino’s strategy to propose the poetic philosophy of Giacomo Leopardi—the poet of vagueness—and then manipulate his fondness for ambiguity to construct an argument in favor of exactitude.¹²⁴ Similarly, in an earlier discussion regarding Calvino’s belief that there is a bond between the formal choices of literary composition and the need for a cosmological model or mythical framework in exactitude, he states that the tendency toward geometrical forms in literature is a response to the order and disorder fundamental to contemporary science:

“The universe disintegrates into a cloud of heat, it falls inevitably into a vortex of entropy, but within this irreversible process there may be areas

¹²⁴ Calvino, Italo. “Exactitude.” *Six Memos for the Next Millennium*. 60.

of order, portions of the existent that tend toward a form, privileged points in which we seem to discern a design or perspective.”¹²⁵

Thus, the order that Calvino believes one can derive from things that appear to be chaotic and disorderly is an example of him grappling with the relationship between consistency and inconsistency. From the inconsistent one can discern the consistent. And consistency in literature involves the combination of mental orderliness and exactitude, as well as the intelligence of poetry, science, and philosophy. This belief is reflected in Calvino’s appreciation for Borges. He explains that the discovery of Jorge Luis Borges’ work was for Calvino like:

“Seeing a potentiality that had always been toyed with now being realized: seeing a world being formed in the image and shape of the spaces of intellect, and inhabited by a constellation of signs that obey a rigorous geometry.”¹²⁶

Calvino also admired Borges’ mastery of concision and economy of expression—both dominant aspects of quickness—his ability to condense an extraordinary amount of rich ideas and poetic attraction into very short texts. For Calvino, every piece of Borges’ work “contains a model of the universe or of an attribute of the universe (infinity, the innumerable, time eternal or present or cyclic).”¹²⁷ His texts are short, concise, versatile, and they take various outer forms, drawing inspiration from popular literature while simultaneously creating mythical structures of their own. Additionally, Borges’ brief style is coupled with tangential narration, precision, and a concreteness of language that is unique, surprising, and powerful.

¹²⁵ Ibid. 69.

¹²⁶ Calvino, Italo. "Jorge Luis Borges." (1984). *Why Read the Classics?* 238.

¹²⁷ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 119.

In his 1984 essay on Borges, Calvino explains that in order to write briefly and overcome the writer's block that kept him from shifting from essays to narrative prose until his forties, Borges simply pretended that the book he wanted to write had already been written by some imaginary writer. He then described, summarized, or reviewed the hypothetical book. Comically, when the first story that he wrote using this strategy, *The Approach of Almotasim*, appeared in the journal *Sur*, it actually convinced a number of readers that it was an honest book review of an Indian author. Critics of Borges regularly point out that each of his texts doubles or multiplies its own space through other books cited from an imaginary or real library, works that are either classical, scholarly, or nonexistent.¹²⁸ (*Jorge Luis Borges*, Calvino, 239).

In the spirit of Borges, Calvino tactically implements a similar narrative function in *Six Memos for the Next Millennium*. *Lightness* alone contains references to over twenty-five different thinkers and works (I do not know how many are contained in the entirety of the text because I have not counted). Calvino purposely interweaves other prominent works into his own brief text in order to vastly expand the implications, relevancies, and coverage of his own work. In Borges, Calvino views the utilization of this tactic as the "birth of literature to the second degree...a 'potential literature',"

Calvino says that for Borges, "only the written word has a full ontological reality and that the things of this world exist for him inasmuch as they refer back to things which have been written."¹²⁹ And Calvino feels the need to emphatically

¹²⁸ Calvino, Italo. "Jorge Luis Borges." (1984). *Why Read the Classics?* 239.

¹²⁹ *Ibid.* 239-240.

stress the circuit of values that characterize this relationship between the world of literature and that of experience. He states that:

“Lived experience is only valued for what it can inspire in literature or for what it in turn repeats from literary archetypes: for instance, there is a reciprocity between a heroic or daring enterprise in an epic poem and a similar deed actually happening in ancient or contemporary history which makes one want to identify or compare episodes and values from the written event with those from the real event.”¹³⁰

The moral problem always resides in this context for Borges “like a solid nucleus in the fluidity and interchangeability of his metaphysical scenarios” according to Calvino.¹³¹ This problem is constantly reiterated in exactly the same terms from one literary universe to another in Borges’ writing and these terms are reduced almost to the terms of a geometry in which the individual must then recognize a pattern before making their decision. Calvino believes that in “Conjectural Poem,” Borges is “Dantesque” when he imagines the thoughts of one of his ancestors, as he lies wounded in a marsh after a battle. In Calvino’s mind this a perfect example of the “osmosis between what happens in literature and what happens in real life”—the ideal source is not some sort of mythical event, but a text which is “a tissue of words and images and meanings, a harmonization of motifs which find echoes in each other, a musical space in which a theme develops its own variations.”¹³²

Calvino believes that Borges purposely selects a finite number of mythical or archetypal motifs and places them within the infinite backdrop of metaphysical themes. In his most famous story, only a dozen pages, *The Garden of Forking Paths*, Borges presents a spy story that includes a “logico-metaphysical” story, which also contains

¹³⁰ Ibid. 240.

¹³¹ Calvino, Italo. "Jorge Luis Borges." (1984) *Why Read the Classics?* 240.

¹³² Ibid. 240-241.

within itself the description of an endless Chinese novel. But Calvino argues that the suspense of the story has more to do with the logic and metaphysics than it does with the actual spy story and after completion of the story, Calvino realizes that although the story has the appearance of a thriller, it is actually a complex narrative tangled in a philosophical reflection on time.¹³³

The Garden of Forking Paths contains three different notions of time conceived by Borges. First, there is the idea of “constant time”, which Calvino understands as a kind of subjective understanding of time in which the person perceiving time recognizes that their notions of time are dominated by this faculty of perception in which things to be happening to them specifically although other objects (animate or inanimate) may be involved. The second conception of time that Calvino pulls from Borges’ story is the idea of “time determined by will” which involves the immobility in which the future presents itself as a consequence of a selected course of action, it remains fixed like the past. The final conception of time is that of a “multiple and ramified time” in which every present splits and branches off to form a dizzying web of divergent, convergent, and parallel times—recall Calvino’s discussion of *Invisible Cities* when he says that “every concept and value turns out to be doubled.”¹³⁴ Calvino says that:

“This idea of infinity of contemporary universes, in which all possibilities are realized in all possible combinations, is not a digression from the story, but the very condition, which is required so that the protagonist can feel authorized to commit the absurd and abominable crime, which his spying mission imposes on him.”¹³⁵

¹³³ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 119.

¹³⁴ Calvino, Italo. "Multiplicity." "Exactitude." *Six Memos for the Next Millennium*. 119 & 72.

¹³⁵ Calvino, Italo. "Jorge Luis Borges." (1984). *Why Read the Classics?* 242.

According to Calvino, this conception of ramified time is dear to Borges because it is a conception that dominates literature. Furthermore, it is what makes literature possible. Calvino then utilizes an example from another one of Borges' essays concerning the controversy surrounding the possibility that Conte Ugolino committed cannibalism in Dante's *Inferno*. Borges examines the specific line "What grief could not manage hunger did", and explains the views of many critics who interpret the line to mean that Ugolino died by starvation rather than committed cannibalism. Borges also adds that Dante likely wanted the reader to suspect, but with some uncertainty, that Ugolino ate his children by providing a list of all the hints of cannibalism, starting with the opening image of Ugolino chewing the skull of Archbishop Ruggieri. But Calvino wants to emphasize the conclusion of Borges' essay because it closely resembles an analytical method of structuralism, which holds that "a literary text consists solely of a succession of words of which it is composed" and therefore, Ugolino is "textual construct."¹³⁶ This reveals in Borges according to Calvino, an awareness of the impersonality of literature—Borges acknowledges that Dante may not have known more about Ugolino than what he wrote.

In real life, when a person makes a decision to select one alternative over another he eliminates the other option, but Borges wants to demonstrate that time behaves differently in art and literature. The concept of ramified time corresponds to literary time where, like Schrödinger's cat, characters operate in superposition—"Hamlet is both mad and sane...Ugolino devours and doesn't devour the bodies of his

¹³⁶ Calvino, Italo. "Jorge Luis Borges." (1984). *Why Read the Classics?* 243.

beloved children” in the Tower of Hunger.¹³⁷ This single example in Dante, exemplifies Borges’ ability to condense a scheme of the network of possibilities into only a few pages of a story. Furthermore, Borges confirms Calvino’s “Keep It Short” rule, which can even be applied to long novels that adopt a structure that embraces the same regulation only in a manner that is “accumulative, modular, and combinatorial.”¹³⁸

These considerations of Borges are at the basis of what Calvino calls the “hypernovel,” which he states that he tried to epitomize in *If on a winter’s night a traveler*. He claims that in *If on a winter’s night a traveler*, Calvino tried to convey the nature of the essence of a novel by providing it in a concentrated form, with ten beginnings; each beginning in a different way generating a multiplicity of acts and actors within a framework that is both determined and undetermined. Similarly, in *The Castle of Crossed Destinies*, he tried to “create a kind of machine for multiplying narratives that began with visual images charged with multiple meanings” like the cards of a tarot pack.¹³⁹ He states that his own temperament “prompts me to ‘keep it short,’ and such structures as these enable me to unite density of invention and expression with a sense of infinite possibilities.”¹⁴⁰

Another example of the hypernovel is *Life a User’s Manual* by Georges Perec, a French novelist, filmmaker, documentarist, and essayist who was also a member of Raymond Queneau’s Oulipo group. The title page describes it as “novels” likely because it contains multiple interwoven stories and ideas as well as several literary and historical allusions, though the story only revolves around the residents of a fictional

¹³⁷ Ibid. 243.

¹³⁸ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 120.

¹³⁹ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 120.

¹⁴⁰ Ibid.

apartment block in Paris. Calvino claims that in his own view, Perec's book, published in Paris in 1978, is the last real event in the history of the novel so far (in 1985 that is).

He explains that his reasoning for this claim is as follows:

“The plan of the book, of incredible scope, but at the same time solidly finished; the novelty of its rendering; the compendium of a narrative tradition and the encyclopedic summa of things known tend to lend substance to a particular image of the world; the feeling of ‘today’ that is made from accumulations of the past and the vertigo of the void; the continual presence of irony and anguish together—in a word, the manner in which the pursuit of a definite structural project and the imponderable element of poetry become one and the same thing.”¹⁴¹

Perec's novel embraces the formal structure of a type of mathematical puzzle.

The entirety of the novel takes place in a typical Parisian apartment structure, and each chapter takes place in one room. There are five levels of the apartment complex, and in each level, Perec provides description of the furniture, appliances, the change of tenants and owners and their lives, as well as all of their ancestors and descendants. Calvino returns again to the theme of chess, and describes the plan of Perec's fictional apartment complex as a bi-square of ten squares by ten—a chessboard—and Perec moves from room to room (chapter to chapter) according to a scheme of rules and restriction of pathways. *Life a User's Manual* is 600 pages long and contains ninety-nine chapters, to which Calvino emphasizes Perec purposely selected in order to leave an “intentional loophole for incompleteness.”¹⁴²

The content of the novel was determined mathematically and analytically for Perec. He created lists of themes, then organized them into categories, and decided that one theme from each category should appear in each chapter in such a way that varied

¹⁴¹ Ibid. 121.

¹⁴² Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 121.

in the combinatorial nature from the other chapters. Even Calvino, who was a friend of Perec's and visited him periodically during the nine years he spent writing *Life a User's Manual* is unaware of the exact mathematical procedures Perec implemented in order to decide on the order that the content of each chapter would appear. According to Calvino, Perec had at least forty-two categories—of which Calvino only knew a few—but they included “literary quotations, geographical locations, historical facts, furniture, objects, styles, colors, foodstuffs, animals, plants, minerals,” and other things.¹⁴³ Amazingly, Perec managed to respect all of these rules and condensed them into brief chapters.

Perec imposed rigorous rules and regulations on himself in order to escape the arbitrary nature of existence. He wrote according to a complex plan of writing constraints and constructed from multiple elements, the combinations of which added density and layering to his text. Another example of the imposition of rigorous rules on geometric structure can be seen in *La disparition*, a 300-page novel that never uses the letter “e”. Calvino states:

“I would like to stress the fact that for Perec the construction of a novel according to fixed rules, to constraints, by no means limited his freedom as a storyteller, but stimulated it.”¹⁴⁴

Recall the discussion of a chessboard; Calvino says “no chess player will ever live long enough to exhaust all the combinations of possible moves for the thirty-two pieces on the chessboard.”¹⁴⁵ Recall the point in exactitude when Calvino says, “This talk is refusing to be led in the direction I led myself... I wanted to tell you of my

¹⁴³ Ibid. 122.

¹⁴⁴ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 123.

¹⁴⁵ Calvino, Italo. "Cybernetics and Ghosts." *The Literature Machine*. 8.

fondness for geometrical forms, for symmetries, for numerical series, for all the is combinatory, for numerical proportions; I wanted to explain the things that I had written in terms of my fidelity to the idea of limits, of measure.”¹⁴⁶ Recall Esther Calvino’s note to the reader in the introduction of *Six Memos for the Next Millennium* when she specifically mentions that Italo believed in the importance of constraints. Recall the geometrical, cosmological, and structural implications of the image of the crystal in exactitude. Recall what Calvino said at the end of “Multiplicity”, “among the values I would like passed on to the next millennium, there is above all: a literature that has absorbed the taste for mental orderliness and exactitude, the intelligence of poetry, but at the same time that of science and philosophy.”¹⁴⁷ Recall the unfinished encyclopedic novels of Carlo Emilio Gadda, Robert Musil, and Marcel Proust.

The hypernovel is Calvino’s solution to the unfinished encyclopedic novels discussed in multiplicity. The encyclopedic novel attempts to become a container of things either through the use of meticulous description or the creation of a single metaphysical system. But the encyclopedic novel is inconsistent because it fails to properly map its content and the use of words to the complexities of the world. Conversely, the hypernovel never attempts to be a container of things, but rather, solves the problems of multiplicity by implementing narrative functions and frameworks that use literature like a machine to generate a vast number of potential possibilities that are both determined and indeterminate and create both a unique density and the sense of infinite possibilities within a text.

¹⁴⁶ Calvino, Italo. "Exactitude." *Six Memos for the Next Millennium*. 68.

¹⁴⁷ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 118.

In Lewis Carroll's *Alice in Wonderland*, the presentation of the Mouse's tale simultaneously assumes the physical structure of a mouse's tail, generating manifold implications of the short text through imagery. In Jorge Luis Borges' work, he frequently cites other famous texts real or imaginary, which multiplies the density of the text tremendously. Although the physical text itself may only be a dozen pages, through the inclusion of several references, Borges connects every implication, every event, and every component of his own text into a network of other texts. Calvino does the exact same thing in *Six Memos for the Next Millennium*; by making allusions to historical and literary people and works, the brevity of the text is exponentially larger than the physical number of pages because of all the invisible connections to other texts. Additionally, in Borges' essay on Dante's *Inferno*, he exposes the intentional open-endedness of the text. The uncertainty is revealed as a deliberate literary strategy to generate an uncontained text with multiple potential literary realities. And in Perec's *Life a User's Manual* a mathematical structure is revealed, content of each chapter follows a calculated combinatorial method that ensures the ordering of order of presentation of each theme is unique in each chapter.

Thus, like the game of chess, the literary writers that Calvino admires and Calvino himself use narrative functions like a chessboard, in order to mathematically generate a vast quantity of potentialities with a relatively small, finite number of basic elements. There is another influential writer who unites the brevity and density of Borges, with the imagination of Carroll and the generative possibilities of Perec—Raymond Queneau. The founder of the Oulipo group (the Workshop of Potential Literature), Queneau pursues a unique combination of intellectual interests,

namely, mathematics in writing and poetry. Like Perec, Queneau insists on utilizing rules and constraints in his writing. In a critique of the automatic writing of surrealists and in favor of writing with constraints, Queneau stated:

“Another very wrong idea that is also going the rounds at the moment is the equivalence that has been established between inspiration, exploration of the subconscious and liberation, between chance, automatism, and freedom. Now this sort of inspiration, which consists in blindly obeying every impulse, is in fact slavery. The classical author who wrote his tragedy observing a certain number of known rules is freer than the poet who writes down whatever comes into his head and is a slave to other rules of which he knows nothing.”¹⁴⁸

Queneau believed that all the great inventions in the field of language and literature emerged through transitions from spoken to written language and attempted to bridge the gap between the rigidity and immobile regulations concerning proper spelling and syntax in the written French language with the inventiveness, mobility, and economy of expression in the spoken language. But, the stylistic revolution that Queneau promoted stemmed from a philosophical context and method. In his 1933 novel *The Bark Tree*, Queneau created a linguistic and structural experiment that dabbled in numerical, symmetrical structures as well as catalogues of narrative genres, and explored different definitions of existence and thought. According to Calvino, Queneau’s novel “spotlights those things which are thought but not real, but influence the reality of the world: a world that in itself is totally devoid of meaning.”¹⁴⁹ In direct challenge to this meaningless world, Queneau establishes the need for order by inserting small areas of order into the universe revealing a sense of order that derived from mathematical and literary invention.

¹⁴⁸ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 123.

¹⁴⁹ Calvino, Italo. "The Philosophy of Raymond Queneau." (19810. *Why Read the Classics?* 248.

Structure is freedom for Queneau. It produces the text and at the same time, it encompasses the possibility of all virtual texts that can replace it. This is the novelty that resides in the idea of “potential multiplicity” in his promotion of a literature developed from constraints that literature elects to impose on itself. This methodology—determined by Queneau and his group at Oulipo—is a playful approach that imposes rules on writing like a game that results in “a rigorous formalization applied to poetic invention.”¹⁵⁰ In opposition to the surrealist automatic mechanism that appeals to chance or the unconscious, structuralists like Queneau and Perec constructed text according to precise rules that in turn, opened up the potential multiplicity of all the texts that can be virtually written according to these rules.

Calvino mentions that it is important to remember that Raymond Queneau worked as an encyclopedia consultant and editor as it is relevant to his temperament for inclusion. Queneau published three volumes of essays and occasional writings during his lifetime, which Calvino believes provide an “intellectual outline” for Queneau, which is the starting point for analyzing his creative work. At first glance, his interests seem divergent to Calvino; however, under further investigation, they provide a framework of an implicit philosophy that Calvino prefers to call “a mental attitude and organization.”¹⁵¹ Queneau combines this intelligence with an endless need to invent and test possibilities in both literary creation and theoretical speculation in a game-like manner that ensures he never strays too far from reality.

¹⁵⁰ Ibid. 258.

¹⁵¹ Calvino, Italo. "The Philosophy of Raymond Queneau." *Why Read the Classics?* 246.

In *Exercises in Style*, Queneau narrates an episode in only a few sentences and then repeats the sentence 99 different times in 99 different styles. *The Portable Small Cosmogony* is a poem on the origin of earth, chemistry, the origin of life, animal evolution and the development of technology. And in *One Hundred Million Million Poems*, Queneau developed a machine for composing sonnets, consisting of ten sonnets using the same rhymes printed on pages cut into horizontal strips, one line on each strip, so that every first line can be followed by a choice of ten second lines, and so on until the total of 10^{14} combinations are reached. As a producer of mathematical ideas, the field of combinatorial systems—a tradition that stems from ancient western systems—is a favorite of Queneau's and he used this passion to combine mathematics and literature.¹⁵² *One Hundred Million Million Poems* is very similar to Perec's literary decision to construct each one of his chapters in *Life a User's Manual* to contain all of his themes, but in a different order in each chapter. Although his book is composed of only ninety-nine chapters, there are an incredibly large amount of potential combinations of those themes. His structural method provides $42!$ — $42 \times 41 \times 40 \times 39 \times 38 \dots \times 2 \times 1$ —unique combinations.

Perhaps this is Calvino's solution to his two diverging paths of exactitude and the incomplete encyclopedic novels. Queneau and Perec demonstrate the success that stems from the blending of mathematics with literary structure in order to create a piece of potential work that has an expansive number of combinatorial possibilities from a small number of finite elements. These structures do not yield an infinite number of possibilities, but the variety is incredibly large, perhaps

¹⁵² Ibid. 246 & 258.

inconceivably so, and it creates a system that follows a type of mental orderliness in which a desired particular variety can be derived through a series of logical processes. Furthermore, these literary structures are not inherently hierarchical or dogmatic, they are tools that recognize the complex nature of the universe we live in and puts forth multiple possibilities on the same level.

Multiplicity concludes with a refutation of the objection that the more a work tends toward the multiplication of possibilities, the further it departs from that “unicum which is the *self* of the writer, his inner sincerity of his own truth.”¹⁵³ Calvino answers with the question what are people if not the combinatoria of multiple experiences, information, books read, lessons learned, and things imagined? He views each life as an encyclopedia, a library, an inventory of objects, a series of styles, in which everything can be shuffled around and reordered in every conceivable way possible. But then he questions what a work conceived outside of the self would look like; one that would allow one to escape the limited perspective of the individual ego and enter into selves like our own as well as give speech to that which has no language. Finally, Calvino speculates if:

“Is this not what Ovid was aiming at when he wrote about the continuity of forms? And what Lucretius was aiming at when he identified himself with that nature common to each and every thing?”¹⁵⁴

The ancient Roman poet Lucretius’ *De Rerum Natura* (“*The Nature of Things*”) is a poem that does not contain people or a story, but is instead, a treatise on science and philosophy. *The Nature of Things* embodies the philosophy of materialism and utilizes

¹⁵³ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 124.

¹⁵⁴ Calvino, Italo. "Multiplicity." *Six Memos for the Next Millennium*. 124.

natural philosophy to deduce philosophical truths from the external world. Lucretius deduces that nothing exists except for “matter and void” and that all matter is made up of indivisible particles called atoms that cannot be created or destroyed.¹⁵⁵ Rather, all events and processes are merely the effects of the movement of an infinite number of atoms and an infinite amount of space. Every atom is immortal, indivisible, and indestructible and ceaselessly in motion.¹⁵⁶ Thus, every action, all creation and destruction alike is the product of the push and pull of atoms, as these elementary particles collide, cohere, or fly apart. Furthermore, the universe is immutable; it exists as the sum of infinite space and an infinite number of atoms—nothing is added and nothing is taken away.¹⁵⁷ For Lucretius, all existence is material and a part of nature. There is no supernatural realm, and insofar as the gods exist, they too must be made of atoms, and are not responsible for the creation of the world, nor do they play a role in its governance.

The complex combinations of chance and changelessness are celebrated throughout his epic poem, but specifically in his metaphor of Venus and Mars. Lucretius aims to show through his poetry that the teachings of Epicurus are true, but also beautiful, lovable, and meaningful. He is able to level all things—nature and culture, plants, animals, and cities—through one energizing force, that is, that the activity of atoms is the cause of everything that exists. This ancient Roman poet possessed a scientific mind with philosophic inclinations and was able to produce an inspiring piece of quantum poetry that beautifully exposed the entangled nature of all

¹⁵⁵ Lucretius. “Book I: Matter and Void.” *The Nature of Things*. 13.

¹⁵⁶ Lucretius. “Book II: The Dance of Atoms.” *The Nature of Things*. 38.

¹⁵⁷ Lucretius. “Book I: Matter and Void.” *The Nature of Things*. 21.

things by emphasizing a mutual cooperation and universal kinship between both animate and inanimate objects.¹⁵⁸ Lucretius constructs a world that is mobile, eternally new, and recognizes the interdependency of the complex relationships that exist between all things.

This theme of leveling things that Calvino proposes at the end of *Multiplicity* is strongly emphasized in Calvino's 1979 essay regarding *Metamorphoses* titled "Ovid and Universal Contiguity." He states that:

"The contiguity that exists between gods and humans—who are related to the gods are the objects of their compulsive desires—is one of the dominant things in "Metamorphoses", but this is simply the contiguity that exists between all the figures and forms of the existing world, whether anthropomorphic or otherwise."¹⁵⁹

Calvino describes the universe contained in Ovid's *Metamorphoses* as a space densely packed with forms that constantly swap size and nature, while the flow of time is continually filled by an expanding sequence of tales and cycles of tales. Both earthly and heavenly forms intertwine until the confines of the two worlds are blurred. In the myth of Paetheon and the sun's chariot in Book 2 of *Metamorphoses*, Calvino recognizes that heavens appear "both as unconfined space, abstract geometry, and at the same time as a scene of human adventure recounted with such detailed precision that we never lose the thread even for a moment."¹⁶⁰ He also remarks that it is not simply the precision of Ovid's description of the chariot's movement or the emotions of the young, unskilled charioteer that Calvino values, but it is Ovid's exactness in the visualization of extraterrestrial forms, like the map of the heavens.

¹⁵⁸ Lucretius. "Book II: The Dance of Atoms." *The Nature of Things*. 38.

¹⁵⁹ Calvino, Italo. "Ovid and Universal Contiguity" (1979). *Why Read the Classics?* 25.

¹⁶⁰ Calvino, Italo. "Ovid and Universal Contiguity." (1979). *Why Read the Classics?* 26.

Ovid reveals that the invisible connections between the gods, humans, and nature do not imply a hierarchical order, but rather an intricate system of interrelations in which each level possesses the capacity to influence another. Calvino identifies that myth, for Ovid, is a “field of tension where forces clash and balance each other out.”¹⁶¹ Furthermore, the tone in which the myth is narrated is the ultimate determining force. Ovid, according to Calvino, attempts to portray the entirety of the narrative tales that have been handed down through literature without privileging any particular reading. For example, sometimes the gods themselves tell a myth in which they have played a significant role, as moral examples to warn mortals; alternatively, humans also tell the same myths as arguments or challenges to the gods.¹⁶² Calvino states that:

“Only by accepting into his [Ovid’s] poem all the tales and intention behind them which flow in every direction, pushing and shoving to squeeze them into the ordered ranks of the epic’s hexameters, only in this way will the poet be sure of not serving a partial design, but a living multiplicity that does not exclude any known or unknown god.”¹⁶³

In addition to this aggregate compilation of all tales, Calvino emphasizes that Ovid uses a narrative technique of expanding the space inside *Metamorphoses* by placing tales within other tales in order to heighten the impression of a densely packed and entangled space within the poem. Calvino directs the reader to Book 8 where a boar hunt brings together the stories of multiple different heroes throughout the text. In the narrative, the forest is placed near the whirlpool of Achelous—the river-god—that ends up blocking the way home from the hunt. In *Metamorphoses*, as the heroes return

¹⁶¹ Ibid. 28.

¹⁶² Ibid.

¹⁶³ Calvino, Italo. "Ovid and Universal Contiguity." (1979). *Why Read the Classics?* 29.

from their hunt, Achelous offers to them his hospitality and invites them into his home, which Calvino emphasizes becomes “an obstacle and a refuge, a pause in the action, and an opportunity for stories and reflection.”¹⁶⁴ The river-god, who is now accompanied by Theseus and Pirithous, is then encouraged to tell tales of metamorphoses, and his guests are encouraged to reciprocate. This purposeful, narrative function allows Ovid to continuously join together new layers of stories. Calvino suggests, “the passion which demonstrates Ovid’s compositional skill is not systemic organization but accumulation, and this has to be combined with various points of view and changes in rhythm.”¹⁶⁵

The poetic style of *Metamorphoses* contains the same principle of cinematography for Calvino: each of Ovid’s episodes follows in a purposeful rhythm, in order to strike our imagination, each image overlays another one, acquiring density before disappearing.¹⁶⁶ The masterful utilization of these techniques creates a picture of the world that Calvino attempts to construct in his own writing; namely, Ovid portrays the world as a system made up of elementary components. Even the unlikely and mystical process of transformation is reduced to a sequence of simple processes. The metamorphoses of things is no longer represented as a fantastical phenomenon, but instead, as the collection of realistic facts—things grow, lessen, harden, soften, curve, straighten, join, separate etc.¹⁶⁷ The example that Calvino uses in his 1979 essay is the same as the example provided in *Lightness of Six Memos for the Next Millennium*. It involves the transformation of seaweed into coral:

¹⁶⁴ Ibid. 30.

¹⁶⁵ Ibid.

¹⁶⁶ Calvino, Italo. "Ovid and Universal Contiguity." (1979). *Why Read the Classics?* 31.

¹⁶⁷ Ibid. 32.

“Water was brought and Perseus washed his hands, triumphant hands, and, lest the snake-girt head be bruised on the single hard shingle, made a bed of leaves and spread the soft weed of the sea above and on it placed the Medusa’s head. The fresh seaweed, with living spongy cells, absorbed the Gorgon’s power and at its touch hardened, its fronds and its branches stiff and strange. The sea-nymphs tried the magic on more weed and found to their delight it worked the same, and sowed the changeling seeds back on the waves. Coral still keeps that nature...”¹⁶⁸

The point that Calvino wants to emphasize the most in Ovid’s work is that this way of portraying animate and inanimate objects *objectively*, as “different combinations of a relatively small number of basic, very simple elements” is the ultimate philosophy of the poem. It exemplifies the interconnectedness of everything that exists in the world, both things and living creatures.¹⁶⁹ Like Lucretius, Ovid set out the cosmogony in the beginning and his profession of faith in the end—Ovid dedicated his work to Pythagoras and Lucretius to Epicurus. Both ancient poets wanted to provide a natural philosophy with a theoretical basis. Calvino states:

“The only thing that matters is the poetic consistency of the manner in which Ovid portrays and narrates his world: namely, this swarming and intertwining of events that are often similar but always different, in which the continuity and mobility of everything is celebrated.”¹⁷⁰

This is perhaps the most definitive conception of consistency that I can provide. Both Lucretius and Ovid exemplify the convergence of the intelligence of poetry, science, and philosophy; and simultaneously, they both strive towards the creation of a work that generates order without the installation of a dogmatic hierarchy of values. They recognize the complexity of the world and grappling with that by incorporating all tales (Ovid) or leaving room for chance (Lucretius).

¹⁶⁸ Ovid. “Perseus and Andromeda.” *Metamorphoses*. iv. 740-745.

¹⁶⁹ Calvino, Italo. “Ovid and Universal Contiguity” (1979). *Why Read the Classics?* 33.

¹⁷⁰ Calvino, Italo. “Ovid and Universal Contiguity.” (1979). *Why Read the Classics?* 34.

There are two writers who think and operate quite similarly to Ovid and Lucretius respectively. The first is Pliny the Elder. Calvino admires Pliny for the movement of his prose and his appreciation for everything that exists as well as his respect for the infinite diversity of all phenomena. He explains that there are however, two sides of Pliny: Pliny the poet and philosopher who possessed awareness for the universe and sympathy for knowledge and mystery and Pliny the neurotic collector of data and compiler of facts.¹⁷¹ Pliny collected multiple written sources and divided them into separate groupings; facts he recorded as true, others that he gave the benefit of the doubt, and others he deemed as false. However, Calvino reveals that Pliny's method of evaluation is extremely inconsistent and unpredictable. Calvino believes that Pliny wants to describe a single world that is composed of a great variety of forms. In order to this, he—like Ovid—attempts to embrace the infinite number of existing forms in the world, which is multiplied by all of the countless reports that exist about these forms.¹⁷²

Calvino describes Pliny's scientific method as oscillating between "a desire to find an order in nature and the recording of what is extraordinary and unique, and it is the latter tendency which always prevails in the end."¹⁷³ Pliny views that nature is eternal, sacred, and harmonious, but he purposely leaves a wide margin for the occurrence of miraculous and inexplicable phenomena in order to create a system that is entirely composed of exceptions to the rules or subject to rules beyond human understanding. Although Pliny believes that there is an explanation for every occurrence and upholds the logic of cause and effect, he frequently minimizes it as well.

¹⁷¹ Calvino, Italo. "The Sky, Man, the Elephant." (1982). *Why Read the Classics?* 38.

¹⁷² *Ibid.* 38.

¹⁷³ Calvino, Italo. "The Sky, Man, the Elephant." *Why Read the Classics?* 39.

Calvino explains that even when Pliny finds an explanation for the facts, the facts do not thereby cease to be miraculous.¹⁷⁴

The explanation of Pliny that most corresponds with Calvino's admiration of Ovid occurs in Pliny's catalogue of man and animals. In this section animals, both real and imaginary, maintain a place in the realm of fantasy: every time an animal is named it is invested with the power of illusion, it becomes an allegory, a symbol, and an emblem. Calvino believes that the main theme of Pliny's work is the idea of nature as "something external to humanity, but also indistinguishable from what is innermost in man's mind, his dictionary of dreams and catalogues of fantasies, without which we can have neither reason nor thought."¹⁷⁵

The thinker who corresponds with Lucretius' philosophy is Cyrano de Bergerac, who Calvino claims is "the first poet of atomism in modern literature."¹⁷⁶ Cyrano, who was a forerunner in science fiction, creates fantastical stories based on the scientific knowledge of his time and the traditions of Renaissance magic. For example, he describes the movement of an astronaut free of the pull of gravity, rockets involving several stages, and 'sound books'—a mechanism that is wound up, a needle is placed on the required chapter, and then one can listen to the sound that emerges from a kind of mouth.¹⁷⁷

Cyrano's poetic imagination stems from what Calvino calls "a true cosmic sense" and allows Cyrano to reproduce a version of Lucretius' atomistic philosophy. They both celebrate the unity of all things, living or inanimate. Calvino utilizes the

¹⁷⁴ Ibid. 40.

¹⁷⁵ Ibid. 46.

¹⁷⁶ Calvino, Italo. "Lightness." *Six Memos for the Next Millennium*. 20.

¹⁷⁷ Calvino, Italo. "Cyrano on the Moon." *Why Read the Classics?* 92.

same excerpt from Cyrano in his 1982 essay as he does in “Lightness” of *Six Memos for the Next Millennium*. It reads:

“You are amazed how this mixture which is a purely haphazard mixture, and governed only by chance, can have produced a human being, since there were so many things essential to the construction of man’s being, but you are not aware that hundreds of millions of times this same matter, when it was on the brink of producing man, stopped and formed a stone, lead, coral, a flower, or a comet, all because of the fact that too few or too many patterns were necessary to plan a human.”¹⁷⁸

This acknowledgement of a complex system of combinations of basic patterns that determines the variety of living forms is inherently Lucretian, and links Epicurean science with DNA genetics and quantum entanglement. In Cyrano, Calvino sees the convergence of poetics with Gassendi’s sensism, Copernicus’ astronomy, and sixteenth-century natural philosophers.¹⁷⁹ Cyrano even meets Descartes in *Journey to the States of the Sun*, the sequel to *The States and Empires of the Moon*. Calvino values Cyrano as a writer who does not illustrate or defend a certain theory, but rather creates inventions in imagination and language that are equivalent to the new scientific and philosophic theories of his time. This playful and imaginative approach is what Calvino admires the most in Cyrano and in *Six Memos for the Next Millennium* he admits that in his 1965 book *Cosmicomics*; he embraced a similar writing strategy.

Calvino explains that the point of departure for the short stories contained in *Cosmicomics* was a statement taken from the language of science; the independent play of visual images that arise from a conceptual statement. He explains further that his “aim was to show that writing using images typical of myth could grow from any soul,

¹⁷⁸ Ibid.

¹⁷⁹ Ibid. 94.

even from the language furthest away from any visual image as science is today.”¹⁸⁰ He believes that even in reading the most technical scientific book or the most abstract book of philosophy, one can stumble upon a phrase that unexpectedly spurs the visual imagination. However, for Calvino, although the initial image may be determined by a preexistent written text, it can stimulate an imaginative process that may either be “in the spirit of the text or go off in a direction of its own.”¹⁸¹

For example, in the first cosmicomic, “The Distance to the Moon,” the impulse for the content of the story, which was inspired by gravitational physics, created a surrealistic and dreamlike fantasy.¹⁸² Calvino admits that in his other cosmicomics, the plot remains closer to the scientific principle that inspired it, but he insists that each story is always “clad in a shell of imagination and feeling, and spoken by one voice or two.”¹⁸³ Calvino explains:

“In short, my procedure aims at uniting the spontaneous generation of images and the intentionality of discursive thought. Even when the opening gambit is played by the visual imagination, putting its own intrinsic logic to work, it finds itself sooner or later caught in a web where reasoning and verbal expression also impose their logic. Yet the visual solutions continue to be determining factors and sometime unexpectedly come to decide situations that neither the conjectures of thought nor the resources of language would be capable of solving.”¹⁸⁴

It should be noted that the ability to demonstrate the world objectively in the way that Calvino values is dependent on the use of poetry and narrative. Narrative functions often provide unique explanative techniques that construct thoughtful,

¹⁸⁰ Calvino, Italo. "Visibility." *Six Memos for the Next Millennium*. 89.

¹⁸¹ *Ibid.* 90.

¹⁸² Calvino, Italo. "The Distance to the Moon." (1965). *Cosmicomics*. 3.

¹⁸³ Calvino, Italo. "Visibility." *Six Memos for the Next Millennium*. 90.

¹⁸⁴ Calvino, Italo. "Visibility." *Six Memos for the Next Millennium*. 90.

complex, and potential conceptions of the world that cannot be adequately matched by philosophy or science alone.

Similarly, in a 1968 interview, Calvino was asked, “ You recently said that the greatest Italian writer is Galileo, why?” Calvino begins his answer by first explaining that Giacomo Leopardi admires Galileo’s prose for their elegance and precision and that if one were to look at any of the selected passages from Galileo that Leopardi includes in his *Anthology* of Italian prose to realize how much the language of Leopardi owes to Galileo. Calvino states that Galileo “uses language not like a neutral utensil, but with literary awareness, with a continuous commitment that is expressive, imaginative, and even lyrical.”¹⁸⁵ He believes that Galileo uses language to make inanimate objects real for human kind. When Galileo describes the moon, Calvino acknowledges that it makes the moon a tangible thing, but at the same instance, Galileo conjures an image of the moon that creates a “rarefication, almost levitation” that is mirrored in Galileo’s prose.¹⁸⁶ Calvino informs the interviewer that Galileo was an admirer of the lunar and cosmic poet Ludovico Ariosto, and suggests that the ideal way in which Galileo regarded the world even as a scientist was nourished by a literary culture. Furthermore, this style of prose connects Ariosto to Galileo to Leopardi.

Additionally, in his 1985 essay “The Book of Nature in Galileo,” Calvino explains that the most famous metaphor in Galileo—one that contains within itself a small kernel of new philosophy—is that of the book of nature written in a mathematical language. Calvino includes this quotation from Galileo:

¹⁸⁵ Calvino, Italo. "Two Interviews on Science and Literature." *The Literature Machine*. 31.

¹⁸⁶ *Ibid.* 32.

“Philosophy is written in this enormous book, which is continually open before our eyes (I mean the universe), but it cannot be understood unless one first understands the language and recognizes the characters with which it is written. It is written in a mathematical language, and its characters are triangles, circles, and other geometric figures. Without knowledge of this medium it is impossible to understand a single word of it; without this knowledge it is like wandering hopelessly through a dark labyrinth.”¹⁸⁷

Calvino recognizes that this image of a book of the world has roots in medieval thinkers like Nicholas Cusanus and Montaigne, as well as been perpetuated by contemporaries of Galileo like Francis Bacon and Tomasso Campanella.¹⁸⁸ However, Calvino believes that Galileo’s most novel contribution to the metaphor of the book of the world is his emphasis on its special alphabet. He also argues that the metaphorical link is not between world and book, but rather, between world and alphabet. Galileo says:

“I have a little book, which is considerably shorter than Aristotle, and Ovid, which contains all sciences, and which with just a little study, can allow others to form the perfect idea of it. The book is the alphabet, and there is no doubt that the person who knows how to put together and juxtapose this or that vowel with those or other consonants, will get the most accurate responses to all doubts and will derive lessons pertaining to all the sciences and the arts.”¹⁸⁹

Calvino believes that when Galileo mentions the alphabet, he means “a combinatory system capable of representing everything in the universe.”¹⁹⁰ Galileo compares the alphabet to painting. He draws equivalence between the combinations of

¹⁸⁷ Galileo, Galilei. *The Assayer*. 6.

¹⁸⁸ Calvino, Italo. "The Book of Nature in Galileo." (1985). *Why Read the Classics?* 83.

¹⁸⁹ Galileo, Galilei, *Dialogue Concerning the Two Chief World Systems*.

¹⁹⁰ Calvino, Italo. "The Book of Nature in Galileo." (1985). *Why Read the Classics?* 85.

letters in the alphabet to the mixing of colors in a palette. Furthermore, Calvino concludes from Galileo's text that Galileo believed that a combination of objects that are already endowed with meaning cannot represent all of reality; "in order to achieve this one needs to turn to a combinatory system of minimal elements such as primary colors or the letters of the alphabet."¹⁹¹

In the same 1968 interview, Calvino further explains the relationship between scientific writing and literary writing chiefly concerning the use of words. He states that scientific writing tends toward a purely formal and mathematical language based on abstract logic indifferent to its content. Conversely, he explains that literary writing tends toward a construction of a system of values in which "every word, every sign, is a value for the sole reason that it has been chosen and fixed on the page."¹⁹² He argues that there can never be a meeting of scientific and literary languages, but there can be a challenge between the two of them. Calvino suggests that in certain situations, literature can provide imaginative inspiration for scientists, urging them to follow a hypothesis to its ultimate consequences and vice versa. He states:

"At the moment the language of mathematics, of formal logic, can save the writer from the disrepair that words and images have fallen into as a result of being misused. Even so, the writer should not think that he has found anything valid absolutely. Here, too, the example of how science can be of use to him, and teach him the patient modesty of considering each and every result as being part of a possibly infinite series of approximations."¹⁹³

Calvino admits that in the particular direction that his work is taking him, he is finding nourishment in Galileo's precision of language, scientific-poetic imagination,

¹⁹¹ Ibid.

¹⁹² Calvino, Italo. "Two Interviews on Science and Literature." (1968). *The Literature Machine*. 37.

¹⁹³ Calvino, Italo. "Two Interviews on Science and Literature." (1968). *The Literature Machine*. 38.

and his posing of conjectures. He then compares Galileo to Dante, who in a different cultural context created an “encyclopedic and cosmological works, and he too, tried to construct an image of the universe by means of written word.”¹⁹⁴ This is a vocation that is deeply embedded in Italian literature, which Calvino believes is handed down from Dante to Calvino.

One could follow the thread even further and argue that Lucretius and Ovid passed down to Dante. Recall that Calvino explains in *Six Memos for the Next Millennium* that Dante’s real genius lies in his “extracting all of the possibilities of sound and emotion and feeling from language, in capturing the world in verse at all its various levels, in all its forms and attributes, in transmitting the sense that the world is organized into a system, an order where everything has its place.”¹⁹⁵

He explains the notions held by the Italian literary traditions:

“This notion of the literary work as a map of the world and of the knowable, of writing driven on by a thirst for knowledge that may by turns be theological, speculative, magical, encyclopedic, or may be concerned with natural philosophy or with transfiguring, visionary observation. It is the tradition that exists in all European literatures, but I would say that in Italian literature it has been dominant in every shape and form, making our literature very different from others, very different but at the same time perfectly unique. In the last few centuries this vein has emerged less frequently, and since that time, certainly our literature has diminished in importance. Maybe now is the time to find that vein again.”¹⁹⁶

Ludovico Ariosto is another Italian author whom Calvino holds in high regard. The novel *Orlando Furioso*—as well as Ariosto—are mentioned in referential passing

¹⁹⁴ Ibid. 32.

¹⁹⁵ Calvino, Italo. "Lightness." *Six Memos for the Next Millennium*. 16.

¹⁹⁶ Calvino, Italo. "Two Interviews on Science and Literature." (1968). *The Literature Machine*. 32-33.

throughout the course of *Six Memos for the Next Millennium*; however, they are never deeply analyzed. In a 1974 essay on *Orlando Furioso*, Calvino teased out narrative functions and structural designs that resemble those he admires in Ovid's *Metamorphoses*. When discussing the cinematic nature of the progression of the *Furioso*—shifts in narration from one character to another without losing the continuity of the narrative—Calvino notices that the text expands from within, that “episodes proliferate from other episodes, generating new symmetries and contrasts” that Calvino believes characterize Ariosto's creative method.¹⁹⁷ Calvino believes that it is impossible to give a single definition of the structure of *Orlando Furioso* since the poem does not possess a rigid geometry. The poem has a “polycentric, synchronic structure, whose episodes spiral off in every direction, continually intersecting with and bifurcating from each other.”¹⁹⁸ In order to describe the structure of *Orlando Furioso*, Calvino provides the image of an energy field, which contains a constant centrifugal force that continually generates a form within itself.

Calvino believes that Ariosto constructs a model of the universe that appears to be a continuation of someone else's work—much like Jorge Luis Borges. Ariosto implements deceitful discretion by understating elements of the story that are incredibly important until the proper moment. The poem zigzags back and forth between the intersections and divergences of storylines that trace across Europe and Africa. Calvino explains that like Dante, Ariosto did not set himself a rigid division of subject matter, or

¹⁹⁷ Calvino, Italo. "The Structure of *Orlando Furioso*." (1974). *Why Read the Classics?* 59.

¹⁹⁸ *Ibid.*

any rules of symmetry that would force him to set the number of canti or number of stanzas in each canto.

The part of *Orlando Furioso* that is most relevant to Ovid's *Metamorphoses* is the use of a narrative function that layers in multiple stories like Ovid's forest. Calvino recognizes that Ariosto creates a kind of vortex in his poem that traps his main characters one by one: the wizard Atlante's magic castle. Atlante is a wizard who is especially gifted at creating architectural illusions; he constructs multiple castles one that is an empty vortex in which all of the images of the poem are refracted. Atlante's spell concentrates all of the unsatisfied desires of Ariosto's characters into the enclosure of a labyrinth, but the rules that govern the movement of the characters and the open spaces of the world remain unchanged. One by one, characters race towards their desires and end up trapped within the castle. However, the character Astolfo—who believes he is chasing a horse thief when he is tricked into entering the castle—is immune to the entrapment spell of Atlante because he possesses a magic book that explains to him everything about the castle of illusions. Astolfo learns that all he must do to disintegrate the illusion spell of the castle is touch a certain marble stone, but just before he reaches it, he is joined by a crowd of knights who remain under Atlante's spell and attempt to kill him.

Calvino explains Atlante the wizard and Ariosto the poet are very similar in that:

“The castle turns out to be a crafty structural device for the narrator because of the physical impossibility of developing simultaneously a large number of parallel plots, he feels the need to remove characters from action for the duration of a number of canti, setting aside a number of cards in order to continue his game and to bring them out at

the appropriate moment. The magician who wants to delay the fulfillment of destiny and the poet-tactician who alternately multiplies and reduces the threads of the threads of the characters he deploys on the field, now grouping them together, now dispersing them, blend into one another until they are inseparable.”¹⁹⁹

But Ariosto employs another narrative function in order to objectively examine itself. Calvino says that the forty-sixth canto opens with a list of a crowd of people who Calvino believes represent the public that Ariosto was writing his poem for. Of course Ariosto, out of obligation, must acknowledge his benefactor and address the beginning of the poem to them, but Calvino insists that this section is the real dedication of *Orlando Furioso*.²⁰⁰ Ariosto sets the scene of the boat entering the harbor surrounded by knights, poets, beautiful noblewomen, and intellectuals. Calvino believes that through this “structural reversal,” Ariosto is providing a role call of his contemporaries, allowing the poem to step outside of itself and then examine itself through its readers.²⁰¹

Perhaps this essay is not following the course that I set for myself when I first began. Every time I try to conclude my thesis project, another pesky thought arises and forces me to attempt to connect and explain different sequences of Calvino’s essays and fiction in a unique and insightful manner. I wanted to write about the narrative functions that Calvino admired in others and used his own analysis of these structures to expose similar elements in his own writing and to discuss Calvino’s interpretation of the multiple odysseys that occur within Homer’s *Odyssey* and expose the narrators of Calvino’s own fiction to be as unreliable as Ulysses. I wanted to talk about Agilulf, the

¹⁹⁹ Calvino, Italo. “The Structure of *Orlando Furioso*.” (1974). *Why Read the Classics?* 66.

²⁰⁰ Ibid.

²⁰¹ Ibid. 67.

nonexistent knight, an empty suit of white armor who goes around performing chivalric deeds, and ironically embodying the very same temperament that I have come to associate with Calvino. I wanted to compare Atlante's castle of illusions in *Orlando Furioso* with Calvino's *Castle of Crossed Destinies* and explain the image generator that grappled with the ordering, swapping, and reordering of tarot cards and analysis as well as the inclusion of multiple variants and interpretations. I wanted to talk about *Cosmicomics* in relation to Calvino's influences from Jorge Luis Borges and the reason that Calvino prefers to write fiction. I wanted to talk about *Mr. Palomar* in relation to Lucretian atomism and further examples of objective approaches to envisioning the world. I wanted to talk about the mathematical design of *Invisible Cities*, the unreliability of Marco Polo, and the complex and vast encompassing ramifications of filtering all of Calvino's ideas through the symbol of the city. I wanted to talk about *If on a winter's night a traveler*, and the intentional unreliability of the narrator, the complex series of design and imitation as well as Calvino's philosophy regarding the relationship between the reader and the writer. I wanted to talk about Calvino the poet, the philosopher, the scientist, the interdisciplinary thinker; I wanted to talk about Don Quixote and literature machines...

I do not consider the project I set out to write to be completed.

However, I do consider the content of Consistency that I have proposed thus far to be sufficient for the completion of an undergraduate thesis project. My interest in Calvino and the enormity of topics I would still like to discuss necessitate further essays, further analysis, and further study. I cannot adequately express with words the gratitude I have for the opportunity to learn about Mr. Calvino and in my pursuit of interdisciplinary

thought I intend look to him for inspiration. Perhaps it is fitting that like *Six Memos for the Next Millennium* the vision I had for my thesis project is incomplete. *Six Memos for the Next Millennium* is an incredibly insightful, small, and relevant work.

I have given multiple copies to people in my life that I respect and thought would appreciate it. The most interesting thing that I have pulled from discussing Calvino's work is that no matter what educational background one comes from, *Six Memos for the Next Millennium* means something unique to the reader. It bridges all disciplines and occupations because it is ultimately concerned with the one thing that connects us to one another, the past and the future: the proper use of language and an understanding of the world that comes from the proper use of language. I believe that this awareness of the proper use of language, a language that strives to map all things and possibilities in order to remain relevant and true is the main purpose of Calvino's lectures. And in that sense, although the lectures are incomplete, he succeeded in his purpose.

I think that my own project thoughtfully engages a significant portion of Calvino's work and proposes relevant content for the nature of Consistency, although no one can say for sure what Calvino would or would not have included. This project has been the first step I have made towards being an interdisciplinary scholar: exposure to a thinker who is inspiring, thoughtful, and certainly a master of his own work. I am at the beginning of the next step of my educational path, but this project has crystallized in my mind multiple ideas on what I am and who I would like to be, as well as how I would like to write.

Furthermore, by studying Calvino's essays and listing his references in *Six Memos for the Next Millennium* I have begun to compile a list of classics as well as assembled a list of interdisciplinary thinkers who inspired Calvino, who I am now interested in learning about. I am proud of what I have written, and will definitely talk about the other elements that I would like to have been able to discuss in this project at my defense.

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