Vortex to Virus, Myth to Meme: The Literary Evolution of Nihilism and Chaos in Modernism and Postmodernism

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VORTEX TO VIRUS, MYTH TO MEME:
THE LITERARY EVOLUTION OF NIHILISM AND CHAOS
IN MODERNISM AND POSTMODERNISM

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ABSTRACT

The emergence of nihilism and chaos in the nineteenth and twentieth centuries offers us a case study in how memes work. Memes are bundles of cultural information that display viral properties, sowing the seeds of reality in the individual minds that make up a culture, sub-culture, or counterculture. In the case of nihilism and chaos, the ongoing epistemological and ontological revolution initiated by the likes of Schopenhauer and Nietzsche, the collapse of myth as a totalizing source of meaning, and the transition from a Newtonian, deterministic worldview to a quantum-relativistic, chaotic worldview transformed the Western cultural landscape, paving the way for the “viral” spread of nihilism and chaos to different intellectual and cultural strata.

The matrix model used in this dissertation provides a fruitful way of approaching cultural dynamics and morphogenesis in general, and the evolution of nihilism and chaos in particular. According to the model, culture evolves when memes (viral bundles of cultural information) flow from the sociocultural matrix (the evolving aggregate of paradigms and epistemes that define a culture) to individual agents (authors and subjects, in this case). Authors and subjects function according to the chaotic model of the self described in chapter one, which defines the self as a radically intersubjective entity that evolves through feedback, renormalization, and “locking in” to a battery of attractor symbols in cognitive phase space. These agents assimilate the memetic material, modify and
recombine it with other memes, and incorporate the memetic innovations in the work of art/cultural artifact. The work of art/cultural artifact flows back into the sociocultural matrix and changes it, adding the novel memetic material to the body of cultural codes that make up the matrix.

James Joyce’s Ulysses, Samuel Beckett’s Three Novels, and Thomas Pynchon’s Gravity’s Rainbow serve as focal points in this study because each work represents a critical juncture in the memetic evolution of nihilism and chaos during the modernist and postmodernist periods. Joyce’s novel embodies the “lapidary” modernist aspiration to create the great work of art which serves as an antidote to the turbulence and anomie of the early twentieth century. Beckett’s work occupies that liminal space where late modernism and early postmodernism meet; his preoccupations in Three Novels focus on the insurmountable problems posed by language in representing the subject and the futility of our epistemological quest to understand the self amidst the “spray of phenomena” that surrounds us. Pynchon’s sprawling Gravity’s Rainbow captures that historical moment in time (the end of World War II) when the modernist impulse toward totalizing systems of order and meaning is eclipsed by the postmodern embrace of chaos and semiotic free play.

When we discuss 1904 Dublin, the haunting abode of “The Unnamable,” and Pynchon’s “Zone,” we examine three distinct matrices in which modern and postmodern subjects struggle to find meaning in a topsy-turvy world where the totalizing rationality of the Enlightenment and the redemptive power of classical and Judeo-Christian myth have failed. Lacking a firm epistemological-ontological-moral foundation to serve as an intellectual immune system, modernist and postmodernist subjects prove vulnerable to the encroachment of nihilism and chaos as cultural contagia that mold and shape the evolution of a distinctive stream of consciousness.
INTRODUCTION:
"THE AIM IS LACKING.'WHY?' FINDS NO ANSWER."  

I don’t know what it is, what it was, nor whether it is not less a question of ruins than the indestructible chaos of timeless things, if that is the right expression." (Samuel Beckett Molloy 39)

My “dark night of the soul,” replete with epistemological and ontological uncertainty, spurs the creation of this dissertation and its focus on nihilism and chaos. This project examines three of the signature works of modern and postmodern literature that also grapple with the ostensible meaninglessness and unruly turbulence of twentieth-century life. Within the theoretical framework I provide, nihilism and chaos are addressed as symbionts, such that each concept thrives in the presence of the other. This mutual reinforcement helps to establish nihilism and chaos as two of the defining themes of the modern/postmodern era.

In negating metaphysically stable foundations (nihilism) and confirming science's ineradicable inability to predict the behavior of chaotic phenomena, nihilism and chaos have played an significant role in shaping the twentieth century’s aesthetic sensibilities. While art, music, film, and other creative media have given vivid expression to what nihilism and chaos look and sound like, my focus will be to explore and interpret the role of nihilism and chaos in three landmark, twentieth-century works (Joyce’s Ulysses, Beckett’s Three Novels, and Pynchon’s Gravity’s Rainbow).
Before proceeding any further, a definition of terms is in order. What do we mean by nihilism? How do we define chaos? In *The Specter of the Absurd*, Donald Crosby describes a number of related types of nihilism, four of which are relevant to this study (political, moral, epistemological, and existential nihilisms).

Nihilism in the political register came into prominence in Russia subsequent to the publication of Ivan Turgenev’s novel, *Fathers and Sons*. Political nihilism and anarchism have a great deal in common, so much so that some theorists conflate the two terms. Political nihilism involves programs of political revolution and terrorism in which the negation of traditional beliefs and practices is viewed as a necessary step toward the destruction of the social, political, and economic institutions in which these beliefs and practices are embedded.

Moral nihilism can refer to at least three different forms: amoralism, moral subjectivism, and egoism. Amoralism rejects all moral principles and negates all the standards and constraints of the moral life. Moral subjectivism holds that all moral judgments are purely individual and arbitrary and denies any rational basis for deciding among conflicting moral claims. Egoism views that the sole obligation of any individual is to the individual. Egoism differs from amoralism, Crosby contends, in that it purports to be a moral position in its own right: “One is morally obligated to realize or to fulfill *oneself* at whatever price to others.” (14)

Epistemological nihilism asserts that the scope and power of reason is sharply restricted. Reason can operate *within systems* of belief or meaning, but it has no power to address fundamental disagreements arising from conflicting systems. No basis can be found for arguing the truth of one system over any other system or for subordinating the patterns of meaning of one system to those of another (Crosby 18). Each individual lives with a private conceptual schema,
which is to a large degree incommensurable with the schemas possessed by other individuals.

In many respects, existential nihilism, which judges human existence to be pointless and absurd, represents the logical end product of the arguments put forth in political, moral, and epistemological nihilisms. The active negation, destabilization, and dismantling of political structures, the denial of moral obligation or the moral viewpoint, and the impossibility of arriving at any sort of absolute, universal truth or totalizing system of meaning lead inexorably to the conclusion that human life is void of meaning and purpose.

In *Very Little . . . Almost Nothing*, Simon Critchley maintains that these nihilisms lead to the recognition of a double failure:

- That the values of modernity or Enlightenment do not connect with the fabric of moral and social relations, with the stuff of everyday life, failing to produce a new mythic or rational totality [. . .] The moral values of Enlightenment [. . .] lack any effectivity, any connection to social praxis.

- However, not only do the moral values of Enlightenment fail to connect with the fabric of moral and social relations, but—worse still—they lead instead to the progressive degradation of those relations through processes that we might call, with Weber, rationalization, with Marx, capitalization, with Adorno and Horkheimer, instrumental rationality, and with Heidegger, the oblivion of Being. Such is Enlightenment’s fateful and paradoxical dialectic. (10)

The problem of philosophical modernity, according to Critchley, is how to confront the problem of nihilism after one has seen how the values of the Enlightenment not only fail to get a grip on everyday life, but lead instead to its
progressive dissolution. Modernism’s response to the failure of the Enlightenment ideal took various forms. The anarchic, iconoclastic strain of modernism, perhaps best represented by groups such as the Futurists, the Dadaists, and the Surrealists, sought to make a radical break with the past. By embracing technology and fascist politics (Futurism) or by deliberately courting the random and the irrational in their work (Dadaism and Surrealism), anarchic modernists demolished the aesthetic value systems of what they considered to be a moribund Western culture. The “lapidary” modernists, on the other hand, sought to craft masterpieces using evocative cultural fragments out of Europe’s historical past. Joyce, Eliot, Mann, Proust, el al., believed that the great work of art constituted the finest reply to the nihilism that beset their age.

Understanding the semantic metamorphosis that “chaos” has undergone requires some historical perspective. The word “chaos” might have first been appeared in Western culture in Hesiod’s Theogony (ca. 700 BC): “At the beginning there was chaos, nothing but void, formless matter, infinite space.” Within the Western tradition, chaos was associated with the unformed, the unthought, the unfilled, the unordered (Chaos Bound 19). At this point in history, chaos was not understood as the opposite of order; chaos simply did not have any relationship to order at all. (Weingart and Maasen 479)

According to Katherine Hayles (Chaos Bound), the tradition that identified chaos as that which existed when the world did not continued at least through the Renaissance. All through the Renaissance, chaos continued to be identified with the lack of differentiation. Over time, the classical suggestion that Chaos is the most ancient of all Gods, the companion of Eros, and the stuff from which the world was made grew gradually obscure. (20)

By the mid-nineteenth century, the classical view of chaos was replaced primarily by the “thermodynamic” view of chaos, so named because the
discovery of the Second Law of Thermodynamics (which dealt with entropy) cast chaos in an unfavorable light. Order and chaos were set up as binary opposites, with chaos being the inimical phenomenon to be avoided wherever possible. Situated in the same semantic network as entropy, chance, and randomness, chaos carried a negative connotation well into the twentieth century.

From the 1960s onward the work of scientists and mathematicians studying the nonlinear processes at the heart of complex systems began to transform the perception of chaos. In the eyes of chaos theorists, chaos fuels the engine that drives nonlinear, dynamical systems toward more complex forms of order. Chaos straddles the interface between predictable, deterministic order and unpredictable, stochastic randomness. Living organisms exist poised at “the edge of chaos,” where the components of a living system never quite lock into a rigid structure, yet never quite dissolve into turbulence, either.

The science of chaos reveals a broad range of phenomena that cannot be categorized neatly under the rubrics of “order” and “disorder.” Where quantum mechanics introduced a fundamental “uncertainty” inherent in our attempts to understand micro-phenomena, chaos theory uncovers an ineradicable “unpredictability” inherent in our efforts to comprehend behaviors at the macro-phenomenal level.

As the preceding overviews of nihilism and chaos suggest, cultural constructs like nihilism and chaos are not static, monolithic essences. Throughout this work, I will make a case for examining nihilism and chaos as emergent, evolving cultural entities. Tropes and concepts borrowed from biology, complexity theory, physics and other disciplines prove most effective in explaining what I believe drives the contemporary evolution of western culture. Because their behavioral histories can be likened to species of thought contagion,
nihilism and chaos will be treated as *memes* in this attempt to account for modernist and postmodernist cultural dynamics.

**New View of Literary Evolution**

The concept of the *meme* opens up new possibilities for scholars and critics engaged in the study of literary evolution. When interpreters consider texts and narratives as artifacts comprised of evolving, symbiotic entities of cultural transmission, we can approach textual creation and interpretation in a new light.

In one of the defining texts of neo-Darwinism, *The Selfish Gene* (1976), Richard Dawkins introduced the *meme* to help explain what he considered to be a "new replicator, a noun that conveys the idea of a unit of cultural transmission, or a unit of *imitation*"(192). For Dawkins, "examples of memes are tunes, ideas, catch-phrases, clothes, fashions, ways of making pots or of building arches"(192). Memes are neither "transcendental signifiers" nor "transcendental signifieds." Rather than conveying essential, immutable truths, memes emerge, mutate and recombine with other memes in the creation and interpretation of texts and other cultural artifacts.

From a meme theorist’s point of view, cultural artifacts are dynamic repositories of memetic material engaged in an evolutionary process that involves the creative artist, the critical and scholarly community, and the general public. In both the creation and exegesis of texts, authors and critics synthesize memetic aggregates that, in turn, disseminate through the general population and find cognitive niches in the minds of readers. In the cultural ecosystem of artists, critics, and readers, psychological and environmental factors play a significant role in determining which memes and memetic aggregates survive to be passed on to other individuals in the culture.

As one of the foci of chapter one, memes represent a central feature of the matrix model which serves as an explanatory framework for the evolution of
literature. According to the matrix model, cultural evolution occurs when memes flow through the component matrices, interacting with other memes, in a process that yields novel cultural artifacts. Chapter one also compares the matrix model with other models of cultural evolution (classical Marxist, cultural materialist, epidemiological).

In the classical Marxist model, modes of economic production determine social organization and the creation of cultural forms. Marx's materialism is wedded to Hegel's notion of dialectical contradictions, which leads to viewing history as a record of successive modes of production, each containing its internal conflicts. Theoretically, the emergence and resolution of successive negations culminates in a classless communist utopia.

Inspired by Marx's emphasis on the crucial role of economic infrastructure in determining the social, political and spiritual processes of life, the *cultural materialist model* developed by Marvin Harris in *Cultural Materialism: The Struggle for a Science of Culture* (1980) departs from Hegel and seeks to improve Marx's original strategy. By dropping the Hegelian notion that all systems evolve through a dialectic of contradictory negations, Harris posits that ecological variables affect positive and negative feedback relationships between culture and environment, which in turn determine certain traits within the culture. Cultural evolution takes place through opportunistic changes in the economic infrastructure that increase benefits and lower costs to individuals.

Classical Marxism and its offshoots (like cultural materialism) explain cultural macro-phenomena in terms of other macro-phenomena (i.e., the evolution of religion coincides with and depends upon changes in the socioeconomic structure). In *Explaining Culture: A Naturalistic Approach* (1996), Dan Sperber proposes an alternative in the form of an *epidemiological model* of cultural evolution. All epidemiological models explain population-scale macro-
phenomena as the cumulative effect of micro-processes that bring about individual events. Epidemiological models incorporate elements from population genetics and cognitive psychology to explain the sources and dynamics of cultural change. For Sperber, cultures are teeming with what he dubs an epidemiology of representations. Mental representations that find expression in cultural artifacts spread throughout a population in a manner analogous to a viral epidemic.

Like Marx, Charles Darwin’s theories have influenced the development of a number of natural selection-oriented models of cultural evolution, with memetics being the most relevant example. After Richard Dawkins initially developed the idea for memes, Daniel Dennett, in Consciousness Explained and Darwin’s Dangerous Idea, has subsequently considered the ramifications of memetics as a comprehensive model of cultural evolution.

Some meme theorists have likened the transmission of memetic aggregates to the transmission of genetic material. Others have speculated that the mechanism responsible for the propagation of memes more closely resembles that of a virus. The problem with Darwinian, natural selection-driven models in general, and memetics in particular, is that cultural representations do not generally replicate in the process of transmission. According to Sperber, they are more likely to transform as a result of constructive cognitive processes (Explaining Culture: A Naturalistic Approach 101): "most cultural descendents are transformations, not replicas. Transformation implies resemblance: the smaller the degree of transformation, the greater the degree of resemblance" (108).

In her dissertation, Cognitive Mechanisms Underlying the Origin and Evolution of Culture (2001), Liane Gabora also weighs in on the issue of replication, observing that it is not clear that anything in culture makes copies of itself in a fashion analogous to cellular meiosis or mitosis. Cultural entities,
Gabora argues, do not explicitly contain and carry out instructions for how to make copies of themselves (Cognitive Mechanisms 21). It is we who do the replicating, not the entities themselves. In so doing we change them however we wish.

If the "faulty replication" argument weakens the position of replication-and-selection models, alternative mechanisms can explain the cultural patterns that emerge from the transmission of memes. Sperber advances an attractor model that borrows concepts from the fields of nonlinear dynamics and chaos theory. According to the model, new cultural entities emerge in a phase space\(^2\) populated with attractor regions.\(^3\)

Liane Gabora refers to the cognitive phase space where these patterns emerge as conceptual space (2). Conceptual space is populated with a very large number of resident attractors associated with the concepts we have. In conceptual space, hardwired instincts, memories, and abstractions interact with stimuli from the outside world; the interactions constantly feed into an ever-changing mental model, or worldview. From Gabora's perspective, we do not assimilate a new idea unless it either logically fits into our worldview or rings true on an intuitive level. This continually evolving worldview spurs on cultural innovation.

Cultural artifacts introduce memes to conceptual space. In the matrix of conceptual space, new memes and memetic combinations emerge, becoming resident attractors that form part of an individual's worldview. Constellations of memes form memeplexes. If we take Gabora's worldview concept and situate it within Sperber's argument concerning cultural evolution, a dynamic macro-phenomena like culture is the sum total of the evolving, individual worldviews that make up the population. Mental representations stored in these worldviews become public representations on display in cultural artifacts. This number is
sufficiently large and varied enough to trigger the evolutionary algorithm that Daniel Dennett describes in *Consciousness Explained* (200). Attractors are not limited to conceptual space; they form a part of the sociocultural matrix and this affects the development of distinct cultural patterns.

In the matrix model, memetic material synthesized in the author matrix finds expression in the work of art/cultural artifact. The addition of works of art/cultural artifacts to the sociocultural matrix changes it in a fundamental way and provides the impetus for new evolutionary trajectories in the work of current and future authors. In Chapters two through four, the matrix model will be used to explore the memetic evolution of nihilism and chaos in the sociocultural matrices that spawned literary modernism and postmodernism.

During the nineteenth and early twentieth centuries, the radical transformation of the western sociocultural matrix precipitated a paradigm shift in our relationship to myth. Chapter two explores how our modern conception of nihilism began evolving in the nineteenth century, crystallizing out of the cultural flux that characterized western European intellectual circles.

It is a widely held belief that nihilism originated in the late nineteenth century. In actuality, the crucial turn to the nihilism of the nineteenth and twentieth centuries begins with Friedrich Heinrich Jacobi, who in an essay from the 1780s entitled "Idealism and Nihilism" argues that Kantian philosophy, especially as articulated in *The Critique of Pure Reason*, leads to a solipsistic view of the human subject as "everything" and the rest of the world as "nothing." For Jacobi, idealism recognized no truth beyond consciousness and lacked any objective standard against which to measure itself. The source of nihilism, in Jacobi’s view, is found not in the diminution of the will but in its magnification, in the doctrine of an absolute human will and freedom. In an influential letter to Fichte ("Circular Letter to Fichte") in March 1799, Jacobi extends his criticism to
include German idealism and affirms his thorough-going opposition to it by branding it as "nihilism."

A representative of the German idealism that Jacobi opposed, Fichte rejected the Enlightenment notion of reason in favor of an absolute subjectivism that attempts to derive all reason from the infinite will of the absolute I. Fichte’s I is not the empirical I of individual human beings but the absolute I of the general will. This rejection of reason leads to an adulation of the striving and longing that are the manifestation of this subconscious will. Fichte’s path, via subsequent explorations by Schopenhauer and Nietzsche, culminates in the death of God and the deification of man.

From the Romantic viewpoint, Fichte’s conception of the will dwells not only in man's psyche, but in the natural world. Nature, for the Romantics, is not merely the orderly motion of matter according to the categories of creation but the expression of a mysterious and largely incomprehensible will, a will that does not appear to the senses but that can be grasped by the feelings, a passionate, subconscious and subrational will which acts in enigmatic and unpredictable ways (Gillespie 105).

The strain of nihilism that emerged in nineteenth-century Russia has been generally understood as a repudiation of German idealism and Romanticism in favor of materialism. Russian nihilism was characterized by a longing for the Promethean, for a new kind of human being who rises above the level of humanity in search of autonomy. This nihilistic vision of a new superhumanity beyond all gods represents a deeper, more radical permutation of the idea of absolute will espoused by Fichte and the German Romantics. Bazarov, the protagonist of Ivan Turgenev’s *Fathers and Sons*, embodies Russian nihilism, epitomizing this vision of the Promethean nihilist and foreshadowing the appearance of Nietzsche’s *ubermensch*. 
Like the Romantics, Schopenhauer radically contradicted the Enlightenment worldview, which glorified reason, by emphasizing the fundamental irrationality at the heart of all existence. Unlike the Romantics, Schopenhauer’s will has no goal and is in fact little more than a blind drive. According to Schopenhauer, what drives the human subject is an ongoing perpetual striving that surges and pushes humanity forward, oblivious to the dictates of reason. Through its blind and aimless activity, the will makes this world into a hell. According to Schopenhauer, human happiness is an impossibility. Certain individuals, however, can transcend suffering either by ceasing to be an individual, that is, a self or ego, or by ceasing to will. The former is the path of the artist, the latter the path of the saint.

Through art and, in particular, music, individuals can escape the will and exist simply as a mirror of the world. Schopenhauer believed that this capacity is actualized only in men of genius, in great poets, painters, and composers. The truth about the will is ultimately revealed to mankind by musical geniuses who have purged themselves of their individuality and become reflections of the will that manifests itself in their bodies as feelings, drives, and passions. Their creations make the truth evident to the rest of humanity.

Schopenhauer’s ideas concerning the will, artistic genius, and the power of music and art made a profound impression on the young Nietzsche. However, where Schopenhauer thought that the tragic quality of life can give no satisfaction and that man was ultimately condemned to resignation, Nietzsche asserted that a life-affirming, Dionysian will can transform man’s suffering into joy through the power of music. Dionysus is the deification of the will in its strength, a source of rapture and ecstasy rather than resignation.

In *The Birth of Tragedy*, Nietzsche contrasts the Dionysian with the Apollinian, a polarity that mimics Schopenhauer dichotomy of will and
representation. As manifestations of the fundamental life-force, the Apollinian and the Dionysian exercise a power over humans that we cannot control. Drawing on Schopenhauer, Nietzsche argues that there are only two ways out of the Dionysian condition, the path of the saint and the path of the artist. The Dionysian poet is the genius who identifies himself with the will and becomes its medium of creation.

Subsequent to The Birth of Tragedy, Nietzsche further developed his concept of the Dionysan, a process that yielded the will to power, one of the signature concepts in a philosophy that demolishes western metaphysics by revealing its inherent emptiness. From the Greeks onward, the firm belief that we exist in a world of stable "beings" and fixed origins served as the foundation for western metaphysics. Nietzsche railed against this claim, asserting that everything is in a state of flux, a perpetual becoming, driven by the will to power. Nothing is stable, permanent, or transcendent. In this world of radical contingency, nihilism reigns.

As nihilism evolved in the works of Fichte, Romanticism, Russian nihilism, Schopenhauer, and particularly Nietzsche, other "grand narratives" (Marx's dialectical materialism, Freud's psychoanalysis) challenged the validity and veracity of myths and other historical texts. Bold, new scientific theories (thermodynamics, evolution, and quantum mechanics) far surpassed any previous myth-oriented attempts to understand nature and man's place within it.

Beginning in the mid-nineteenth century, our contemporary notion of chaos began its evolutionary trajectory, emerging from scientific texts that initially dealt with disorder, randomness, and indeterminacy. The second law of thermodynamics defined and quantified disorder (entropy), predicting that all closed, physical systems move inexorably toward maximum disorder. Evolution by natural selection maintained that variation in nature is a product of random
mutation, accentuating the role of chance in the design of nature's organisms. In
the 1920s and 1930s, quantum mechanics (Heisenberg, Schrödinger, Dirac)
underscored the indeterminacy and uncertainty inherent at the sub-atomic level
of physical reality.

Twentieth-century science witnessed the downfall of the Newtonian,
deterministic worldview for two very different reasons. The first reason emerged
in the form of quantum mechanics. A central tenet of that theory is the
Heisenberg "Uncertainty Principle," which states that there is a fundamental
limitation to the accuracy with which the position and velocity of a particle can
be measured.

The second reason for the undoing of strict determinism stems from the
exponential amplification of errors that accompany chaotic dynamics. Chaotic
systems demonstrate an acute sensitivity to their initial conditions; any
perturbations, no matter how small in size, drastically affect the predictability of
the system at large. Where quantum mechanics implies that initial measurements
are always uncertain, chaos theory ensures that the uncertainties will overwhelm
our ability to make predictions about a chaotic system's behavior. In fact, chaos
theory tells us that we will never know the initial conditions of chaotic
phenomena with enough precision to predict long range, future behavior.

This crisis of classical myth, the anti-metaphysical, anti-rationalist
philosophy espoused by the likes of Nietzsche and Schopenhauer, and the
chaotic worldview emerging from the sciences contributed to the formation of
the modernist sociocultural matrix, the milieu that would help shape James
Joyce's *Ulysses*. By experimenting with the narrative elements (form, content,
characters, plot) of old myths, Joyce describes vividly a twentieth century world
bereft of the metaphysical security afforded by the mythic narratives of previous
historical periods.
The development and maturation of nihilism and chaos in the postmodernist sociocultural matrix is the main thrust of chapter three. Where modernism had witnessed the embryonic stages of contemporary nihilism and chaos (the crux of chapter two), the postmodern period gave rise to a metastasis of evolving, memetic trajectories.

In examining modern man’s alienation from his mythic past, iconic modernists created their own mythos, which envisioned artists as the "antennae of the race" (Pound), avatars of virtu, marshaling the forces of the cultural vortex into "patterned integrities" (Kenner) and "objective correlatives" (Eliot) capable of capturing the essence of human emotion.

Some pivotal postmodernists dispense with this modernist myth, proclaiming the "death of the author" (Barthes) and the "implosion of meaning" (Baudrillard). Différance, traces, and supplements (Derrida) pervade language, making "patterned integrities" unsustainable and fixed meaning impossible. As a result, language is an exercise in the endless play of signifiers. In the postmodern world of Deleuze and Guattari, there are no antennae of the race, but rather schizophrenic nomad-subjects fueled by libidinal flows, diametrically opposed to the traditional narratives and codes of the "State"-sponsored cultural apparatus.

The embryonic nihilism that Nietzsche proclaimed in the latter half of the nineteenth century would reach maturity in the twentieth century critical theory of Derrida, Deleuze and Guattari, and Baudrillard. Their body of work highlights the extent to which nihilism and chaos have become ingrained in the postmodern cognitive fabric. Beginning in the late 1960s, Jacques Derrida took up where Nietzsche had left off, mounting a critique of philosophy and language that proved to be fatal to totalizing, logocentric systems. Derrida broke with structuralism and Saussurean linguistics, rejecting the possibility of arriving at general laws that govern all discourses or formal universals that reflect the
nature of human knowledge.

Derrida’s project of deconstruction, while not a formal, critical analysis of mythology (like the projects of a Frazer or a Levi-Strauss), did attack the western metaphysics of presence. For Derrida, the fixed, foundational logos is a "myth" that has pervaded western thinking. The history of metaphysical thought records the futile attempt to link a "transcendental signifier" with a secure, stable "transcendental signified" (i.e., a logos), yielding fixed, universal meaning in the process. The futility stems from the différance, traces, and supplements that destabilize language and delocalize meaning, an idea that will be further developed in chapter four.

Gilles Deleuze’s work represents a nexus where a myriad of philosophical influences (Spinoza, Nietzsche, Bergson, Marx) commingle with allusions drawn from psychoanalysis, physics, biology and mathematics, creating a post-structuralist perspective that values the shifting, aleatory alliances of an anarchic libido over the pursuit of metaphysical truth. Deleuze also collaborated with Felix Guattari to publish a two-volume work (Capitalism and Schizophrenia) that would greatly influence postmodern theorists in their efforts to do away with master narratives such as Freud’s Oedipal complex and Marx’s dialectical materialism.

Deleuze and Guattari advocate the primacy of free-flowing, unfettered desire as a postmodern extension of Nietzschean will to power. The whole western metaphysical tradition, in their estimation, is an exercise in paranoiac libidinal investment, where individual and institutional energies are devoted to the preservation of codes that serve despots and capitalists. Deleuze and Guattari emphasize that there is no "Truth," but rather the building up and tearing down of codes by institutions and individuals. Individuals as "desiring machines" are endlessly engaged in the embrace of or flight from such codes.
Genetic and cybernetic codes play a prominent role in the work of Jean Baudrillard, the theorist who coined the term "hyperreality." Baudrillard maintains that we have entered an unprecedented historical period where signifiers obliterate signifieds and are wholly self-referential. According to Baudrillard, postmodernity is characterized by the proliferation of models and codes that have lost touch with their referential origins and foundations. In Baudrillard's words, "it is the map that precedes the territory . . . it is the map that engenders the territory" (Simulations 2). The power of images and simulacra is such that in postmodern society, even the Absolute becomes just another simulacrum, disconnected from its referent.

As Derrida, Deleuze and Guattari, and Baudrillard explored the theoretical ramifications of nihilism, scientists in the burgeoning fields of cybernetics, chaos theory, and complexity theory investigated the nature of information and the seemingly random processes at work in the universe. What emerged was a connection with profound ramifications for our understanding of natural, as well as cultural, processes.

In the case of information theory, scientists like Leon Brillouin and Claude Shannon discovered an intimate relationship between disorder and information. After revisiting nineteenth century concepts (entropy) and metaphors (Maxwell's Demon), they arrived at diametrically opposed views of the definition of information.

Brillouin's view of the relationship between information and entropy made sense when viewed in the context of nineteenth century thermodynamics. In his analysis of Maxwell's Demon, Brillouin concluded that information and entropy are inversely related: the more information the Demon has for sorting out the fast and slow molecules, the lower the entropy of the system. Information is thus "negentropy," the opposite of entropy and disorder. The problem that
unfolds is that the information gained in one area is offset by increasing entropy in another. For much of the modernist period, the idea that entropy would eventually overwhelm ordered systems figured prominently in the western intellectual imagination.

For Claude Shannon, information and entropy were not opposites; they were identical. Shannon’s equation for information bore a striking similarity to Ludwig von Boltzmann’s (1909) equation for entropy. In equating information with entropy, Shannon anticipated the postmodern view that proliferating information is associated with the production of entropy. In retrospect, identifying entropy with information allowed entropy to be reconceptualized as the thermodynamic motor driving systems to self-organization rather than as the heat engine driving the world to heat-death. Chaos went from being associated with decline and disorder in the modernist sense to being associated with increasing complexity and new life in the postmodernist sense.

The "new" interpretation of chaos emerged from twentieth-century developments in nonlinear dynamical systems theory. Nonlinear dynamical systems are all around us: from dripping faucets to waterfalls to macro-scale climate changes, the world is populated with systems whose behaviors are unpredictable. The unpredictability stems from the fact that in practice we can never precisely specify the initial conditions of these systems. Small errors made in specifying the initial state of such systems are magnified exponentially, what Edward Lorenz called the "butterfly effect." These errors, no matter how small, grow rapidly and dominate the future behavior of systems. Consequently, the slightest ignorance about the state of the system at any one time will make prediction of the future behavior impossible.

While prediction of future system behavior is impossible, multidimensional (defined as three or more dimensions), nonlinear systems
display a kind of "bounded" indeterminacy. Feedback mechanisms within the system constrain the effects of perturbations on the system, causing the system to turn back onto itself.

The postmodern period also witnessed challenges to Darwinian orthodoxy. Darwin emphasized that evolution was a gradual process in which natural selection alone produced a series of tiny changes over the course of millions of years. In the last thirty years, however, the theory of punctuated equilibrium and complexity theory have emerged, causing the scientific community to reconsider two key elements of Darwin's overall theory.

Punctuated equilibrium, a theory developed by Stephen Jay Gould and Niles Eldredge, challenges the idea of gradual evolutionary change by pointing to the gaps in the fossil record and proposing that evolution proceeds in fits and starts, with long periods of stasis punctuated by sudden, "rapid" bursts of evolutionary change. Punctuated equilibrium finds theoretical support and explanation in the work of Per Bak, who has developed a novel theory of self-organized criticality.

For Bak (and fellow theorist Kim Sneppen), species and whole ecological systems evolve toward a "self-organized critical state," where minor disturbances may lead to events, called avalanches, of all sizes. The evolution to this very delicate state occurs without design from any outside agent. The state is established solely because of the dynamical interactions among individual elements of the system.

Similarly, complexity theorists, like Stuart Kauffman of the Santa Fe Institute, argue that the natural history of life is the product of natural selection and self-organization. Life forms are complex systems. In a complex system, the interaction among the constituents of the system, and the interaction between the system and its environment, is of such a nature that the system as a whole cannot
be fully understood simply by analyzing its components. Kauffman speculates that all living systems seek out the edge of chaos, the critical point at which a small change can either push the system into chaotic behavior or lock the system into a fixed behavior. Natural selection must bring life to the edge of chaos, Kauffman believes, to produce viable organisms capable of further evolution.

Information theory, chaos theory, complexity theory, and punctuated equilibrium provide a number of helpful ideas for the conceptual toolbox employed throughout this project. In a world where blind chance dances with fixed determinism, cultural patterns, like biological entities, represent oases of order in a sea of unpredictability. In a manner analogous to natural history, western cultural history has witnessed periods of stasis "punctuated" by bursts of (r)evolutionary activity.

Modernism and postmodernism mark one of the pivotal phase transitions in cultural history. Historically, classical myths and logocentric philosophy served as basins of attraction that ordered and stabilized western cultural systems. The depreciation of myths and subversion of philosophical foundations that characterized the twentieth century represent a phase transition toward a more dynamic, turbulent cultural system. Joyce, Beckett, and Pynchon all explore the dramatic, philosophical ramifications of the move toward nihilism and chaos that helped define the culture of the last century.

Chapter four focuses on the evolution of two conceptual trajectories that span the modernist and postmodernist periods. The first trajectory explores the transition from the modernist symbol of the vortex to the postmodernist metaphor of the virus. The second trajectory examines the transformation "from myth to meme" that took place during the twentieth century.

While fusing the Cubist formal vocabulary with the dynamic energy of the Futurists, Vorticism expressed its own fundamental originality by theorizing
about what Ezra Pound termed a "correlated aesthetic." The Vorticists (Pound, Wyndham Lewis, et al.) conceived the movement as one that linked the arts under a common theme: "render the essence, the most intense aspect of a subject in or through a severe form and omit the fugitive and superficial qualities" (Dasenbrock 71).

To that end, Pound wrote about the use of the "primary pigment." He theorized that "every conception, every emotion presents itself to the vivid consciousness in some primary form" ("Vortex Pound," Blast 1: 153). For poetry, the primary pigment is the image.

All experience rushes into the vortex. The Vorticist artist tries to occupy the place where all the energy concentrates, the still point of the vortex. From this vantage point, the artist endeavors to give expression to the primary pigment, "the picture that means a hundred poems, the music that means a hundred pictures, the most highly energized statement" ("Vortex Pound" Blast 1: 153).

Dasenbrock describes Vorticist art as a dynamic formism, a reconciliation of form and flux where the artist and the observer can glean some essential meaning from the bedlam of modernist experience. Postmodernists (Burroughs, Baudrillard, Derrida) generally look upon language quite differently, as a mutating, viral entity that destabilizes and delocalizes meaning and signification.

In the case of William Burroughs, the viral mechanism is not so much a metaphor for the way language works, but rather the other way around: language is a metaphor for the way a virus works. Burroughs asserts that linguistic codes proliferate and mutate, operating as a control mechanism that enforces a conformist ideology of the image, a replicative semiosis that reproduces the dominant power regime.

Jean Baudrillard repeatedly turns to biological tropes (viruses, the genetic code, DNA) when describing the cultural dynamics of postmodernism.
According to Baudrillard, the "viral contamination of things by images" constitutes the signature characteristic of postmodern culture. For Baudrillard, the genetic code has usurped the religious and metaphysical codes of previous eras. As a consequence, the postmodern identity no longer finds stability in religious or secular/philosophical values. As a virtual mutant, the postmodern subject undergoes ceaseless transformation via seduction by the endless blitz of simulacra.

Derridean deconstruction uses the trace and the supplement to emphasize the susceptibility of philosophical systems and textual codes to the mutating power of metaphor. As an undecidable presence/absence built in to the very fabric of language, the trace subverts the apparent stability of texts, triggering a play of signifiers that opens the text to multiple interpretations. Perceived meanings are the by-products of traces from previous experiences, which, in turn, where shaped by traces of yet other previous experiences, ad infinitum. The trace network paradoxically appears solid on the one hand, yet ephemeral on the other.

Equally paradoxical, the supplement is an entity that both adds to and replaces elements in the text. For Derrida, the supplement escapes the textual system and at the same time installs itself within it, derailing any attempts to arrive at a facile, monovalent reading of the work in question. Working in concert, the supplement and the trace undermine any sort of Modernist/Vorticist vision of the artist as the still point of the vortex. Pound's "primary pigment," indeed the Modernist quest to arrive at a pure essence, is reduced to a fiction when seen from the Derridean perspective.

Chapter four’s second major conceptual trajectory examines the evolution of the modern and postmodern relationship to myth. Modernists like Eliot and Joyce made extensive use of ancient myths to enrich the aesthetic quality of their
works while simultaneously calling attention to modern man's alienation from the mythic past. In the modern period, scholars like Frazer, Jung, Campbell, and Levi-Strauss developed archetypal and structuralist perspectives on myth that touted the universality of certain mythic structures and elements.

In the postmodern period, however, the distrust of grand narratives precipitated a dramatic revision in how myth is interpreted. Jacques Derrida's analysis of play, bricolage, and différance ironically pointed out the "mythic" nature of mythic exegesis. While some myths lost most if not all of their vitality and relevance, other forms emerged to take their place. Advertising hype, political spin, and urban legends represent some of the derivatives that have proliferated via the media to occupy the cognitive niches that were formerly reserved for ancient myths.

Memetics may provide one possible explanation for the persistence of myth. The work of Dawkins, Dennett, Blackmore, Aunger, et al., approaches cultural artifacts (like myths) as aggregates of memetic material, constructed out of mental representations and disseminated in some physical form (oral tradition, text, musical composition, painting). Whether we adopt the imitation/replication mechanism of Dawkins and Dennett or the attractor-based approach of Sperber and Gabora, the crucial point is that myths-as-memes have the capacity to spread throughout a population regardless of their truth value. Veracity is not the primary criteria in ensuring a meme's survival; a meme can successfully "infect" prospective hosts by appealing to a variety of subjective motives that have little or nothing to do with established fact. When we approach myths as a species of meme, it becomes easier to understand why some mythic structures and narratives succeed in propagating through populations over time.
For example, the classic monomyth, as described by Joseph Campbell, may not resonate with all people, but it resonates with the psychological and emotional nexus of beliefs, concepts, and values held by a sufficiently large portion of the population. Whether it is Homer’s epic poetry or George Lucas’s Star Wars franchise, the "hero on a quest" meme has managed to propagate successfully over time regardless of the plausibility of the narrative elements that comprise it. The end result is the formation and perpetuation of large scale, cultural mythologies that evolve over time.

In chapters five through seven, I will apply the theoretical framework developed in the first four chapters to the modernist (Ulysses), late modernist (Beckett’s Three Novels) and postmodernist (Gravity’s Rainbow) novels chosen for this dissertation.

Chapter five focuses on Joyce's modernist tour de force. Ulysses epitomizes the thoroughly "recombinant" novel, a work which splices together allusive memetic fragments from Homer, Shakespeare, Dante, and a myriad of other cultural, historical references. It blurs the distinction between high and low culture, finding memes in the cultural minutiae of 1904 Dublin. With these cultural fragments, Bloom, as twentieth century Everyman, and Stephen Dedalus, as the aspiring artist, piece together a makeshift, foundational bricolage with which to sustain themselves. No longer nourished and energized by Europe's fractured cultural legacy and enervate mythic past, Bloom and Stephen endeavor to create a modernist ethos from the memetic shards available to them.

Chapter six addresses the ontological and epistemological issues raised in Beckett’s Three Novels (Molloy, Malone Dies, and The Unnamable). These dark, cryptic works probe the very core of western metaphysical thought, calling every cherished ontological and epistemological belief into question. Molloy and company serve as the reader's tour guides, a perverse twist on Dante's Virgil,
only they are not guiding the reader through Hell, at least not any metaphysical Hell the reader may recognize. As readers, we can know nothing for certain, can glean no stable meanings from the characters, who know and understand even less. The characters primarily long for an end to everything, offering up a Godless petition for non-being, only to be willed to continue in true Schopenhauerian fashion on an ostensibly aimless, endless trek.

After Beckett’s minimalist approach to metaphysical uncertainty, Thomas Pynchon treats this theme in a dramatically different way in Gravity’s Rainbow, the subject of chapter seven. Temperamentally as dark as Beckett’s work, Pynchon’s novel draws from an incredible wealth of cultural sources for its memetic material. As we follow Slothrop through his sexual escapades and political intrigues on a quest that leads him not to the Grail, but rather to self-dissolution, we encounter all manner of signs signaling death and sterility. The omnipresent V2 rocket, the slave labor camp at Dora, the perversions on the Anubis, and the menace of the “Empty Ones” all point to a world that has lost its moral compass and embraced a life of “mindless pleasures,” the original working title for the novel. Entropy pervades the novel on both a structural and thematic level; while storylines unfold and fall apart with no sense of closure, characters face disorder and decay in the physical remnants of the war and the breakdown of myth and ritual. In the post-World War II “Zone,” Western civilization’s slim hopes rest on the postmodern subject’s ability to draw a “line of flight” and escape the oppressive codes imposed by the ascendant technocratic elite. By remaining open to the possibility of cultural negentropy, the postmodern subject is poised to create meaning from the new cultural forms emerging amidst the chaos of the post-war period.
CHAPTER ONE
THE MATRIX MODEL: CHARACTERISTICS AND CONTRASTS WITH OTHER MODELS OF CULTURAL EVOLUTION

Memes are an integral part of the matrix model, a useful framework for explaining the evolution of literature. According to the matrix model, cultural evolution, of which literary evolution is a subset, occurs when memes flow through the component matrices, mutating and recombining with other memes, in a process that yields novel cultural artifacts.

The matrix model holds that the sociocultural matrix and the author matrix interact via the work of art/cultural artifact. The sociocultural matrix presents the author with an abundance of sources rich in memetic material. The author draws from these sources, synthesizing and creating the memetic aggregate known as the work of art/cultural artifact. In turn, the work of art/cultural artifact becomes part of the sociocultural matrix, changing it in a fundamental way. The vast majority of works of art/cultural artifacts do not radically alter the sociocultural matrix. However, from time to time, a work of art/cultural artifact (like Les Demoiselles d’Avignon or the theory of relativity) emerges to shake the sociocultural matrix to its foundations. These works dramatically rupture the stasis maintained by existing paradigms and initiate periods of remarkable creativity and innovation. These periods are the cultural
counterparts to the rapid evolutionary phases that Gould and Eldredge describe in their theory of punctuated equilibria.

The sociocultural matrix refers to the dynamic nexus of institutions, technologies, and discursive practices that construct and define “reality” for a culture of individuals during a period of time. Paradigms and epistemes serve as the foundation upon which these institutions, technologies, and discursive practices are established. A paradigm expresses a generally accepted perspective of science at a given time; paradigms define what is “true” and what is not based on a set of assumptions, concepts, values, and practices that constitute a way of viewing reality for a particular community. Paradigms fulfill two requirements: 1) they are sufficiently unprecedented to attract an enduring group of adherents away from competing modes of intellectual activity; and 2) they are sufficiently open-ended to leave a number of problems for the emergent group of adherents to resolve.

The episteme can be taken as a deeper level of cognition, a set of discursive rules that define what is knowable in a certain age. An episteme consists of a grouping of statements that suggests a consistent pattern in how they function as constituents of a system of knowledge. An episteme may be a cultural code, system, structure, network, or body of thought that governs the language, perception, values, and practices of an age. The epistemology of a particular period holds these rules as a set of invisible, axiomatic, and mostly unconscious preconditions of thinking.

To understand the dynamics of the sociocultural matrix, it would be fruitful to draw analogies to concepts borrowed from the work of Deleuze and Guattari. The notion of a sociocultural matrix draws from the Deleuzo-Guattarian concept of the assemblage presented in A Thousand Plateaus: Capitalism and Schizophrenia. The assemblage and the sociocultural matrix are self-organizing,
hyperdimensional entities that are subject to mutation and/or transformation. As Deleuze and Guattari describe the concept, assemblages are composed of relations, liaisons, and affiliations among and across an array of elements and processes that are completely different in kind.

On a first, horizontal, axis, an assemblage comprises two segments, one of content, the other of expression. On the one hand it is a *machinic assemblage* of bodies, of actions and passions, an intermingling of bodies reacting to one another; on the other hand it is a *collective assemblage of enunciation*, of acts and statements, of incorporeal transformations attributed to bodies. Then on a vertical axis, the assemblage has both *territorial sides*, or reterritorialized sides, which stabilize it, and *cutting edges of deterritorialization*, which carry it away. (*A Thousand Plateaus* 88)

In the sociocultural matrix, relations, liaisons, and affiliations occur between memes, which coalesce to form the numerous memeplexes that make up the matrix. Material and semiotic flows course into and out of the sociocultural matrix, fueling its evolution. In a virtual sense, the sociocultural matrix *lives*, a dynamic, mutating entity drawing energy and novel memetic materials from the individuals that comprise the culture.

The sociocultural matrix concept overlaps semantically with Antonio Gramsci’s hegemony (egemonia). Antonio Gramsci coined the term “hegemony” to refer to the pervasive system of assumptions, meanings, and values, the web of ideologies that shapes the way things look, what they mean, and therefore what reality is for the majority of people within a culture. A culture’s web of ideologies presents the dominant ideas and values as *de facto* reality, often preventing individuals from seeing how society actually functions. Gramsci defined hegemony as the state of affairs which exists when a social group or class
“articulates and proliferates throughout society cultural and ideological belief systems whose teachings are accepted as universally valid by the general population” (Fontana 140). To Gramsci, reality is perceived and knowledge acquired, through moral, cultural, and ideological “prisms” and “filters” by means of which society acquires form and meaning. Cultural hegemony involves the creation of a particular structure of knowledge and system of values.

Hegemony is thus conceived as the vehicle whereby the dominant social groups establish a system of “permanent consent” that legitimates a prevailing social order by encompassing a complex network of mutually reinforcing and interwoven ideas affirmed and articulated by intellectuals. (Fontana 141)

Hegemonic rule, however, is never a closed, static empire of thought and culture. Gramsci’s hegemony is not a static concept but rather a process of continuous creation that, given its massive scale, leaves some room for antagonistic cultural expressions to develop (Adamson 174). The intellectuals and artists who constitute the author matrix are thus intrinsic to both the matrix model and Gramsci’s hegemony. On the one hand, intellectuals and artists can serve as intermediaries through which the dominant social group or class manufactures a pervasive, nearly totalizing worldview. As experts in legitimation, they translate the interests and values of a specific social group into general, common interests and values.

On the other hand, intellectuals and artists can also serve as catalysts for change, shock troopers that revolutionize what William Burroughs calls “The Reality Studio” (Nova Express 7). The paradigmatic upheaval in twentieth century physics initiated by Einstein, Heisenberg, Schrödinger, Dirac, and others represents such a revolution. Similarly, the “Cubist” Picasso, Jackson Pollock,
and other artists who embraced the shift from mimetic representation to radical abstraction produced a comparable overhaul in Western aesthetic sensibilities.

The author matrix thus designates the locus where the creation of new texts takes place. By author I am referring to creative agents of all kinds, from poets, novelists, and other writers to creative agents in the other arts and sciences. From a functional point of view, the concept of complex adaptive systems (CAS) helps us understand the basis for the author matrix. In complexity theory, the operation of complex adaptive systems is used to explain a broad array of natural and man-made processes, from the inner workings of the mammalian immune system to the dynamics of human cultural evolution.

According to Nobel Prize-winning physicist Murray Gell Mann of the Santa Fe Institute, complex adaptive systems possess the following general characteristics:

1) Complex adaptive systems experience their surroundings as a set of data.

2) Within that data, complex adaptive systems perceive regularities of certain kinds and treat the remaining information as random.

3) The perceived regularities are compressed into schemata. A schema constitutes an internal model that defines the CAS’s relationship(s) to the external environment. Each schema provides some combination of description, prediction, and prescription for action.

4) The results obtained by a schema in its interactions with the world then feedback to affect its standing with respect to other schemata with which it is in competition. (“Complex Adaptive Systems” 18-19)
Schemata, as sets of customs, traditions, myths, laws, and institutions, include prescriptions for individual as well as collective behavior. In human societies, a culture operating on the basis of a given schema reacts to changing circumstances in ways that are indicated by the schema. Individuals, groups, or whole societies may change their respective schemata when the prevailing versions do not yield satisfactory results. Finally, when considering the evolution of CAS over long periods of time, we find that not only do some schemas fail, but whole cultures mutate radically or become extinct.

As a CAS embedded within the larger culture, the author matrix represents that locus of convergence where the sensory experience of everyday life’s random events and the internal nexus of unconscious drives, instincts, and “potential” X-factors (archetypes, epigenetic rules) test the cultural schemata internalized by the author over time. As an adaptive entity, the author may perpetuate the status quo, act as a catalyst for change, or generate some combination of new and old cultural codes that make an impact on the evolution of the culture. Memes, the chunks of culturally-coded information that comprise the building blocks of a society’s myths, traditions, customs, et al., serve as the raw materials from which authors synthesize new aggregates that feed their way back into the larger cultural CAS via the work of art (literary text, musical composition, painting, architectural structure, or other such cultural artifact).

Viewing authors as CAS necessitates a paradigm shift in the way we look at the self. The chaotic model of the self presented here owes a considerable debt to the ideas presented in the work of Alexander Argyros (A Blessed Rage for Order: Deconstruction, Evolution, and Chaos) and Douglas Hofstadter (Gödel, Escher, Bach: An Eternal Golden Braid and Metamagical Themas: Questing for the Essence of Mind and Pattern). Before redefining the self, we must first reconceptualized what we mean by symbols and ideas.
In *Gödel, Escher, Bach*, Hofstadter theorizes that the human brain stores information about objects in the world in multineuronal networks called *symbols*. Symbols may be simple, such as those representing a physical object, or they may be complex, such as those representing abstract concepts. In any event, a large constellation of lower level neuronal communication is *chunked* into a symbol. *Chunking* is Hofstadter’s term for the act of encoding a summary of lower level processes into an upper level language. Argyros illustrates chunking with the following examples:

 [...] when I press “save” on my computer, I am chunking a series of commands and paths written in machine language that I do not need to understand; when I turn on my radio, I am chunking its circuitry and the laws of electromagnetism, and when I move my arm, I am chunking the laws of biology, chemistry, and physics. (*A Blessed Rage for Order* 185)

A similar redefinition is required for *ideas*. Logical positivists conceived of ideas as sovereign, simple, punctual, and irreducible pieces of information. At the opposite end of the spectrum, Derrida’s version of an idea is that of a temporary crystallization of an uncontrollable network of traces. Argyros strikes a middle ground by positing that ideas are dynamical confederacies of symbols that exist in mental phase space in intricately nested fractal structures. Any concept is thus a chunked society of other idea societies, which in turn are chunked societies of other societies, and so forth. The end result is a heterarchical structure in which different levels that make up the concept communicate via what Hofstadter calls “strange” or “tangled” loops:

 My [Hofstadter’s] belief is that the explanation of “emergent” phenomena in our brains---for instance, ideas, hopes, images, analogies, and finally consciousness and free will---are based on a
kind of Strange Loop, an interaction between levels in which the top level reaches back down towards the bottom level and influences it, while at the same time being itself determined by the bottom level. (*Gödel, Escher, Bach* 709)

Strange or tangled loops are closely related to the concept of “renormalization,” a term Hofstadter borrows from the physics of subatomic particles: “no particle can ever be defined without referring to all other particles, whose definitions in turn depend on the first particles.” (*Gödel, Escher, Bach* 142)

Every real particle’s existence therefore involves the existence of infinitely many other particles, contained in a virtual “cloud” which surrounds it as it propagates. And each of the virtual particles in the cloud, of course, also drags along its own virtual cloud, and so on ad infinitum. (146)

In *Metamagical Themas*, Hofstadter puts forth the bold theory that the self also engages in “renormalization” with respect to other selves. Self-identity depends on the identities of close friends and relatives; their identities in turn depend on yours and on their close friends’ and relatives’ identities, and so on. (393)

Argyros asserts that this “bootstrapping” that leads to the emergence of the individual subject creates the most strongly individuated self in the animal world, and the most communal (291). The self is a dynamical process, not a static entity, constituted by the never-ending flux of feedback information streaming in from external stimuli and the equally constant communication taking place via strange loops connecting the internal levels that make up our conceptual constitution. Amidst the chaotic activity, the self’s sense of relative stability comes from the process of locking-in, whereby a system such as the self uses iteration and feedback to find its most stable configuration at any point in time.
The imagery I [Hofstadter] wish to convey is that of a system that seeks and gradually settles into its own most stable states, and the mechanism whereby it seeks and attains such loci of stability is feedback. A system that locks into a state is in stable equilibrium, which means that if you perturb it somehow, it will swiftly return to the state it was in---there are restoring forces that push it back. *(Metamagical Themas 389)*

Argyros posits that the self ultimately emerges from a chaotic feedback loop that locks-in on a chaotic or strange attractor. The self remains open to the social world, yet possesses a deeply felt identity.

[...] the self is not a fortress carried through time, but a dynamic, changing, multiple, and, at times, contradictory network, while not sacrificing the equally compelling idea that the self does indeed have coherence and integrity. Furthermore, if the self is a renormalized feedback system, then it is a radically intersubjective entity essentially open to the social world.

[...] a chaotic self would be constantly crossing levels, creating tangled hierarchies and strange loops [...] a large part of its being would consist of levels below the threshold of consciousness [...] a chaotic, feedback-generated, level-crossing, renormalized self closely resembles the self most people have in mind when using the word *I*: a dynamical, open, temporally complex, multiple system with a profound sense of its own identity and stability. (291-292)

I propose that memes, as “chunks” that efficiently encode and summarize information about cultural processes, play a pivotal role in subject formation. A radically intersubjective entity like the self receives memetic material from a wide range of external sources (other subjects, cultural artifacts, technological
media); in turn, these memes and memeplexes take their place in the constellation of attractors that populate the subject’s mental phase space. The self’s stream of consciousness, as an expression of the dynamics of that phase space, is shaped by the memetic attractors which exert their influence in the self’s conscious and unconscious mind. Memes, be they abstract ideas, theories, prototypes, narratives, et al., are assimilated by the subject and, in turn, are continuously matched against incoming sensory data that corroborates their validity or creates a vector that initiates a change of some sort. Memes can and do mutate in light of the ever-changing landscape of the mind.

A chaotic ontology like the one described affects how one approaches epistemological issues. Argyros theorizes a chaotic epistemology which finds a dynamic middle ground between Platonic metaphysics and Derridean deconstruction.

Such chaotic attractors are not fixed points but evolving systems, a chaotic epistemology would no longer picture concepts as Platonic islands; yet, since chaotic attractors enjoy a large measure of autonomy and identity, neither would they be conceptualized as Derridean texts. Instead, a concept or idea would be understood as the chunked or emergent product of a vast network of other concepts. Its constitution would be the result of renormalization and locking-in. In other words, concepts would be dynamical syntheses melding innate genetic proclivities with feedback from both the human (i.e., social) and prehuman environments. (299)

Increasingly complex, abstract ideas and beliefs give rise to chaotic attractors that occupy increasingly larger numbers of dimensions in mental phase space. One might argue that an attractor for “god” or “beauty” would vary to such an extent between cultures that meaningful dialogue between
individuals of different cultural backgrounds would be fruitless. Argyros responds that in the case of cross-cultural attractors like “god” or “beauty,” the hyper-dimensionality of such conceptual attractors would produce enough dimensional overlap between memes that meaningful communication and exchange can take place.

Out of this delicate equipoise of chaos and order, the literary text surges into existence, offering culture “both a remarkable data bank in which to store and transmit cultural knowledge and a flexible, turbulent laboratory in which to invent new knowledge” (Argyros 319). Roland Barthes, in his seminal essay, "The Death of the Author," prefigures the dynamics involved in the text when he writes:

> We know now that a text is not a line of words releasing a single ‘theological’ meaning (the ‘message’ of the Author-God) but a multidimensional space in which a variety of writings, none of them original, blend and clash. The text is a tissue of quotations drawn from the innumerable centers of culture. (*Image-Music-Text* 146)

As "tissues of quotations drawn from the innumerable centers of culture," literary texts crystallize the unique memetic structures that emerge from the interplay of the sociocultural and author matrices. In biology, the genetic constitution of offspring changes the gene pool by adding to it. Similarly, the sociocultural matrix changes when unique memetic aggregates present in literary texts become part of the larger information grid. The critical community and the public at large experience the work of art as external stimuli and the process begins again, with conscious and unconscious forces churning out interpretations of the work of art. Given time, cultural memetic patterns begin to form as memes presented "originally" in the work of art find their way into formal, critical interpretations and informal, word-of-mouth observations. At
each successive stage, memes spread, mutating along the way, recombining with other memes, and serving as the raw material for subsequent works of art.

The best way to appreciate the merits of the matrix model is to compare it with other models of cultural evolution. Some models (classical Marxist, cultural materialist) explain the evolution of culture by concentrating on changes in macro-phenomena (i.e., changes in the economic infrastructure or base dictate changes in the superstructure). Other models (epidemiology of representations, memetics) focus on cultural change as the by-product of micro-processes taking place within the individual psyches that constitute the cultural population. The matrix model represents a hybrid in the sense that it accounts for both macro- and micro-phenomena via the dynamics of the sociocultural and author matrices.

Marx believed he had discovered the law of evolution in human history when he asserted that mankind must first eat and drink, have shelter and clothing, before pursuing the development of politics, science, religion, and art. In *A Contribution on the Critique of Political Economy* (1859), Marx states:

> The mode of production in material life determines the general character of the social, political, and spiritual processes of life. It is not the consciousness of men that determines their existence, but on the contrary, their social existence determines their consciousness. (21)

Marx theorized that the production of the material means of subsistence forms the foundation upon which state institutions, legal concepts, art and religious ideas have evolved. No general, consensus agreement exists as to what Marx exactly meant by infrastructure or the mode of production. Marx himself attempted to explain the change from one mode of production to another by relying on the Hegelian idea that social formations develop internal contradictions during the course of their existence that are at once the cause of
their own destruction and the basis for the emergence of new social formations. Each epoch or social formation, Marx believed, is urged onward toward its inevitable negation.

Economic forces shape and determine all the elements of what constitutes the superstructure: law, philosophy, religion, art, literature. These constituent elements, according to classical Marxism, resonate with and justify the dominant ideology in capitalist societies. Ideology is comprised of the shared beliefs and values accepted in an unquestioning manner by the participants in the cultural affairs of the society.

Ultimately, the dialectical materialism espoused by classical Marxism is a political strategy dedicated to the destruction of capitalism and the birth of communism. For the participants in this process, dialectics functions as an ideological theme, a nexus of symbols and metaphors, which validates the belief that the desired changes will occur only as the result of revolutionary opposition to the capitalist class.

Marvin Harris’s cultural materialist model (Cultural Materialism: The Struggle for a Science of Culture (1980)) seeks to improve Marx’s original strategy by dropping the Hegelian notion that all systems evolve through a dialectic of contradictory negations and by adding reproductive pressure and ecological variables to the conjunction of material conditions studied by classical Marxism.

For Harris, infrastructure, structure, and superstructure constitute the parts of a sociocultural system. By infrastructure, Harris envisions an entity more complex than Marx’s base, a vast conjunction of demographic, technological, and environmental variables responsible for producing and expanding basic subsistence, food, and other forms of energy. Infrastructure is the principal interface between culture and nature. Structure refers to the domestic and political apparatuses that organize production, exchange, and consumption
within and between sovereign bodies. Symbols, myths, epistemologies, aesthetic standards, and the like constitute the core elements of the superstructure.

Cultural materialists like Harris adhere to the principle of *infrastructural determinism*, whereby the technologies and practices of the infrastructure *probabilistically* determine what happens at the structural level of domestic and political economy. The organization of production, exchange, and consumption by domestic and political economic structures in turn *probabilistically* determines the symbols, myths, and philosophies that make up the cultural superstructure.

Structure and superstructure clearly play vital system-maintaining roles in the positive and negative feedback processes responsible for the conservation of the system. However, cultural materialism holds that innovations are unlikely to be propagated and amplified if they are functionally incompatible with the existing infrastructural modes of production and reproduction.

Classical Marxism and cultural materialism both emphasize the primacy of the economic base or infrastructure in determining behaviors at the level of the cultural superstructure. In their holistic explanations, they both assume that macroscopic phenomena have macroscopic causes. While economic forces certainly constitute an important influence on cultural patterns, both classical Marxism and cultural materialism fail to account for the dynamics of desire, particularly at the microscopic level of the individual.

At the most fundamental level, cultural transmission involves individuals observing a behavior or its traces and generating ideas and behaviors that are passed on, more or less imperfectly, to other individuals. The presence or absence of desire impacts the entire process. Without some attempt to account for the ebb and flow of desire, one cannot hope to understand the cultural patterns that emerge.
“Culture is the precipitate of cognition and communication in a human population”  

From an epidemiological perspective, the explanation of a cultural fact (the actual distribution of cultural representations) is to be sought not in some global macro-mechanism, but in the combined effect of countless micro-mechanisms. Rather than dialectics or base/superstructure dynamics, cognitive processes are in large part responsible for the propagation of ideas.

An epidemiological approach to cultural evolution does not aim for one grand unitary theory. Just as standard epidemiology does not give a single general explanation for the distribution of all diseases, so there is no reason to expect that the emergence, communication, and transformation of representations will be accounted for in the same way for every kind of cultural entity. Different cognitive abilities, different motivations, and different environmental factors affect cultural transmission.

Epidemiological models of cultural evolution, like the one espoused by Dan Sperber (Explaining Culture: A Naturalistic Approach(1996)), explain population-scale phenomena as the cumulative effect of micro-processes that generate individual cultural events. By incorporating elements of cognitive psychology into the model, Sperber attempts to explain why and how some ideas are "contagious," in a manner that goes beyond the dictates of the economic base/infrastructure.

For Sperber, cultural evolution involves two types of representations: 1) mental representations, in the form of beliefs, intentions, and preferences that, like memories, are patterns in the brain and represent something for the "owner" of that brain; and 2) public representations, in the form of signs, utterances, texts, and pictures, which are material phenomena in the environment that represent something for the people who perceive and interpret them.
An epidemiology of representations attempts to explain culture as the cumulative effect of two types of micro-mechanisms: 1) individual mechanisms that bring about the formation and transformation of mental representations, and 2) inter-individual mechanisms that, through alterations of the environment, bring about the transmission of representations via signs, utterances, texts, and pictures.

Some representations are slowly transmitted over generations and constitute traditions. Other representations, typical of modern cultures, spread rapidly throughout a whole population, but have a short life-span. These fashions exhibit distribution patterns that are comparable to epidemics.

The dispositions and susceptibilities of the members of a culture affect the speed with which and extent to which a cultural entity/representation will spread. Sperber argues that we all have an innate disposition to develop concepts according to certain schemas. Schemas are mental structures used to organize our knowledge of the social world according to themes and subjects. They guide our recognition and understanding of new information by providing expectations about what should occur. Concepts which conform to these schemas are more easily internalized and remembered. In effect, schemas act as a filter on the representations capable or likely to be distributed in a population.

Several theorists believe that the distribution of cultural representations in a population can be best explained by adapting the Darwinian model of natural selection to the phenomenon of culture. Of the existing theories, memetics is the most relevant to the issue of how nihilism and chaos have evolved in modernist and postmodernist literature. After Dawkins coined the expression, theorists like Daniel Dennett, Director for the Center of Cognitive Studies at Tufts University, have explored the ramifications of what a memetic theory of cultural evolution represents.
"Design out of Chaos Without the Aid of Mind"

In *Consciousness Explained*, Daniel Dennett argues that biological and cultural evolution occurs when natural selection acts upon genes and memes, respectively. The theory of evolution by natural selection is neutral regarding the difference between genes and memes, which are just different kinds of replicators evolving in different media at different rates. As replicators, genes and memes share the characteristic of being able to make copies of themselves under the right set of conditions. Whereas genes replicate in the living cell, memes replicate in the domain of the mind, using the brain’s inherent cognitive machinery.

For Dennett and other evolutionary theorists, algorithms drive the evolutionary process. Algorithms are formal processes that can be logically counted on to yield a certain sort of result whenever they are run. On the simplest level, computing long division and alphabetizing words represent algorithms from our everyday world. Algorithms are *substrate-neutral*, meaning they can run on a variety of different materials; the substrate does not matter---only the logic of the procedure does.

According to Dennett, the evolutionary process that involves these replicators requires the following conditions:

1. *variation*: a continuing abundance of different elements (genes, memes)
2. *heredity or replication*: the elements have the capacity to create copies of themselves
3. *differential “fitness”*: the number of copies of an element that are created in a given time varies, depending on interactions between the features of that element (whatever it is that makes
it different from other elements) and features of the
environment in which it persists. (*Consciousness Explained* 200)

Given enough time, the "Darwinian" algorithm produces the staggering
natural and cultural diversity we see all around us. Compared to the natural
world, cultural evolution takes place at a much faster pace. Memes often
disseminate rapidly through a population, making copies and finding niches in
the cognitive fabric of individual hosts.

The haven all memes depend on reaching is the human mind. Dennett
asserts that the human mind is itself an artifact created when memes restructure
a human brain in order to make it a better habitat for memes: "our selves have
been created out of the interplay of memes exploiting and redirecting the
machinery Mother Nature has given us" (*Darwin’s Dangerous Idea* 367).

Dennett asserts that brains seem to be designed to transform, invent,
interpolate, censor and generally mix up the incoming memes before yielding
any "output" (in the form of signs, utterances, texts, or pictures)(*Darwin’s
Dangerous Idea* 355).

We seldom pass on a meme unaltered, unless we are particularly
literal-minded rote learners . . . as Steven Pinker has stressed, much
of the mutation that happens to memes---how much is not clear---is
manifestly *directed* mutation. (355)

This lack of copying fidelity is precisely what detractors of meme theory
point to as its significant flaw. The mechanism for memetic transmission is often
compared to that of a virus. However, whereas pathogenic agents such as viruses
and bacteria reproduce via replication and undergo a mutation only occasionally,
memetic representations are transformed almost every time they are transmitted.
For this reason, Sperber maintains that stable memetic transmission is not the norm, but rather a limiting case. Constructive cognitive processes transform incoming public representations from the environment into mental representations. If there is a strong resemblance between internal mental representation and external public representations, it simply means that the degree of transformation has been minimal.

That said, strong resemblances between cultural entities/memes, Sperber argues, tend to be biased in the direction of attractor positions within the space of possibilities (phase space).

To say that there is an attractor is just to say that, in a given space of possibilities, transformation probabilities form a certain pattern; they tend to be biased so as to favor transformations in the direction of some specific point, and therefore cluster at and around that point. (112)

An attractor is not a material thing, but rather an abstract, statistical construct used to explain the behavior(s) of a system (in this case, a distribution of representations). In developing an attractor model of cultural evolution, discussion of attractors invariably leads to the subject of phase space.

Phase space can be viewed as a kind of map, a way of defining and visually representing a collection of things that are in motion, whether incessantly or intermittently (Merrell 112). In its capacity as a map, phase space depicts the dynamics of what might occur in light of the range of all possible occurrences.

In phase space the complete state of knowledge about a dynamical system at a single instant in time collapses to a point. That point is the dynamical system---at that instant. At the next instant, though, the system will have changed, ever so slightly, and so the point
moves. The history of the system can be charted by the moving point, tracing its orbit through the phase space with the passage of time. (Gleick 134)

As seen from the perspective of the matrix model, cultural evolution at the macrocosmic level (sociocultural matrix) and the microcosmic level (author matrix) represent hyperdimensional phase spaces with an enormous range of possibilities. Within each respective phase space, behavioral patterns emerge whose trajectories are drawn to and guided by basins of attraction toward specific points. These points are the aforementioned attractors.

There are four kinds of attractors: fixed point, limit cycle, quasi-periodic, and strange. The first three share a fundamental stability and predictability. Given pertinent information about their phase space, it is possible to predict the state of such systems at any given point in the future. These attractors cause the behavior in phase space to converge on a point (fixed point) or to settle into a structured (limit cycle) or somewhat structured (quasi-periodic) pattern of movement.

In the case of strange attractors, the system's behavior follows an endless and non-repeating path in phase space, bound to a particular region, but never returning to the same point. Strange attractors exhibit a combination of attraction and repulsion, a tendency toward the oneness of a single point and the manyness of widely disseminated points.

In A Blessed Rage for Order, Alexander Argyros speculates how stable attractors (fixed point, limit cycle, quasi-periodic) can serve as a mathematical-visual metaphor for the metaphysics of modernism, while strange attractors are better suited for symbolizing the post-metaphysical position of a theorist like Derrida.
If by metaphysics is meant the desire to conceptualize the world as a system whose dynamics are reducible to a non-textual, fully present essence, then it would appear that stable attractors function as some sort of transcendental signified, controlling and channeling the play of traces [. . .] we should expect that Derridean textuality would be described by the absence of a [stable] attractor [. . .] he [Derrida] would probably choose to characterize dissemination as a radically discontinuous play of traces whose phase space, if such a description of dissemination is even possible, would never settle into a recognizable pattern. The phase space of dissemination would be fundamentally anarchic, periodically congealing into metaphysical stability but then quickly undermining its temporary hypostatization with unpredictable and discontinuous leaps of textual free play. (251)

The matrix model is ultimately a hybrid, incorporating elements from the different models discussed in this chapter. Both the sociocultural and author matrices are influenced a great deal by socioeconomic forces, without resorting to the determinism espoused by the classical Marxists and cultural materialists. Secondly, the matrix model posits that the component matrices are a product of the transmission and transformation of memes, which form clusters in the vicinity of attractor regions found in the culture at large and in the conceptual space of the author matrix.

The subtitle of this study, "The Literary Evolution of Nihilism and Chaos in Modernism and Postmodernism," alludes to the theory that nihilism and chaos emerged as memes in the nineteenth and twentieth centuries, exerting a strange fascination on a number of the great modernist and postmodernist literati. Nihilism and chaos served as lightning rods for the creative energies of writers
ranging from proto-modernists like Turgenev and Dostoevsky in the nineteenth century to postmodernists like Burroughs and Pynchon in the latter half of the twentieth century.

Argyros's use of "stable-versus-strange attractors" as metaphors to describe the cultural dynamics of modernism versus postmodernism foreshadows the subjects to be discussed in chapters two through four. As the memes of nihilism and chaos trek through their respective trajectories in the cultural phase space of the nineteenth and twentieth centuries, we will be able to see a paradigmatic shift in western man's relationship to the mythic past, as well as a dramatic transformation in aesthetic sensibilities, from the essence-driven ethos of modernism to the postmodern embrace of the aleatory.

The modernist sociocultural matrix (chapter two) witnessed the birth of modern nihilism and the emergence of scientific developments that undermined the "myth" of a completely ordered, predictable universe. The postmodernist sociocultural matrix (chapter three) tracks the evolution and metastasis of nihilism, as well as the maturation of a "chaotic" worldview developing from discoveries being made in fields like chaos theory, complexity theory, and the theory of punctuated equilibria. In light of the developments in chapters two and three, chapter four addresses two important cultural trajectories: 1) the path that leads from the modernist aesthetics associated with the vortex metaphor to the postmodern theory surrounding the symbol of the virus; and 2) the path that reveals the transition from "myth-as-vessel-of-truth" to "myth-as-meme."
To accept the complete absence of pre-determined meaning and yet remain unable to escape the yearning for such meaning is the paradox that circumscribes the modern condition . . . The world is no longer a text that mirrors, or at least intimates, an eternal truth capable of transforming all of time-bound, suffering existence into something meaningful. Human beings, who previously carried the breath of God within themselves, who believed themselves justified in the light of their divine origin and purpose, suddenly appear devoid of all value and, although they still feel themselves in need of redemption from this world, they are forced to recognize that this salvation is no longer forthcoming. (Roodt 40)

The crux of this chapter involves an examination of how nihilism emerged in Western intellectual circles and became a defining characteristic of modernism’s sociocultural matrix. From Fichte and Jacobi to Dostoevsky and Nietzsche, the nineteenth century witnessed the initial stages of nihilism’s development into a cultural force that would make an impact on the literature of
the first half of the twentieth century. For much of the modernist period, to be fully human meant to affirm both the utter emptiness of a world devoid of meaning and the human need for a meaningful world.

Secondly, this chapter explores the ramifications of three modern scientific developments that dealt a severe blow to Western man’s intellectual confidence in the ordered Newtonian worldview that had prevailed since the Enlightenment. The second law of thermodynamics, the theory of evolution by natural selection, and quantum mechanics all helped to dispel the idea that we live in a strictly deterministic universe. In the “new” chaotic and probabilistic worldview, chance and random phenomena play an important role in shaping the events that unfold, from the interactions of subatomic particles to the “heat death” of the universe. This view of an aleatory universe that exceeds man’s capacity to predict and totally understand, in conjunction with modern nihilism, provides modernist writers like Joyce with the cultural raw materials needed for the construction of their novels.

**Precursors to Nietzschean Nihilism**

A proper exploration of the emergence and evolution of nihilism takes us back to the philosophical system that paved the way: Kant's transcendental idealism. While Kant was not himself a nihilist, the position he staked out enabled Johann Gottlieb Fichte to rework the basic tenets and conceive a worldview where the infinite will of the Absolute I reigns supreme. Friedrich Jacobi called Fichte’s position *nihilism* to describe the danger this brand of idealism posed for the intellectual, spiritual, and political health of humanity.

Fichte’s philosophy heavily influenced early German Romanticism, whose proponents asserted that man is an autonomous, self-creating I, free from both God and nature. While the German Romantics engaged mainly in metaphysical and epistemological issues, Russian nihilism addressed a more socio-political
range of meanings, envisioning a "Promethean" intelligentsia that would clear
the way for radical reform.

Back in Germany, Arthur Schopenhauer plumbed the depths of the
incomprehensible will, maintaining that man’s redemption can only come
through art or resignation. Ultimately, Nietzsche arrived at a radical synthesis,
drawing from Romanticism, Russian nihilism, and Schopenhauer, fusing these
elements with his conceptualization of the Dionysian, and presenting the
consummate nihilist philosophy.

Kant to Fichte to Jacobi: Transcendental Idealism and its Discontents

In transcendental idealism, Immanuel Kant posits that we do not have
knowledge of things-in-themselves but only of their appearances or
representations within consciousness. Kant’s critique of metaphysics not only
denies human beings cognitive access to the speculative objects of classical
metaphysics (God and the soul), but also removes the possibility of knowing the
ground of the self (Critchley 3).

Transcendental idealism presented two possibilities for those who
followed in Kant’s footsteps: 1) emphasize the thing-in-itself as the basis for a
transcendental empiricism; or 2) deny the thing-in-itself and attempt to establish
both nature and freedom on the basis of an autonomous I. Fichte’s
reconceptualization of Kant follows the second path.

For Fichte, the I is radically free and absolute in the most literal sense. It
absolves itself from all relationships other than those that it establishes. Self-
posing constitutes the essence of the I, which is not a thing or object but rather a
primordial activity that is infinite, undifferentiated, and unlimited. As pure,
unconditioned activity, it is totally without internal distinctions and
encompasses everything. Paradoxically, the primordial I’s lack of differentiation
means that it is no particular thing and therefore nothing.
Friedrich Jacobi had been an early admirer of Fichte, but was profoundly concerned that Fichte's fundamental principles led to atheism. From Jacobi's viewpoint, Fichte's idealism recognizes no truth beyond consciousness or reason and thus falls into an absolute subjectivism that is essentially an inverted Spinozism. It reduces everything to the activity of the "I," and thus reduces God to a mere creation of the imagination. With nothing beyond the representations of the "I," the good, the beautiful, and the holy are merely hollow names (Gillespie 66). Jacobi concludes that man's fundamental choice is between nothing or God. In choosing nothing, man makes a god of himself, transforming the notion of the "I" into a world-creating will. In the hands of the Romantics, this world-creating will turns demonic, empowering and liberating certain individuals, vaulting them beyond the bounds of conventional morality into what is simultaneously superhuman and bestial.

**Demonic Forces from Romantic Sources**

The Romantics pitted the notion of the individual will of natural man against the cultural and spiritual degeneracy of bourgeois society. The new hero envisioned by Romanticism is the individual who looks within himself to find a heroic will that struggles to free itself from the constraints of social life. For early German Romantics, the "demonic" will reveals itself as the concealed essence of the human psyche. Guided by this force, man ceases to be man and becomes superhuman.

Ludwig Tieck's *William Lovell* (1795) embodies the convergence of Fichtean idealism with the demonic will posited by the early German Romantics. The knowledge sought by the protagonist is the demonic knowledge denied to all men who live under the moral law. Lovell's "crimes" are not despicable deeds in the eyes of Romantics, but rather the tragic price he has to pay for the degree of freedom he attains: "immorality becomes a badge of freedom and greatness."
(Gillespie 108) The Fichtean/Romantic synthesis that bases human life in the absolute autonomy of the I, and rebels against traditional morality in the process, marks the beginning of a radical transformation of European intellectual life.

Idealism and Romanticism in this sense signal the death of the traditional Christian God, who is reduced to a mere concept, and the advent of the overman, who is guided by his subliminal instincts. (Gillespie 110)

**Russian Nihilism: Prometheus, Unbound and Razing Hell**

Familiarity with the mythic figure of Promethean man is crucial to understanding the spirit of Russian nihilism. Prometheus personifies rebellion against divine despotism. For the mid-nineteenth-century imagination of Russian radicals, Prometheus represented the inspirational prototype for the "new men," individuals with implacable wills who would act to bring about the revolutionary transformation of autocratic Russia.

Russian radicals were convinced that only through the negation and destruction of existing institutions could a new reconstructive phase of human life be possible. The Promethean view of human freedom established a moral imperative: if man is free to shape his own destiny, then revolutionary activity is a moral duty.

The radicals believed that the seeds for this new Promethean humanity already existed within the revolutionary movement itself. Although various monikers were attached to these individuals, N.K. Mikhailovsky’s *intelligentsia* best described this "world-historical" class of men, members of a kind of monastic order ready to sacrifice their lives in the service of the great moral crusade of human liberation (Gillespie 144). Sergei Nechaev represented the living prototype of this kind of individual (Gillespie 161). Along with Mikhail Bakunin, he wrote a very influential political pamphlet titled *Catechism of a Revolutionist* (1869), in which he and Bakunin describe the quintessential nihilist.
The Revolutionist is a doomed man. He has no private interests, no affairs, no sentiments, ties, property nor even a name of his own. His entire being is devoured by one purpose, one thought, one passion—the revolution. Heart and soul, not merely by word but by deed, he has severed every link with the social order and with the entire civilized world; with the laws, good manners, conventions, and morality of that world. He is its merciless enemy and continues to inhabit it with only one purpose—to destroy it.

Michael Allen Gillespie (*Nihilism Before Nietzsche*) argues that the intelligentsia, driven by this kind of monomaniacal, single-minded ethos, believed it would create a new superhumanity and then merge with it.

The concept of the intelligentsia also figures in the development of the character Eugene Bazarov, the nihilistic protagonist of Ivan Turgenev's *Fathers and Sons*. In Bazarov, readers can begin to see the hidden relationship of the Russian, Promethean nihilist to the demonic hero of the Romantics and the Absolute I of Fichtean idealism.

As a nihilist, Bazarov does not stand for anything and stakes out a position against not only the Russian autocracy but nature itself. Bazarov’s desire to raze the Russian socio-political establishment served as the model for the hardened elite that many believed was necessary to transform Russia.

Like the typical Romantic, Bazarov does not fit neatly in his world. Rather than flee into an idealized literary world of his own, Bazarov proclaims the moral order of the world to be irrational and criminal. Like Goethe’s *Faust*, Bazarov refuses to submit to anything and forces everything to submit to him. He is the master and not the servant of science and society. Like Byron’s *Manfred*, Bazarov is a supreme egoist whose egoism is essentially tragic because he measures himself against a superhuman standard that he cannot live up to.
In contrast with Turgenev’s Bazarov and "real life" nihilists like Bakunin and Nechaev, Fyodor Dostoevsky created a series of nihilistic characters of different temperaments. Compared with the actual revolutionaries who aimed at the destruction of the autocratic establishment, Dostoevsky’s figures come to grips with the abyss within their own souls. Characters like Stavrogin (The Possessed), Ivan Karamazov (The Brothers Karamazov), and Raskolnikov (Crime and Punishment) search for and experiment with ways for the self to justify its existence in a world where God has disappeared.

Diametrically opposed to the active, destructive type of nihilist hell-bent on toppling all semblance of authority, the “underground man” of Dostoevsky’s Notes from Underground (1864) is the embodiment of contemplative inertia, having reached the conclusion that the best thing to do is sink into a state of inactivity. Nishitani Keiji (The Self-Overcoming of Nihilism) asserts that for the "underground man," the only place left to go is the underground. Unable to dream of going beyond the real world, he is simultaneously unable to tolerate life on the surface (140).

The "underground man" wages an internal revolution against secular humanism, the scientific spirit, and the rational worldview that had come to dominate western society. For Dostoevsky’s protagonist, what exists is simply a real world that obediently follows mathematical formulas. For the normal man who lives on the surface, this is not a problem because he unwittingly mistakes immediate and secondary causes for primary causes. The intelligence of the normal man lacks the wherewithal to question and seek the more fundamental causes. Normal men are capable of rationalizing their purity and righteousness under the rubric of an increasingly secular, scientifically-grounded humanism. They accept some kind of goal in life, or feel some value or ideal, as an absolutely consistent basis of support for their actions.
Speaking through his protagonist, Dostoevsky vehemently opposed an intellectual, rational view of ethics born from the social theories of scientific positivism and socialism. The "underground man" confronts the positivistic worldview, maintaining that capitulation to this Weltanschauung leads to the death of the soul.

By virtue of his "deviant" intelligence and level of awareness, the "underground man" cannot conform to and act in the world that in his estimation has no foundation. This idea of the hyper-conscious individual who goes beyond the normal and steps outside of humanity provides Dostoevsky with the raw material for the complex web of concerns that will occupy him in Crime and Punishment, The Possessed, and The Brothers Karamazov.

**Schopenhauer:** "Death is the great opportunity no longer to be I . . . To desire immortality is to desire the perpetuation of a great mistake"  

Schopenhauer grew up in the midst of the philosophical revolution initiated by Kant and completed by Fichte, Schelling, and Hegel. While a student of Fichte, Schopenhauer did not hesitate to critique his teacher, arguing that his principal error was the solipsistic attempt to deduce the world from the subject. According to Schopenhauer, the idealist troika of Fichte, Schelling, and Hegel erroneously empowered the subjective spirit and overturned Kant's limitation on human reason. Schopenhauer himself returned to the early Kant and recognized that the substance of Kant's "better consciousness" (as opposed to "empirical consciousness") is will, a blind, rapacious energy with no ultimate purpose or design other than gratification. Kant's noumenon is nothing other than the will experienced in one's own body.

Kant erred, in Schopenhauer's opinion, by assuming that reason in some sense governed both the phenomenal realm of appearances and the noumenal realm of will. As conceived by Schopenhauer, the phenomenal realm consists of
representations and is ruled totally by the principle of sufficient reason. The will that underlies the phenomenal world cannot be grasped by consciousness or deduced through reason. Moreover, the will for Schopenhauer not only supplements the intellect in the constitution of the human self: it underlies that self, including the intellectual side, as the source of the self’s very being (Zöller 19).

Only through the immediate intuition of the will in our own bodies can we attain the truth. The noumenal realm can only be known through the inner experience of our passions and drives. Schopenhauer takes up an even more radical position when he asserts that our bodies are nothing other than the objectification of this primordial will. Indeed, the form of everything animal, vegetable, and mineral speaks of the essential will that lies behind it. In The Philosophy of Schopenhauer, Bryan Magee elaborates on the will’s omnipresent, yet intellectually ungrasppable nature:

(Will) has no necessary reference to anything to do with life, personality, consciousness, inner sense or aim. It is his [Schopenhauer’s] name for the force exemplified in the constitution and motion of everything in the universe from the cosmic wheeling of the galaxies to the perpetual whirl of subatomic particles. He [Schopenhauer] has given it the name will for no other reason than that the nearest we as experiencing subjects can come to a direct apprehension of it is through the manifestation of primal energy that each one of us experiences in inner sense as the ordinary drive of life, the ongoing thrust, however weak, of being alive; or, if you like, simply the will to live, to survive, to keep going. (Magee 142)

While Romanticism had articulated the notion of a world-spirit possessing a guiding telos, Schopenhauer’s will has no goal because it is bereft of all reason.
The will amounts to an insatiable, blind drive, a monstrous, inhuman force that through its aimless activity makes the world into a Hell. For Schopenhauer, life as a whole is meaningless.

With human happiness out of reach, some individuals are capable of transcending their suffering by walking the path of the saint and ceasing to will altogether. This path cannot be chosen and the saintly life can occur only if the will itself wills it. Only in the will's omnipotent freedom can an individual's self-renunciation take place (Gillespie 192).

The other option available to certain individuals is transcending their suffering by becoming mirrors of the world via the artistic process. Art seeks to know and is concerned with the eternal forms of things. Through the abolition of the knowing subject/artist, ideas can become objects of knowledge. The capacity for such knowing, according to Schopenhauer, is actualized only in men of genius (poets, painters, composers).

Of all the creative media, Schopenhauer believed that music has no peer when it comes to expressing the will itself. The truth about the will is revealed by musical geniuses who have become perfect instruments of expression. Their genius lies in being able to give expression to the feelings, drives, and passions originating in the will. The sublime musical composition makes the truth evident to the rest of humanity (Gillespie 191).

Friedrich Nietzsche, whose seminal philosophic event was his discovery of Schopenhauer’s *The World as Will and Representation*, also wrote passionately about the power and significance of music, the role of the musical genius in society, and the primacy of the will. However, Nietzsche’s vision would differ in several important respects from the man who inspired him in his youth.

While Schopenhauer recognized the power of music, he believed that it only led to resignation. In his view, tragedy teaches us that the world can give no
lasting comfort or satisfaction. Artistic presentation leads to despair because man comes to recognize that his individual existence is fundamentally tragic.

In his mature thought, Nietzsche would come to regard Schopenhauer’s pessimistic vision as the preeminent form of passive nihilism. Nietzsche came to see Schopenhauer’s will as a degenerate form of Christianity that represented the final manifestation of the European devotion to the “Crucified.” As the final expression of Christianity, Schopenhauer’s will is the ground out of which will arise Nietzsche’s great Dionysian will to power.

Nietzsche engaged in a life-long effort to usher in a different, ultimately affirmative vision embodied by the god Dionysus. Nietzsche sought such a god not as the basis of a new rationality but a new beauty. Nietzsche was particularly attracted to Schopenhauer’s aesthetic vision. Schopenhauer recognized that there was a demonic force in the world, but also saw beauty in it.

Beauty is brought into the world by artistic genius, the Dionysian poet who identifies himself with the will and becomes its medium of creation. Because he is the agent of the life-force in its greatest form, the artistic genius lifts humanity above the banality of existence. The artist exudes a superabundance of life and vitality that make him healthier and more powerful than other men because the genius is possessed by the life-force at its flood while ordinary men are a reflection of this force at its ebb.

Both active and passive nihilists must be distinguished from the affirmative stance toward life that characterizes the Dionysian artist, who passes beyond nihilism because he does not need to believe that all values are absolute values. The Dionysian artist recognizes the tragic character of human life, but unlike Schopenhauer or the Russian nihilists (who both embrace absolute negation and despair), the Nietzschean hero affirms life with all of its pain and suffering.
Nietzsche: “When you look long into an abyss, the abyss also looks into you”9

What I relate is the history of the next two centuries. I describe what is coming, what can no longer come differently: the advent of nihilism. (The Will to Power 3)

With these words taken from the preface of his last major work, Nietzsche heralds what he believes to be the future that will unfold during our lifetimes. In contrast to all his predecessors from Jacobi and Fichte through Turgenev and Dostoevsky, Nietzsche sees nihilism as the consequence of human weakness and not the result of a Promethean striving for the superhuman. For Nietzsche, nihilism designates the contemporary situation where the highest, the absolute, values are rendered null and void. At the same time, nihilism also applies to the unfolding, internal logic of all European history since Plato.

According to Nietzsche, nihilism presided over the original creation and institution of the classical values being assaulted in his lifetime. Nihilism, in some fashion, has always been present, always been at work, before, during, and after its violent explosion in the nineteenth century. Germinal nihilism dates as far back as Plato, a product of philosophy’s recoiling from an affirmation of life and inventing a “true world,” a world possessing all the attributes that “life” does not have: stability, identity, happiness, truth, goodness, et al. The division of the two worlds (Real versus Ideal), the feat undertaken by Plato, constitutes the nihilistic act par excellence (Haar 14).

In the aftermath that is European history, various stages of “incomplete nihilism” have evolved. Incomplete nihilism describes the gradual decomposition of Plato’s “true world”; the recurrent attempt to find replacement values to substitute for the Platonic and Christian ideals defines European intellectual evolution. At this point in its trajectory (during Nietzsche’s lifetime),
nihilism represented the progressive consumption of everything having signification, the growing proliferation of empty significations.

Nothing is worth much any more, the everything comes down to the same thing, everything is equalized. Everything is the same and equivalent: the true and the false, the good and the bad. Everything is outdated, used up, old, dilapidated, dying: an undefined agony of meaning, an unending twilight: not a definite annihilation of significations, but their indefinite collapse. (Haar 13)

**Art as the masking of chaos**

For Nietzsche, the world of the Greek gods was an ever changing appearance that hid the most terrible reality: the chaos of being has no grounds, no reasons; it is an unfathomable abyss. In “Nietzsche’s Conception of Chaos,” Jean Granier examines Nietzsche’s view that “art is the veil of beautiful appearance thrown over the horrors of chaos” (138). The “mask” becomes indispensable if man is to survive because in no other way can chaos appear than as masked.

The whole life and art are two words that characterize a single creative act: namely, the act of ordering chaos, stabilizing becoming, and inventing categories by which the abyss of truth can be organized into various forms and constellations. (Granier 139)

The chaos of existence, according to Nietzsche, is a tremendous psychological burden that few can bear. For most people, the raw, unmediated experience of the primordial ground of being produces paralysis and despair. Life can be sustained only by a greater or lesser denial of this chaos. Only the strongest form of life can face the terrifying truth that existence is chaotic and meaningless. Lies in this sense are generally more valuable to life than truth.
man must be a liar by nature, he must be above all an artist. And he is one: metaphysics, religion, morality, science---all of them only products of his will to art, to lie, to flight from “truth,” to negation of truth. (The Will to Power 451-452)

In Nietzsche’s estimation, early Greek civilization maintained a healthy balance of what he termed the Apollinian and Dionysian forces. The Apollinian signifies order, measure, number, limitation, and subjugation of things wild and untamed. It represents the work of the poet creating a world of illusion, which allows for an interpretation of life. In The Birth of Tragedy, Nietzsche states:

The beautiful illusion of the dream worlds, in the creation of which every man is truly an artist, is the prerequisite of all plastic art, and, as we shall see, of an important part of poetry also. In our dreams we delight in the immediate understanding of figures; all forms speak to us; there is nothing unimportant or superfluous. But even when this dream reality is most intense, we still have, glimmering through it, the sensation that it is mere appearance. (34)

In contrast with the Apollinian, Nietzsche’s vision of the Dionysian is one of intoxication, irrationality, ecstasy, and unfettered instinct. The nature of the Dionysian is one of fusion with the primordial unity radically prior to individuation and reason. Nietzsche declares:

Under the charm of the Dionysian not only is the union between man and man reaffirmed, but nature which has become alienated, hostile, or subjugated, celebrates once more her reconciliation with her lost son, man [. . .] Transform Beethoven’s "Hymn to Joy" into a painting; let your imagination conceive the multitudes bowing to the dust, awestruck---then you will approach the Dionysian [. . .] Now with the gospel of universal harmony, each one feels himself not only
united, reconciled, and fused with his neighbor, but as one with him, as if the veil of maya had been torn aside and were now merely fluttering in tatters before the mysterious primordial unity. (37)

Given the disparate natures of the Apollinian and the Dionysian, the potential always existed for a violent conflict between these two forces. In Nietzsche’s aesthetic vision, the human artist mediates a reconciliation, resulting in Greek tragic poetry. The wild, formless, chaotic Dionysian instinct combines with the structuring influence of Apollinian form and results in the work of art. Nietzsche maintained that the work of art represents a temporary truth, the only truth we can know.

"This world: a monster of energy, without beginning, without end"10

The discussion of Nietzsche and chaos invariably leads to an examination of one of Nietzsche’s core concepts, the will to power. Nietzsche borrows from Schopenhauer’s concept of the will and develops a nihilistic melange made up of the will to power, eternal recurrence, and the overman (Übermensch). In The Will to Power, Nietzsche describes this elemental entity in the following fashion:

[. . .] as a play of forces and waves of forces, at the same time one and many, increasing here and at the same time decreasing there; a sea of forces flowing and rushing together, eternally changing, eternally flooding back, with tremendous years of recurrence, with an ebb and a flood of its forms; out of the simplest forms striving toward the most complex, out of the stillest, most rigid, coldest forms toward the hottest, most turbulent, most self-contradictory [. . .] as a becoming that knows no satiety, no disgust, no weariness; this my Dionysian world of the eternally self-creating, the eternally self-destroying [. . .]

This world is the will to power---and nothing besides! And you yourselves are also this will to power---and nothing besides! (550)
Alphonso Lingis’s essay, “The Will to Power,” elaborates on the decisively anti-metaphysical nature of the will to power.

It is not an essence; it is neither structure, telos, nor meaning, but continual sublation of all telos, transgression of all ends, production of all concordant and contradictory meanings, interpretations, valuations. It is the chaos, the primal fund of the unformed---not matter, but force beneath the cosmos, which precedes the forms and makes them possible as well as transitory . . . Will to power can function neither as the reason that accounts for the order of essences, nor as the foundation that sustains them in being [ . . . ] The will to power is an abyss (Abgrund), the groundless chaos beneath all the grounds, all the foundations, and it leaves the whole order of essences groundless. (Lingis 38)

Michel Haar, in “Nietzsche and Metaphysical Language,” describes the will to power in terms of a primordial generator of forces, energies, and impulses.

Every force, every energy, whatever it may be, is will to power---In the organic world (impulses, instincts, needs), in the psychological and moral worlds (desires, motivations, ideas), and in the inorganic world itself---inasmuch as life is just a special case of the will to power. (Haar 10)

The dynamics of Nietzsche’s will to power brings forth radical ontological consequences for the way persons and things are to be conceived. For Nietzsche, the self as a unitary concept is a metaphysical fiction; what exists is the body as a multitude not of atoms, but of forces: a chaos in the midst of which arises a dominating force that comes to command, to impose perspective. We are a multiplicity of impulses that have provided themselves with an arbitrarily
coherent and substantial center. From the Dionysian perspective, the individual
does not have a free will and is thus not responsible for his actions. He is rather a
piece of fate, a pawn in the world-game that is the self-creation and self-
destruction of Dionysus, of the eternal struggle of the will to power with itself.

Epistemologically speaking, no facts exist, only interpretations. Persons,
selves, egos have no foundation; only masks and masks of masks exist. A being
has not one form, but different forms; it has not one telos, but as many as there
are powers orienting it; it has not one essence, but multiple essences, not one
meaning behind it, but multiple apparent meanings. There is no essence to be
sought behind the appearances, no telos behind the differentiation of the
appearances (Lingis 42). In short, engaging in a metaphysical description of
existence is an act of sheer vanity.

But how could we reproach or praise the universe? Let us beware of
attributing to it heartlessness and unreason or their opposites: it is
neither perfect nor beautiful, nor noble, nor does it wish to become
any of these things; it does not by any means strive to imitate man.
None of our aesthetic and moral judgments apply to it. Nor does it
have any instinct for self-preservation or any other instinct; and it
does not observe any laws either. Let us beware of saying that there
are laws in nature. There are only necessities: there is nobody who
commands, nobody who obeys, nobody who trespasses. Once you
know that there are no purposes, you also know that there is no
accident; for it is only beside a world of purposes that the word
"accident" has meaning [. . .] The total character of the world,
however, is in all eternity chaos, in the sense not of a lack of necessity
but of a lack of order, arrangement, form, beauty, wisdom, and

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whatever other names there are for our aesthetic anthropomorphisms. (*The Gay Science* 168)

Despite the radical ontological and epistemological anarchy emerging from these passages, culture finds a way to evolve. For Nietzsche, this evolution is predicated on a series of errors that have become ingrained in the fabric of the western psyche.

Over immense periods of time, the intellect produced nothing but errors. A few of these proved to be useful and helped to preserve the species: those who hit upon or inherited these had better luck in their struggle for themselves and their progeny. Such erroneous articles of faith, which were continually inherited, until they became almost part of the basic endowment of the species, include the following: that there are enduring things; that there are equal things; that there are things, substances, bodies; that a thing is what it appears to be; that our will is free; that what is good for me is also good in itself. It was only very late that such propositions were denied and doubted; it was only very late that truth emerged, as the weakest form of knowledge. . . Thus the strength of knowledge does not depend on its degree of truth but on its age, on the degree to which it has been incorporated, on its character as a condition of life. (*The Gay Science* 169)

Nearly a century before Richard Dawkins, Nietzsche was theorizing about “articles of faith” that today would be considered memes. Nietzsche asserted that human knowledge, at any given point in time, is a dynamic composite of “errors” that are conducive to the species’ survival. Paradoxically, the greatest error of them all is also the most indispensable: “truth is that kind of error without which a certain species of life could not live” (*The Will to Power* 272). According to
Michel Haar, we have no other choice but to construct a philosophical scaffolding that keeps us hovering above the abyss.

We are forced to believe in a logic in order to bring things under our control. To deduce logic from the will to power means to relate it to needs and desires: the desire for stability introducing simplicity, order, identity; the need for prediction inventing the categories of causality and finality, which in turn make possible various systems of repetition and the consequent foreseeability of phenomena. The logic rests upon a useful and necessary falsification, being born of the vital need to lean upon identities despite the fact that nothing real is reducible either to unity or to identity. (Haar 17)

As if the existential dilemma brought on by the will to power were not grave enough, Nietzsche’s doctrine of the eternal recurrence holds that man is fated to engage in metaphysical futility for all time.

**Eternal Recurrence: “That everything recurs is the closest approximation of a world of becoming to a world of being”**¹¹

Let us think this thought in its most terrible form: existence as it is, without meaning or aim, yet recurring inevitably without any finale of nothingness: “the eternal recurrence” […] This is the most extreme form of nihilism: the nothing (the “meaningless”), eternally! (The Will to Power 35-36)

The greatest weight— What, if some day or night the daemon were to steal after you into your loneliest loneliness and say to you: “this life as you now live it and have lived it, you will have to live once more and innumerable times more; and there will be nothing new in it, but every pain and every joy and every thought and sigh and everything unutterably small or great in your life will have to return to you, all
in the same succession and sequence--- even this spider and this moonlight between the trees, and even this moment and I myself.
The eternal hour-glass of existence is turned upside down again and again, and you with it, speck of dust!” (The Gay Science 273)

Nietzsche’s ontological doctrine of eternal recurrence offers an interpretation of the world that uses the category of recurrence in the same way that the doctrines of Heraclitus and Parmenides use the categories of becoming and being, respectively. Each philosopher posits that their concept is the one and only concept that accurately describes reality as a whole.

As a classical philologist, Nietzsche was strongly inclined towards the ideas of the early Greek thinkers. He considered the dispute between Heraclitus and Parmenides regarding becoming versus being as the most important event in the history of early Greek thought.

The doctrine of becoming, supported by Heraclitus, claims that the world is wholly a world of becoming: nothing is permanent. There is no being, and therefore no lasting stability in this world, only a continual and endless flux of phenomena. Conversely, the doctrine of being, advocated by Parmenides, holds that only what has being is real. It denies any reality to becoming and regards all coming to be and passing away as no more than a mere semblance or illusion.

For the most part, Nietzsche sides with Heraclitus, favoring the doctrine of becoming and arguing that being is a concept to which nothing in the real world corresponds. It seems, however, that Nietzsche’s eternal recurrence is not so much a particular kind of becoming, but rather an independent category in its own right. In Nietzsche’s ontology, the will to power plays a role in the dynamics of eternal recurrence. The supreme will to power, Nietzsche contends, can and does “impose upon becoming the character of being” (The Will to Power 330).

One can gather from Nietzsche’s writings that different ways to approach
the doctrine of eternal recurrence exist. In his essay “Three Interpretations of Eternal Recurrence,” Robin Small describes how students and scholars have fastened upon different key passages in order to establish and defend certain favored interpretations (91).

One common reading is based upon texts which suggest that the doctrine is a statement about the character of the world as a whole. As such, it says that everything that occurs does so not only once but infinitely many times, and in exactly the same way. Another important interpretation of the doctrine treats eternal recurrence not as a cosmological theory but as an ethical principle (Small 92). From this point of view, Nietzsche offers a standard by which we can assess the worth of our actions or experiences. He wants to ask whether we would be willing to repeat any part of our life in just the same way not just once but infinitely many times. Interpreters claim that Nietzsche goes as far as to make this an imperative: one ought to live only in a way that meets this test, in a way that one would be willing to live again time after time. The idea of the eternal recurrence in Nietzsche’s view is a hammer which tests the strength of humanity and separates the weak from the strong. It will reinforce the strong by driving them to affirm themselves even more, while in contrast, it will crush the weak by driving them to want to negate themselves even more forcefully. Only those who are strong, only those who consider their existence as worth being infinitely repeated, will be able to bear the thought of eternal recurrence.

Self-Overcoming: from the “last man” to the Übermensch

Faced with daunting task of coping with nihilism, the will to power, and eternal recurrence, man can choose from one of three paths. Either he chooses the passive nihilism of the “last man,” the active nihilism of a character like Turgenev’s Bazarov, or the path of self-overcoming associated with the übermensch. For Nietzsche, the “last man” represents extreme weakness, a man
frozen in his sense of complacency and reduced to the level of a “herd animal.”

Here we have the experience of a will satisfied with meaninglessness, with nonsense, a will happy that there is no longer any sense or any meaning to look for, a will having found a certain comfort in the total absence of meaning and a certain happiness in the certainty that there is no answer to the question “why?” (Haar 13)

The active nihilist, or Faustian nihilist (as Spengler describes him), is not content to wallow in the mire of dead values and bankrupt ideals. Like Bazarov in Fathers and Sons, the active nihilist would rather shatter the metaphysical edifice than slowly watch it crumble. For the active nihilist, all social institutions are corrupt and only universal destruction can make a decent future possible. What this universal negation will produce, however, is not clear. Ultimately, the active nihilist cannot go beyond the spirit of negation; he remains trapped in a position where he cannot create and affirm a new value system.

The idea of the Übermensch seems to correspond to the possibility of an ecstatic break from humanity. The Übermensch stands out as that type of living being who finally cuts himself loose from all the ties that bind him to what Nietzsche viewed as the moribund conglomeration of metaphysical and Christian values.

The Übermensch himself furnishes the law of action, which is therefore an individual law beyond traditional morality. Traditional morality serves to keep the ordinary person in check, but can only stand in the way of an Übermensch [ . . . ] Although he may join in the game we call morality for a specified period of time, he does so with loose restrictions. For him there are no categorical imperatives, which strike a weak subject’s conscience like lightning, but only rules that
serve the art of life. (Safranski 265-266)

The Übermensch concept evolved over the span of Nietzsche’s productive life. As early as the essay “Schopenhauer as Educator” in Unmodern Observations (1872-1874), Nietzsche preached a philosophy intent on going beyond the constraints of conventional definitions of self: “For your true nature does not lie hidden deep inside you but immeasurably high above you, or at least above that which you customarily consider to be your ego” (166).

In “Schopenhauer as Educator” and The Birth of Tragedy (1872), Nietzsche’s embryonic version of the Übermensch bears a strong resemblance to the Schopenhauerian “half-saint/half-genius” of The World as Will and Representation.

For Nietzsche, the genius and the saint were the “peak of rapture” of the world. They were ascetics, ecstastics, and intelligent and creative people, but they were not Cesare Borgia types. They were not heroes of vitality or bastions of strength, nor were they athletes of amorality. (Safranski 264)

Despite taking great pains to distance himself and his work from much of Darwinian thought, Nietzsche was unable to extricate himself entirely from the implications of evolutionary theory (Safranski 261).

Nietzsche retained two basic Darwinian ideas: the theory of development in the specific arena of the theory of evolution, and the idea of the struggle for existence as a driving force in evolutionary development. Of course, he interpreted the struggle for existence not as a fight to survive, but as a fight to overpower. (Safranski 266)

Beginning with the fifth book of The Gay Science (1882), the idealistic, Schopenhauerian genius of the early Nietzsche matures and hardens into an amoral bastion of strength, “the ideal of a spirit who plays naively [. . .] with all
that was hitherto called holy, good,untouchable, divine” (347).

By the time On the Genealogy of Morals is complete (1887), the Übermensch concept has evolved into something much darker, a far cry from the self-denying ascetic of earlier works. Once the so-called “good men” step “outside” the thin veneer of civilization, “where the strange, the stranger is found, they are not much better than uncaged beasts of prey” (Basic Writings of Nietzsche 476).

[. . .] they go back to the innocent conscience of the beast of prey, as triumphant monsters who perhaps emerge from a disgusting procession of murder, arson, rape, and torture, exhilarated and undisturbed of soul, as if it were no more than a student’s prank, convinced they have provided the poets with a lot more material for song and praise. One cannot fail to see at the bottom of all these noble races the beast of prey, the splendid blond beast trolling about avidly in search of spoil and victory; this hidden core needs to erupt from time to time, the animal has to get out again and go back to the wilderness: the Roman, Arabian, Germanic, Japanese nobility, the Homeric heroes, the Scandinavian Vikings---they all shared this need. (Basic Writings of Nietzsche 476-477)

Nietzsche chose these primal, violent images of man overwhelming the tenuous bonds of civilization to call attention to vital forces lying dormant in the psyche of modern man. The Übermensch is in touch with these forces without being compelled by them. The aim of the Übermensch is not senseless violence, but rather self-transcendence. Ultimately, existence involves going “beyond good and evil” to a plane where the Übermensch abides only by the rules he has set for himself.

The Übermensch is only possible once the transmutation of values is accomplished. By its very nature, this transmutation presupposes a radical
transformation at the core of the will to power, a transformation in which weakness and negation are once and for all eliminated. Art will henceforth be acknowledged as the highest value because it best corresponds to the essence of the will to power.

Nietzsche has called art “the highest task and the authentically metaphysical activity” because art is the “great stimulus of life”: art drives the creator on to overcome himself, art enlarges the world by returning it to its originally explosive and chaotic character. (Haar 27)

Nietzsche’s nexus of ideas (will to power, eternal recurrence, and the Übermensch) would leave an indelible mark on both the modernist and postmodernist periods. Modernist avant-garde movements, like Italian Futurism, writers ranging from D.H. Lawrence to Andre Gide, and philosophers like Martin Heidegger drew material and inspiration from Nietzsche’s work. In the latter half of the twentieth century, French postmodern/post-structural theorists, like Derrida, Foucault, and Deleuze and Guattari, would launch their theories from a platform constituted to a significant degree by Nietzsche’s œuvre.

Nietzsche’s influence extended beyond the domains of literature and philosophy. The work of Oswald Spengler represents one such example that is relevant to the ideas being presented here. In the introduction to The Decline of the West, Spengler acknowledges a debt to Goethe and Nietzsche even though he regards himself as correcting certain shortcomings he sees in Nietzsche’s philosophy.

In The Decline of the West, Spengler incorporates several fundamental Nietzschean themes: epistemological relativism, decadence, the transmutation of all values, the will to power, the adulation of great men, and amor fati. Inspired by Nietzsche’s perspectivism, Spengler denies that such things as absolute truth
and standards of cultural value exist. As a polymath who studied a number of different cultures, Spengler arrived at the conclusion that history reveals no transcendental meaning.

He stood in sharp contrast to Nietzsche with regards to the individual, who Spengler envisioned as being subjected to transcendent historical forces rather than as capable of self-mastery. Whereas Nietzsche strove to reinvigorate the decadent West with his values of self-overcoming, Spengler dismissed Nietzsche’s more “utopian” vision of the Übermensch. Spengler brought the tradition of German cultural pessimism to a cataclysmic conclusion. He gave Nietzsche’s philosophy what it lacked most, a grand historical-philosophical perspective and systematization, without giving in to Nietzsche’s vision of a better future. Ultimately, Spengler brings into full relief the catastrophic qualities of the will to power as a force in world history.

**Oswald Spengler: The Decline of the West**

Several decades before memeticists began explaining cultural phenomena as quasi-biological entities, Oswald Spengler was formulating his theory of history, whose recurrent theme was that cultures [embodying forms of government, religions, arts, sciences] are living organisms in their own right. A culture blossoms from the soil of an exactly definable landscape and dies when it has exhausted all its possibilities (*The Decline of the West* xix). The stages in between correspond to the childhood, youth, manhood, and old age of the individual man. For Spengler, "organic" cultures evolve in a manner that parallels the cyclical changing of the seasons.

Strong religious faith characterizes the "springtime" of a culture. "Summer" is a period of great creativity, as religion gives way to increasing intellectuality and materialism. During "autumn," a culture’s life becomes dominated by materialism and by purely rational thought. Finally, a culture’s
life-cycle ends when it reaches the "grey dawn of Civilization."

Spengler defines the living existence of a culture as "an inner passionate struggle to maintain the Idea against the powers of Chaos without and the unconscious muttering deep down within" (73). It comes as no surprise that the second law of thermodynamics played a prominent role in Spengler's theory. For Spengler, the "discovery" of entropy marked the beginning of the end of classical dynamics, which was symptomatic of the still larger decline of western culture.

Entropy introduced fundamental disorder and temporal irreversibility to a European worldview that had been dominated by immutable laws and timeless causality. One of the ramifications of entropy theory was that the west had now entered a historical period where the certainties of classical mechanics had given way to a world that could now only be understood in terms of probabilities.

Spengler believed that the crisis in physics represented the most conspicuous symbol of a larger scale Götterdämmerung taking place in the west. In keeping with his overall theory, Spengler posited that each culture experiences collapse in its own way, producing a distinctive nihilism that is consistent with the culture's constitution.

In each case, the ideals of yesterday, the religious and artistic and political forms that have grown up through the centuries, are discarded; yet even in this last act, this self-repudiation, each Culture employs the prime symbol of its whole existence. The Faustian nihilist---Ibsen or Nietzsche, Marx or Wagner---shatters the ideals. The Apollinian---Epicurus or Antisthenes or Zeno---watches them crumble before his eyes. And the Indian withdraws from their presence into himself. (184)
As a modernist, Spengler maintains that there is an essence, a distinctive cultural signature that marks the birth, life, and death of a culture. He foreshadows what memetics will address in the late 20th century: the evolution of cultural aggregates [memeplexes] that enjoy periods of great replicative success followed by inevitable decline.

As nihilism was making inroads in nineteenth-century European intellectual circles (like the German idealists and the Russian intelligentsia), developments in the sciences raised some serious doubts about the validity of the predictable, clockwork Newtonian universe. While chaos theory was still a century away, the emergence of the second law of thermodynamics, Darwin’s theory of evolution by means of natural selection, and quantum mechanics foreshadowed the coming of a scientific worldview that would make disorder, chance, and uncertainty operative words in the description of the universe.

**Entropy in the Nineteenth and Early Twentieth Centuries**

Entropy occupies a special place in this study for various reasons, not the least of which is the impact that the concept of entropy had on thinkers and writers of the late nineteenth and twentieth centuries, from Oswald Spengler to Thomas Pynchon.

In 1850, Rudolf Clausius became famous when he formulated the second law of thermodynamics, which maintains that the entropy of the universe tends toward a maximum. To Clausius, entropy was linked to the inevitable degradation of heat which occurs in any heat exchange: *heat flows naturally from hot to cold, but not the other way around*. For the early thermodynamicists, entropy signified the measure of the heat lost for useful purposes.

The second Law of thermodynamics is different from most other laws of physics in the sense that it is a probabilistic law: it is more probable for energy to lose its quality than to regain it. What do we mean by energy’s "quality"? The
most fruitful early interpretation of entropy was that entropy measures the
degree to which a system’s heat energy is unavailable for doing work. Therefore,
increases in entropy detract from a system’s “quality” of energy.

The implications of the second law were made explicit in 1852 by William
Thomson, Lord Kelvin. To Kelvin and his fellow thermodynamicists, entropy
represented the tendency of the universe to run down, despite the best efforts of
British rectitude to prevent it from doing so. Kelvin concluded that a universal
tendency exists in nature that leads to the dissipation of mechanical energy; he
dubbed his hypothesis the “law of dissipation of energy.” In Kelvin’s prose, the
rhetoric of British imperialism confronted the inevitability of failure embodied by
entropy. In this context, entropy represented an apparently inescapable limit on
the human will to control.

The concept of dissipation resonated with prevailing religious beliefs. If
the first law of thermodynamics was evidence of the permanence of the Creator,
Kelvin saw the second one as a reminder of the transience of His creations.
Kelvin thought that the same power who created the sun, the earth, life, and
human beings also directed that they should eventually disintegrate into
entropic oblivion.

Since degradation represents an accessible and understandable idea, the
principle of energy dissipation captured the public’s attention. The immediate
provocation of this interest was the arrival of the end of the century, which
triggered a wave of apocalyptic hysteria. In the 1890s, this frenzy expressed itself
in a preoccupation with the heat death of the universe.

In Chaos Bound, N. Katherine Hayles argues that Ludwig Boltzmann’s
work (1909) was largely responsible for the modern interpretation of entropy.
Boltzmann built his interpretation on the work of the Scottish physicist James
Clerk Maxwell. Boltzmann studied Maxwell’s papers and used his statistical
methods to arrive at a new and more general treatment of entropy, based on probability and probability alone.

According to this new understanding in the mid-nineteenth century, entropy is an increase of disorder among particles. The more mixed up or randomized the final state, the more probable it is, because more configurations lead to it. The state of maximum entropy is the state of equilibrium. Chaos is the easiest, most probable, and thus, most predictable state and it lasts nearly indefinitely due to its being the most probable. Order is improbable and hard to create as there are many more ways of creating disorder than those of creating order. Conventional physics suggests that time is order's enemy, as entropy tends to increase with time. Orderly energy can do work, but in the very process of working, it decays into disorderly energy.

Implicit in Boltzmann's version of the entropy principle is the insight that what human observers can know about a system undergoing an energy transformation is limited. When a system is orderly, and therefore improbable, and when it is low in entropy and rich in structure on the macroscopic scale, more can be known about that system than when it is disorderly and high in entropy.

Boltzmann showed that human beings cannot know how each individual molecule behaves on average. However, as the system becomes more disorderly and its entropy increases, even this limited knowledge disappears. In Grammatical Man, Jeremy Campbell notes that the relationship between increase of entropy and decrease of knowledge was not made explicit until many years later (44).

Another way of looking at the second Law of thermodynamics is to say that the higher the entropy, the more numerous are the possible ways in which the various parts of the system may be arranged. Given a large number of
possible configurations and a state of high entropy, it is improbable that they will be found in any one specific arrangement at a particular instant. A muddle is more probable than an arbitrary "order" because more, usually many more, ways exist in which a muddle can be created than there are ways in which an orderly structure is formed.

Boltzmann remarked that the higher the entropy, the less information we can have about the microcosm, the constituent parts of matter (Campbell 46-47). A high entropy means a lack of information and results in predictive uncertainty. In a thermodynamic system, high entropy means lack of information about the internal structure and a loss of capacity to harness energy for a useful purpose.

Entropy is also an irreversible process. It does not decrease unless some extra source of energy intervenes to maintain or reestablish a higher degree of order. Entropy is, thus, a physical index of the one-way, irreversible flow of time. An observer can distinguish earlier from later by measuring the increase in entropy. However, the statistical nature of entropy affects the knowledge we can have about the past and the future. In Newton's macroscopic scheme, perfect information is assured backward and forward in time. Knowing where an object is now, at this moment, knowing how fast it is moving and in which direction, enables an observer to predict where it will be at any given time in the future. What is more, one can retrodict and say where it has been in the past.

In thermodynamics, where scientists deal in probability, no such perfect information is available. In terms of what an observer can know about a system (molecules in a gas, for example), a particle does not follow a continuous, single track through space, but may follow a number of possible tracks. One may predict where the particle will probably be at some moment in the future, but it is another matter altogether to say even where it probably was at some moment in the past.
The introduction of entropy into nineteenth and twentieth century consciousness facilitated the spread of ideas concerning nihilism and chaos. The specter of a heat-death universe haunted a generation of physicists and intellectuals. With the universe running down toward maximum disorder, of what enduring value are abstract, idealistic philosophical systems? They, too, will crumble before the inexorable march of entropy. Chaos, not order, is in keeping with the ways of nature.

A second, no-less-important phase in the history of entropy was still to come. Following the World War II, entropy underwent yet another transformation when it was linked to the theory of information. The work of Brillouin, Shannon, Szilard, and Wiener will be examined further in chapter three, where the relationship between thermodynamics and information theory will be further explored.

Evolution by Means of Natural Selection

With the publication of *On the Origin of Species by Means of Natural Selection*, Charles Darwin vaulted evolution to a prominent, albeit controversial, place in late nineteenth and twentieth century consciousness. The repercussions of Darwin's theory, like entropy in the second law of thermodynamics, caught the attention of the literati. From literary naturalism to the "social Darwinism" of Herbert Spencer, intellectuals sought to interpret and express the significance of evolutionary theory. In many instances, conclusions drawn from Darwinian evolution led to an increasingly nihilistic view of life, void of purpose, filled with chaos.

To engage in a lengthy exposition on evolution by natural selection would go beyond the scope of this study. A brief overview will serve our purposes. Evolution occurs because genetically unique individuals tend to leave different numbers of offspring to grow, mature, and reproduce in the subsequent
generation. As this process is repeated from generation to generation, change occurs in the genetic composition of the population.

Natural selection specifies one way in which genetic change may occur; it represents Darwin's chief contribution to our understanding of evolution. The process of natural selection leads to the evolution of adaptation in species. Those individuals and species which are best suited to struggle and compete for vital resources, in an environment characterized by random climate change, chance genetic mutation, predation, et al., survive and reproduce, passing their genetic endowment on to the next generation. It bears emphasis that natural selection runs contrary to any teleological theory, despite anthropocentric attempts to situate mankind and its faculties as the pinnacle of cosmic existence.

While Nietzsche may have uttered, "God is dead," Darwin developed a theoretical framework to explain life processes that have no use for God. Darwin's theory could account for biological adaptation and change without resorting to divine purpose. In the absence of an ultimate telos, the universe, life, and man are all products of an impersonal, aleatory interaction of matter and energy over huge expanses of time. The emphasis resides in the accidental nature of it all. Consequently, no firm basis exists for asserting the cosmos or human existence has any inherent meaning.

Furthermore, if living organisms survived only on the basis of blind, mindless natural selection, then it follows that human reason is also the product of natural selection. As such, the conclusions of human reason could never be known to be true, but only valuable in accord with their contribution to the survival of the human species. Truth could only be defined as what works on behalf of individual and species survival. In the Darwinian worldview, survival value supplanted the privileged position of universal truth.

In a universe in which all things are produced by chance, any meaningful
concept of ethics or idea concerning free will would perish as well. From an evolutionary perspective, mankind does not independently act upon the environment. Culture, which is determined by the natural environment, and heredity, which is dictated by natural selection, program human beings on how to feel, what to think, and how to react to the world and the people around them. If evolution is true, can the seemingly "free" actions of individual human beings be significantly different from mere randomness, as in the random actions of individual atomic particles?

These darker reflections on the implications of evolution by natural selection, along with the equally sobering conclusions of the second law of thermodynamics, were mid-to-late nineteenth century developments that facilitated the emergence of nihilism and chaos in the intellectual discourse. Subsequently, the development of quantum mechanics would continue the assault on western epistemological foundations, shaking western culture’s confidence in reason to an unprecedented degree.

**Quantum Mechanics**

The rise of quantum mechanics in the early twentieth century, like entropy and evolution before it, ushered in a turbulent period of intellectual controversy, debate, and speculation as to what its implications were for man and the cosmos. After nearly three centuries of unprecedented success and progress using Newtonian, or classical, mechanics, physicists of the early twentieth century found out, to their astonishment, that the world of the infinitesimal escapes classical description and formulation. The fibers that make up the fabric of reality play by a different set of rules, rules that differ from those of classical mechanics.

A lengthy digression into the history and science of quantum mechanics would also go beyond the scope of this essay. The aims of this project would be better served by contrasting classical mechanics with quantum mechanics,
highlighting the dramatic repercussions in the process.

In classical mechanics, the state of a system at any one time is completely specified by giving the precise position and momentum of each of its constituent particles. This state fixes the precise values of all other dynamical quantities, like the system’s kinetic energy. The state typically changes as the system is acted on by various forces. The theory specifies how it changes by means of equations of motion. At least in the case of simple isolated systems, the solutions to these equations uniquely specify the state of a system at all later times, given both its initial state and the forces acting on it. In this sense, the theory is deterministic: the future behavior of the system is uniquely determined by its present state. An ideal observation of a system’s state would then not only reveal the precise position and momentum of each of the constituent particles at one time, but also permit prediction of its exact future state, given the forces that will act on it, and setting aside computational difficulties.

Although it uses almost the same dynamical quantities, quantum mechanics does not describe the system’s elements to which it applies (such as an electron). Instead, the state of an isolated system at any time is represented by an abstract mathematical object called a wave function. A single electron, for example, may be represented by a wave function that assigns a number to each region in which it may be found: the bigger the number, the greater the chance of finding it there. A collection of wave functions, each representing a different state a system can be in at a given time, can be simply added together to give a new wave function.

As long as a system neither interacts with other systems nor is observed, its wave function changes in a way that is uniquely determined by its initial wave function. However, the wave function specifies only the probability that measuring any dynamical quantity would yield a particular result. No attempt to
establish a system’s initial state by measuring dynamical quantities can provide more information than can be represented by a wave function. It follows that no measurement, or even theoretical specification, of the present state of a system suffices within the theory to fix the value that would be revealed in a later measurement of an arbitrary dynamic quantity. In this sense, quantum theory is indeterministic.

The formalism of quantum mechanics supplies no starting point whatsoever for the description of the individual event; quantum mechanics only makes predictions with respect to the ensemble of many individual events. Thus, it appears that quantum mechanics is not able to explain why specific individual events happen. This impossibility to predict the individual event, not even in principle, appears very early in the course of development of quantum mechanics.

According to the Copenhagen interpretation of quantum mechanics, it is neither possible nor reasonable to search for properties of the constituents of a quantum system as such. Since we can only communicate what we have found by using our quantum language, questions concerning properties of systems only make sense, strictly speaking, as questions about statistical properties of aggregates. So even here, the experience of reality has a fundamental border, clearly a limitation to a complete knowledge of the world. Quantum mechanics then appears to be a theory not of an objective world of individual particles, but merely of our observations of an aggregate’s behavior. If an objective world lies behind these observations, then quantum mechanics seems notably unsuccessful in describing and understanding it.

Like the two scientific developments which preceded it in this chapter (entropy and evolution), quantum mechanics amounted to a severe blow to the intellectual and spiritual pride of modern western man. Taken collectively,
modernist writers could glean the following from these scientific advances: 1) we are moving inexorably toward maximum disorder; 2) we struggle to survive in an impersonal environment whose criteria for survival are subject to chance; and 3) our most reliable tool in making sense and meaning of the world, our reason, has been proven to have significant limitations. Combined with the nihilistic contributions of Schopenhauer, Dostoevsky, Nietzsche, et al., these ideas helped form the sociocultural matrix that enveloped the likes of Joyce and other Modernists, providing them with the memetic material they would use in their respective novels.

Chapter three will engage in an exploration of the postmodernist sociocultural matrix. A central feature of this matrix involves what Karen Carr refers to as the “banalization” of nihilism. For many postmodern thinkers and literati, Nietzsche’s “God is Dead” has lost its shock value. Rather than linger in an existential quagmire, postmodernists like Derrida, Baudrillard, and Deleuze and Guattari focus on the ramifications of nihilism with regard to language, images, and desire.

In the realm of the postmodern sciences, chapter three will concentrate on three critical events: 1) Entropy escapes the confines of physics and acquires new significance in the realm of information theory; 2) Chaos becomes a full-fledged area of scientific investigation and serves as the launchpad for the study of complexity and self-organization; 3) Orthodox Darwinism is challenged (Stephen Jay Gould) and defended (Richard Dawkins) in a publicized tête-à-tête that makes “selfish genes” and “punctuated equilibria” household words in Western intellectual circles. As was the case with modernism, ideas from science and philosophy form a potent mélange that helps to shape the sociocultural matrix. Postmodern writers like Beckett and Pynchon have access to both the modernist and postmodernist sociocultural matrices and often juxtapose elements of both
matrices in their novels. Whether it’s Beckett’s “trilogy” or Pynchon’s *Gravity’s Rainbow*, both novelists make extensive use of the “modern versus postmodern” theme.
CHAPTER THREE:
ELEMENTS OF THE POSTMODERNIST SOCIOCULTURAL MATRIX:
THE BANALIZATION OF NIHILISM AND FORMALIZATION OF CHAOS

Man is no longer, like the animal, the plaything of Nothingness, but Nothingness is itself his plaything---he ruins himself in it, but illuminates its darkness with his laughter, which he reaches only when intoxicated with the very void which kills him. (Bataille 92)

[...] the last century has seen the gradual dissolution of the pathos of nihilism---a dissolution abetted by the existentialist appropriation of it as revelatory of the character of human existence itself---into the bathos of nihilism in the contemporary scene. (Carr 131)

Characterizing it as a disease that was pathological in its intensity, Nietzsche thought that nihilism had within it the possibility of redemption from a Christian-Platonic interpretation of life that was both hypocritical and debilitating. Central to Nietzsche’s portrayal of nihilism was his conviction that it was a major crisis in the history of European culture, a turning point that would signify either the beginning of our demise or the starting point of a new way of being in the world (Carr 9). In Nietzsche’s view, nihilism was to be a temporary phenomenon, linked to a particular set of intellectual developments---the forces leading up to the self-dissolution of the Christian-Platonic worldview. Nietzsche
envisioned that eventually a transvaluation of values would emerge along with new beliefs.

In the aftermath of existentialism, Western intellectuals in the last forty years have witnessed a recasting of the problem of nihilism into a framework significantly different from that conceived by Nietzsche. This new framework, with its corresponding attitude towards nihilism, is best seen in the works of deconstructionists (chiefly Derrida) and other postmodernists (Baudrillard, Deleuze and Guattari). During the poststructuralist period, the appraisal of nihilism has shifted away from something which we must escape to something which is perceived as a relatively innocuous dimension of contemporary life. Postmodern nihilism does not generate anxiety or distress, or the need for heightened strength and increased vigor; one need only embrace the ramifications of Derridean *play* and Baudrillardian *simulacra*.

Paradoxically, the potential bad news is that this “liberating” transformation in our collective, cultural approach to nihilism reifies essentially the present values, beliefs, and judgments of the postmodern historical community into seemingly absolute truths, albeit unintentionally and unconsciously. “There is nothing outside of the text” and other such postmodern dicta reject absolutely the possibility of any transcendental, trans-cultural, or trans-historical access to truth or meaning. Many ethical, religious, and/or political positions are dismissed by postmodernists on the grounds that these ideas make untenable truth claims or appeal to some false foundation, like presence. Due to the unique unfolding of events in the postmodern period, we have witnessed the emergence of a relativistic maelstrom that has entrenched itself in such a way that we assert our claims and values at the risk of being labeled “dogmatic.”
Derridean traces and the dynamics of différance

The critique initiated by Nietzsche and carried on by Derrida proved to be fatal to totalizing, logocentric systems. Nietzsche assailed the metaphysics of being, arguing instead for a world of infinite becoming characterized by endless possibilities for interpretation. Similarly, Derrida seeks to undermine what he takes to be the decisive presumption of philosophical discourse in the West: the conviction that some fundamental ground, some “transcendental signified” is the goal of any system of signs. Derrida broke with structuralism and Saussurean linguistics, rejecting the possibility of arriving at general laws that govern all discourses or formal universals that reflect the nature of human knowledge.

Saussure stated that no necessary link exists between the signified and the signifier; the signifier is only connected to the signified in an arbitrary and conventional way (McQuillan 16). For Saussure, the relation between signifiers is differential (constituted by difference), while the relation between signified and signifier is stable (McQuillan 17). Saussurean linguistics maintains that the concept is fixed as the signified and has priority over its arbitrary and conventional mode of expression as a signifier. Derrida’s critique of the metaphysics of presence challenges Saussure on this very issue.

For Derrida, the signified concept is never present in and of itself but is inscribed in a system within which it refers to other concepts by means of the systematic play of differences and deferrals. Derrida's neologism, différance, describes the virtual, liminal dynamic that delocalizes meaning and presence and makes difference itself possible. Différance has no immutable essence. It is not fixed, but constantly defers the moment of presence and its final knowability.
Différance is the source of all difference, but it is not an origin in the traditional theological sense because it is not fixed (it is never entirely knowable or identifiable as a single point of authority because the moment we think we have it pinned down it is no longer différance but its logocentric inscription) . . . it can never be reached but is instead constantly deferred, always just out of reach.

(McQuillan 18)

Derrida posits that the concept is only meaningful through its expression as a signifier; because the signifier is arbitrary and conventional, the concept itself is unstable. In the eyes of Derrida, the instability of the Sausurrean signifier/signified ➔ sign is a product of différance. No fixed distinction between signifiers and signifieds exists because the structure of the sign is determined by what Derrida calls traces. Neither simply present nor simply absent, the trace occupies a liminal space. The trace is what loosely binds any system of signs, so that at any one moment, a given sign works by referring to other signs not now present. The relay of differences between signifiers depends upon a structural undecidability, a play of presence and absence at the origin of meaning (Collins and Mayblin 70). In Speech and Phenomena, Derrida elaborates:

The trace is not a presence but is rather the simulacrum of a presence that dislocates, displaces, and refers beyond itself. The trace has, properly speaking, no place, for effacement belongs to the very structure of the trace. Effacement must always be able to overtake the trace; otherwise it would not be a trace but an indestructible and monumental substance. In addition, and from the start, effacement constitutes it as a trace—effacement establishes the trace in a change of place and makes it disappear in
its appearing, makes it issue forth from itself in its very position.

(156)

The play of the trace is a kind of deforming, reforming slippage which gives rise to an instability that language cannot escape. For Derrida, full, replete presence is impossible because of the trace’s constant sliding between presence and absence. The sign must be studied "under erasure," always already inhabited by the trace of another sign which never appears as such (Sarup 34). The semantic flux produced by *différance* and *traces* represents a defining symptom of the language virus that William Burroughs (chapter 4) and Derrida explore in their respective works.

*Derrida*: The virus is in part a parasite that destroys, that introduces disorder into communication... it derails a mechanism of the communicational type, its coding and decoding. (Brunette and Wills, Deconstruction and the Visual Arts 12)

**Truth as Fiction, Fiction as Truth: Derridean *différance* pervades logocentric systems**

This freewheeling play of signification drastically affects the notion of the "meaning" of any text. *Différance* continually delocalizes meaning along a chain of signifiers; we cannot be precise about its exact position because it is never tied to one particular sign. Meaning will never stay the same from context to context; the signified will be altered by the various chains of signifiers in which it is entangled.

Derrida’s project of deconstruction, while not a formal, critical analysis of mythology (like the projects of a Frazer or a Levi-Strauss), did attack western philosophy, revealing logocentrism to be a myth inherent in the very fabric of western philosophy. According to Derrida, the history of western thought records the longing for a "transcendental signifier" which would directly
correspond to a secure, stable "transcendental signified" (i.e. a logos), yielding fixed, universal meaning in the process. Throughout his body of work, Derrida deconstructs concepts such as God, Idea/Form, Essence and Truth in his attack on western thought.

Différance precludes the possibility of transcendental signifieds and signifiers. In his "Introduction" to Deconstruction: A Reader, Martin McQuillan elaborates on how différance inhabits the tissues of language and renders it unstable: "différance structures language (or any other system of difference) and makes the idea of structure impossible because structures depend upon a fixed point of origin" (18).

Différance operates according to a logic of supplementarity that enables différance to create differential relations in language while interrupting any simple idea regarding the stability of these relations. For Derrida, the supplement is that which escapes the system and at the same time installs itself within the system to demonstrate the impossibility of the system. Metaphors and metaphorical language put this supplementarity on display.

Metaphor is not a discrete unit of rhetoric but the general condition of language and thus of thought itself because thinking only ever takes place within language. If all thought is metaphorical (and there is no fixed limit to the field of metaphor), then there is no anchor of stable origin for any concept (beauty, fate, war, drugs, etc.), but merely a chain of metaphors constantly referring to other metaphors. (McQuillan 20)

If no point of origin for any concept exists, no metaphysical presence in language, then the linguistic representation of a fundamental, immutable "reality" is impossible. Language, as Derrida conceives it, would amount to an unbounded set of metaphors referring only to one another, a free-for-all of
signifiers playing in the absence of a metaphysical foundation. In short, Derridean deconstruction reinforces the Nietzschean perspectivism that first appeared in the late nineteenth century. By way of différance, the trace, and the supplement, Derrida presents his postmodern audience with ideas that resonate with Nietzsche’s vision of a dynamic, groundless abyss and extend his nihilistic tenor into the realm of literary analysis. As a result, language represents a turbulent mélange of traces and supplements that leads to polysemic discourses and hermeneutic chaos.

**Baudrillard: "God is not dead, He has become hyperreal"**

But what if God himself can be simulated, that is, reduced to the signs which attest to his existence? Then the whole system becomes weightless, it is no longer anything but a gigantic simulacrum — not unreal, but a simulacrum, never again exchanging for what is real, but exchanging in itself, in an uninterrupted circuit without reference or circumference. (*Simulations* 10-11)

As Derrida heralded the new reign of play and the primacy of the trace, Jean Baudrillard examined the evolution of simulacra and the advent of hyperreality. To understand the history of simulacra better, Baudrillard (“The Structural Law of Value and the Order of Simulacra”) presents four different "orders of simulacra" that correspond to mutations in the law of value that regulates the way signs function. Each order has a law (natural, market, structural, fractal), a dominant form (counterfeit, production, simulation, proliferation), and displays certain semiotic features (arbitrariness, seriality, codification, viral metonymy) (Genosko *Baudrillard and Signs* XV).

In the first order, which Baudrillard associates with the medieval or feudal hierarchy, signs are transparent and limited in number. They serve primarily to mark rank and social position, and to designate the social and cosmic values that
fix the social structure in an immutable hierarchy. All appearance [clothing, speech, religious and social iconography] is governed by clarity of signs designating order, rank, and obligation. With the dismantling of the feudal order and the dissolution of the social bond of obligation by the historically emergent bourgeoisie, these fixed and limited signs are emancipated.

Having been detached from the divinely sanctioned cosmic order of feudalism, the sign is first grounded in "nature" and the "natural order." This relationship, according to Baudrillard, is simulated because the emancipated sign is really a counterfeit of the feudal sign of obligation. Because the modern sign finds its value in a simulacrum of "nature," it gives rise to an entire problematic of the "natural," to appearance and reality (“The Structural Law of Value and the Order of Simulacra” 62). Above all, the modern sign inaugurates a new metaphysics that accentuates the bourgeoisie's obsession with the imitation of nature. Baudrillard situates this era in the period that extends from the classical Renaissance to the Industrial Revolution. With the Industrial Revolution, the extermination of reference made possible the machine-driven replication of serial signs. The second order of simulacra emerges with the rise of industrialization and operates according to a production-oriented logic. The "industrial simulacrum" makes its appearance when assembly line production becomes a grounding metaphor for European culture. With the mass production of nearly identical objects by virtually indistinguishable workers, the industrial simulacrum inaugurates a new order of signs---without tradition, origin, or reference. The commodity law of value replaces the natural law of value that had been in effect before the Industrial Revolution.

In the post-Industrial era of simulation, mechanical reproduction gives way to a universal semiotic operating according to the metaphysical models of the cultural code. The era of production with its industrial simulacra slides
inevitably into the era of reproduction and simulation that is dominated by what Baudrillard calls *third-order simulacra*. These semiotic entities play not on the commodity law of value, but on what Baudrillard calls the structural law of value, a code of structured differences and binary oppositions. The signs of this order are simulations of second-order industrial simulacra.

In the era of third order simulation, we no longer find counterfeits of an original [first order simulacra], or identical items in a pure series [second order simulacra], but models that generate forms according to modulations of their differences. The era of simulation is the age of hyperreality, where we witness the simultaneous duplication of the sign and the suspension of its referent. The opposition between appearance and reality has drained away. In his essay, “Baudrillard’s Nihilism and the End of Theory,” Anthony King focuses on the distinguishing features of the hyperreal:

Hyperreality emerges when culture no longer refers to a social reality. Hyperreal culture is not grounded in a reality beyond itself; images float free from any verifying reference, becoming an unanchored "reality." The signifier and the signified become detached, and the signifier effaces the signified. Hyperreality marks the end of representation, because representation becomes reality and, in this, differs profoundly from any previous culture. (94)

**Baudrillard vis-à-vis Nietzsche**

With God reduced to a simulacrum of the divine, Baudrillard’s hyperreality reveals that postmodern nihilism has become transparent and indelible at the same time. From the simulations of Disney World on one extreme to the televised Persian Gulf War on the other, Baudrillard argues that nihilism is neatly woven into the very fabric of post-industrial society.

Nihilism no longer wears the dark, Wagnerian, Spenglerian,
fuliginous colors of the end of the century. It no longer comes from a Weltanschauung of decadence nor from a metaphysical radicality born of the death of God and of all the consequences that must be taken from this death. Today's nihilism is one of transparency, and it is in some sense more radical, more crucial than in its prior and historical forms, because this transparency, this irresolution is indissolubly that of the system, and that of all the theory that still pretends to analyze it. When God died, there was still Nietzsche to say so, the great Nihilist before the Eternal and the cadaver of the Eternal. But before the simulated transparency of all things, before the simulacrum of the materialist or idealist realization of the world in hyperreality (God is not dead, he has become hyperreal), there is no longer a theoretical or critical God to recognize his own. (Simulacra and Simulation 159)

The postmodern world assimilates Nietzsche's declaration of the death of God as simply another semiotic entity in the cultural code, not as the earth-shaking proclamation it had been in the late nineteenth and early twentieth centuries. In the essay “After the Orgy,” Baudrillard sums up the blasé attitude of postmodernity toward the events that led to its emergence.

If I were asked to characterize the present state of affairs, I would describe it as “after the orgy.” The orgy in question was the moment when modernity exploded upon us, the moment of liberation in every sphere […] Now all we can do is simulate the orgy, simulate liberation. (The Transparency of Evil 3)

The fact is that the revolution has well and truly happened, but not in the way we expected. Everywhere what has been liberated has been liberated so that it can enter a state of pure circulation, so that
it can go into orbit [...] The fate of things liberated is an incessant commutation, and these things are thus subject to increasing indeterminacy, to the principle of uncertainty. (The Transparency of Evil 4)

In The Transparency of Evil (1993), Baudrillard expounds upon the emergence of fourth order or fractal simulacra in our contemporary society. We live embroiled in a semiotic free-for-all, characterized by the implosion of meaning and the conversion of signification “into an uncontrollable metonymic and ‘viral’ proliferation in all directions to infinity” (Genosko Baudrillard and Signs XVI).

At the fourth, the fractal (or viral, or radiant) stage of value there is no point of reference at all, and value radiates in all directions, occupying all interstices, without reference to anything whatsoever, by virtue of pure contiguity. At the fractal stage, there is no longer any equivalence, whether natural or general. Properly speaking, there is now no law of value, merely a sort of epidemic of value, a sort of general metastasis of value, a haphazard proliferation and dispersal of value. (The Transparency of Evil 5)

Baudrillard glosses on the Heisenberg uncertainty principle when he describes the difficulty inherent in making value judgments in the postmodern age: “it is as impossible to make estimations between beautiful and ugly, true and false, or good and evil, as it is simultaneously to calculate a particle’s speed and position.” (The Transparency of Evil 5-6).

Never one to shy away from hyperbole via scientific metaphors, Baudrillard uses the virtual particle as an instrument for highlighting the evanescent quality of meaning and value in today’s postmodern world.

Just as each particle follows its own trajectory, each value or fragment of value shines for a moment in the heavens of
simulation, then disappears into the void along a crooked path that only rarely happens to intersect with other such paths. This is the pattern of the fractal—and hence, the current pattern of our culture. (*The Transparency of Evil* 6)

In contrast to Nietzsche, Baudrillard’s nihilism is without joy, without energy, without hope for a better future. In his essay “On Nihilism,” Baudrillard boldly proclaims that “the true revolution of the nineteenth century, of modernity, is the radical destruction of appearances” (*Simulacra and Simulation* 160) and asserts that “the second revolution, that of the twentieth century, that of postmodernity, . . . is the immense process of the destruction of meaning, equal to the earlier destruction of appearances” (*Simulacra and Simulation* 161). Sounding more like a nineteenth century Russian nihilist than a French postmodern critical theorist, Baudrillard offers what he believes to be the only recourse left in a world where simulation has run amok.

If being a nihilist is carrying, to the unbearable limit of hegemonic systems, this radical trait of derision and of violence, this challenge that the system is summoned to answer through its own death, then I am a terrorist and nihilist in theory as the others are with their weapons. Theoretical violence, not truth, is the only resource left us. (*Simulacra and Simulation* 163)

**Deleuze as Nietzsche’s “New Species” of Philosopher**

Gilles Deleuze’s *Nietzsche and Philosophy* (1962) marks a significant turning point in French philosophy, helping to make Nietzsche a major presence in French thought. In Deleuze’s later works, Nietzsche’s texts present themselves as tools to be used rather than privileged objects to be understood. According to Alan Schrift (“Putting Nietzsche to Work: The Case of Gilles Deleuze”), Deleuze’s study contributed as much as any single work to the renewed interest
in Nietzsche’s thought in France during the 1960s and 1970s (253). In Deleuze’s view, Nietzsche’s major goals are: 1) to attack Hegelianism and the dialectical tradition; 2) to overturn Platonism and its vision of sense, essence, and change; and 3) to create an affirmative and active thought that counteracts the negative, reactive thought that has dominated western philosophy from its inception.

**Affirming Chaos, Denying Dialectics**

Regarding Hegel, what Nietzsche finds most objectionable in the dialectical tradition is the role that Hegel ascribes to the negative in a specific relationship. Nietzsche’s skepticism toward the dialectic is a skepticism toward a mode of thought which trusts in the power of the negative and makes it the motor of change. Ronald Bogue maintains that for Deleuze as well as for Nietzsche, the object of philosophy is the affirmation of difference as the chaotic multiplicity of the becoming of the world (*Deleuze and Guattari* 32). In subsequent works, particularly his collaborations with Felix Guattari, Deleuze critiques the notion that the negative, in the form of Freudian-Lacanian "lack," is the origin and birthplace of desire. Following in Nietzsche’s footsteps, Deleuze and Guattari will claim that desire, like the will to power, affirms life as a flux of forces and produces flows of force, materials, signs, et al., out of its inherent creativity. This idea will be further developed in the subsequent section on Deleuze and Guattari.

**Immanence over Transcendence**

Besides Hegel, Deleuze states that a second major target of Nietzsche could be found in Platonic thought. For Deleuze, modern philosophy cannot establish itself without first overturning Platonism. This move involves denying the primacy of the original over the reproduced, questioning the status of essence over appearance, undermining the privilege of model over copy, and reversing the preeminence of the thing itself over the simulacrum. Deleuze’s later work
emphasizes the primacy of immanence over transcendence just as Nietzsche stressed the phenomenal world over any philosophical models of the noumenal.

**Nature, Multiplicities, and the Will to Power**

Nietzsche's quest to establish an affirmative, active thought that broke with the past can be traced to his philosophy of nature, which is ultimately a philosophy of the dynamic relations of forces (Bogue *Deleuze and Guattari* 21). The world is not a text in which signs only refer to other signs but a network of forces in which signs are symptoms of forces. Nature is an interrelated multiplicity of forces, and all forces are either dominant or dominated. Deleuze elaborates:

> every relationship of forces constitutes a body---whether it is chemical, biological, social, or political [...] In a body, the superior or dominant forces are known as *active* and the inferior or dominated forces are known as *reactive*. (*Nietzsche and Philosophy* 40)

Deleuze, following Nietzsche's lead, identifies the will to power as that which interprets and evaluates the dynamic interplay of forces. In *Deleuze and Guattari*, Ronald Bogue states:

> Without the concept of the will to power, forces remain indeterminate. The will to power determines the relationship between forces, in terms both of quantity (as the differential element that determines the difference between quantities) and of quality (as the genetic element that determines the quality of each force as either active or reactive). (22)

> An active force commands, appropriates, and imposes forms on reactive forces, while a reactive force tends to negate that which differs from it (Bogue 21). Deleuze posits the will to power as "a kind of inner center of force," . . . "the power of becoming that plays through forces, differentiating them and linking
them both spatially and temporally" (Bogue 22-23).

Ultimately, the will to power is the source of meaning and value. Deleuze envisions Nietzsche's will to power as being either affirmative or negative. Affirmative will to power is life-enhancing, embracing the flux of existence. Negative will to power denies life in that it rejects the dynamism of the world-as-endless-becoming and posits the existence of a static, foundational, "true" world, in the form of Platonic Ideas or the Christian vision of Heaven.

**From Affirmative and Negative to Schizophrenic and Paranoiac**

Affirmative will to power and negative will to power evolve in Deleuze's later thought, becoming *schizophrenic, libidinal investment* and *paranoiac, libidinal investment*, respectively. Schizophrenic, libidinal investment affirms the destabilization of fixed codes of meaning, while paranoiac, libidinal investment seeks to connect all that is in flux and subordinate the forces to a static, master code of signification. The Deleuzian trend toward linking desire with the Nietzschean will to power first finds its expression in Deleuze's *Nietzsche and Philosophy*.

Throughout Deleuze's work, force, bodies, and *physis* remain essentially irreducible to language. In contrast to the hermeneutic project of interpretation and the structuralist project which tracks the play of signifiers, Deleuze places his emphasis on the ceaseless flow of energy moving into (recoding) or away from (decoding) codes of meaning which are constantly being assembled or torn apart. Nietzsche's originality, Deleuze claims, lies in part in his having written a new kind of book, one that defies codification insofar as his aphorisms transmit forces rather than signify meanings (Schrift 255). Escaping stable codes in favor of dynamic fluxes of signification represents a hallmark of postmodern, post-structuralist theory in general and Deleuze and Guattari in particular.
Deleuze and Guattari: Liberators of Desire

Deleuze and Guattari called for and promoted the liberation of desire, much the same way that Nietzsche championed the will to power. For Deleuze and Guattari, desire was not the product of a lack as it had been for Freud and Lacan, who envisioned desire as stemming from the intercession of the Father in the Oedipal triangle. The Father’s disruption of the union between Son and Mother represents a defining moment, condemning the son to search for substitute signifiers representing the lost union and thus filling the lack. On the other hand, Deleuze and Guattari’s vision of desire posits that desire represents the vital, creative, productive force flowing through the “machinery” of humanity and social institutions. In their first collaboration, Anti-Oedipus: Capitalism and Schizophrenia, Deleuze and Guattari go to great lengths to unite the libidinal with the social, the production of (individual) desire with social production at large:

The truth of the matter is that social production is purely and simply desiring production itself under determinate conditions. We maintain that the social field is immediately invested by desire, that it is the historically determined product of desire, and that libido has no need of any mediation or sublimation, any psychic operation, any transformation, in order to invade and invest the productive forces and the relations of production. There is only desire and the social, and nothing else. (Anti-Oedipus 29)

The productive desire of Deleuze and Guattari is, in fact, another form of Nietzsche’s will to power. For Deleuze and Guattari, sexual desire does not have as its objects persons or things at all. It is invested in whole environments, in vibrations and fluxes of all kinds; it is essentially nomadic. It is this nomadism that drives capitalism, which itself is characterized by a chaotic production that is
no longer tied to traditional social arrangements that restrain its growth. Deleuze and Guattari argue that capitalism manifests two tendencies, a schizophrenic tendency toward the disorganization and decoding of social relations, and a paranoiac tendency toward the reorganization and recoding of such relations. These tendencies are also referred to as “detrimentalization” and “reterritorialization.”

**Detrimentalization and Reterritorialization**

As Eugene Holland points out in his essay, “Detrimentalizing Deterritorialization,” the terms “detrimentalization” and "reterritorialization” serve a very specific function. Derived initially from Lacanian psychoanalysis, “detrimentalization” and “reterritorialization” function as hinge terms that connect Marx and Freud, libido and labor power. For Lacan, “territorialization” refers to the imprint of maternal nourishment and care-giving on the child’s libido, a process which creates charged erogenous zones and objects out of organs and orifices. Holland states:

For Deleuze and Guattari, “detrimentalization” in the psychological register designates the freeing of “schizophrenic” libido from pre-established objects of investment: from the mother’s breast, for instance, or from the family triangle of the Oedipus complex. At the same time, but in the social register, it designates the freeing of labor power from the seigneurial plot of land, the assembly line, or other means of production . . . In line with this dual-register use of the notion of territorialization, schizoanalysis (Deleuze and Guattari’s alternative to psychoanalysis) expands the field of the libidinal to include the investment of human energy of any kind: perceptual and physical, cognitive and productive, desire and work. (Holland 57)

“Detrimentalizations” can be of two kinds: 1) “relative,” whereby the
libidinal energy/labor power is liberated only to become reterritorialized at a later time; and 2) “absolute,” otherwise known as a “line of flight,” where libidinal energy/labor power is unchained and flows ceaselessly, unscrambling the codes of fixed meaning it encounters along the way.

The idea of “lines of flight” is inseparable from that of “molecularity,” a notion that Deleuze and Guattari oppose to that of “molarity.” “Molar,” in the Deleuzo-Guattarian sense, alludes to totalities, unities, wholes, and their respective behaviors as statistical aggregates. “Molecular” refers to the microscopic interactions of the constituent particles in these aforementioned wholes. “Molar” unities, such as states, economies, and military organizations, are the intersection of smaller, constituent, “molecular” lines. Of these “molecular” lines, it is the “line of flight” which is characterized as nomadic, irreducible and creative. “Molar” unities are constantly trying to harness the productivity and libidinal energy of “lines of flight” for their own ends. “Lines of flight” escape the efforts of “molar” unities without leaving the social field. “They are disruptions that work not negatively by resistance or destruction, but positively by creating a new reality that, solely in the act of creation, subverts the system” (May 5).

**Schizo-Subjects and Schizoanalysis**

The “line of flight” is a particularly apt way of describing Deleuze and Guattari’s vision of the schizo-subject, whom they differentiate from the clinical schizophrenic. The schizo-subject is revolution-in-motion, a subject whose energies are not bound by norms, codes, or protocols. Deleuze and Guattari’s vision of the schizo-subject goes hand-in-hand with their conception of schizoanalysis, a bold alternative to psychoanalysis that seeks to dismantle the repressive psychic structures imposed by the capitalist “machinery” (with help from Freudian psychoanalysis). Schizoanalysis endeavors to do away with the
psychoanalytic vision of the unconscious as a “theatre” of representation where the “meaning” of the Oedipal triangle is played out in all its permutations. Schizoanalysis seeks to reveal the “factory” of the unconscious, whose desiring-machines operate out of a plenitude of energy and psychic material rather than a lack, as explained by conventional Freudian-Lacanian psychoanalysis.

**Deleuzo-Guattarian “Machines” as Multiplicities**

The “factory” of the unconscious and the social field is populated by what Deleuze and Guattari call “machines.” For Deleuze and Guattari, a “machine” is any point at which a flow of some sort (physical, intellectual, emotional, energetic) either leaves or enters a structure. A baby’s mouth at its mother’s breast is a mouth machine meeting a breast machine. There is a flow between these two machines. Machines abound in the works of Deleuze and Guattari under a host of different monikers: desiring machines, abstract machines, war machines, et al. These Deleuzo-Guattarian machines have no essences, for they are first and foremost multiplicities. Deleuze/ Guattari conceive multiplicities in the following manner:

A multiplicity is defined not by its elements, nor by a center of unification or comprehension. It is defined by the number of dimensions it has; it is not divisible, it can not lose or gain a dimension without changing its nature. Since its variations and dimensions are immanent to it, it amounts to the same thing to say that each multiplicity is already composed of heterogeneous terms in symbiosis, and that a multiplicity is continually transforming itself into a string of other multiplicities, according to its thresholds and doors. (*A Thousand Plateaus* 249)

As such, multiplicities possess a variable number of dimensions and, most importantly, lack a supplementary or higher dimension that would impose an
extrinsically defined unity upon the various, constituent dimensions. The ubiquity of the machine tropes reveals a dominant concern in Deleuze and Guattari’s collaborations: the central preoccupation with how these various “machines” work, rather than what they mean or represent.


In the second volume of their *Capitalism and Schizophrenia* series, titled *A Thousand Plateaus*, Deleuze and Guattari expand on the "conceptual toolbox" they first introduced in *Anti-Oedipus*. In *A Thousand Plateaus*, Deleuze and Guattari create terms and pose ideas used in the analysis of literary texts that refer back to the concepts of *Anti-Oedipus*. For example, Deleuze and Guattari state: "In a book, as in all things, there are lines of articulation or segmentarity, strata and territories; but also lines of flight, movements of deterritorialization and destratification" (3).

Books, like capitalism in the social register or libidinal desire in the psychological register, possess the potential for both schizophrenic libidinal investment and paranoiac libidinal investment. In other words, texts can: A) destabilize or subvert codes and meanings; B) reinforce or impose codes and meanings; or C) engage in both processes. In keeping with their oppositional stance to viewing the unconscious as a theatre of representation, Deleuze and Guattari extend their "unconscious-as-factory" approach to the realm of books and texts, arguing that books and texts are productive "machines" rather than "stages" for symbolic representation.

We will never ask what a book means, as signified or signifier; we will not look for anything to understand in it. We will ask what it functions with, in connection with what other things it does or does not transmit intensities, in which other multiplicities its own are inserted and metamorphosed, and with what bodies without organs...
it makes its own converge. (*A Thousand Plateaus* 4)

**The Body without Organs (BwO)**

A BwO is made in such a way that it can be occupied, populated only be intensities. Only intensities pass and circulate. Still, the BwO is not a scene, a place, or even a support upon which something comes to pass. It has nothing to do with phantasy, there is nothing to interpret. The BwO causes intensities to pass; it produces and distributes them in a *spatium* that is itself intensive, lacking extension. It is not space, nor is it in space; it is matter that occupies space to a given degree . . . to the degree corresponding to the intensities produced. It is nonstratified, unformed, intense matter, the matrix of intensity, intensity=0; but there is nothing negative about that zero, there are no negative or opposing intensities. (*A Thousand Plateaus* 153)

The "body without organs," or BwO, as Deleuze and Guattari refer to it, stands out as one of Deleuze and Guattari's most significant, and difficult, concepts. The BwO represents an "open field of unactualized potential" (*Carrier* 203). Brian Massumi defines the BwO as "the body outside any determinate state, poised for any action in its repertory" (*A User’s Guide to Capitalism and Schizophrenia* 70). Manuel De Landa calls the BwO a "special state of matter-energy information" and a "flowing reality animated from within by self-organizing processes constituting a veritable non-organic life" (*A Thousand Years of Nonlinear History* 260). BwO's exist in relation to desiring machines. Their interactions, which oscillate from attractive to repulsive, lead to the formation of "miraculating" machines and/or paranoiac machines. These machines, in turn, engage in the deterritorialization/reterritorialization processes that characterize the individual, the society, and the text. In short, when the actual, dynamic
energies of desire interact with the virtual, static, undifferentiated BwO's, the results can range from a free-flowing polysemous entity to a rigid, highly structured and codified entity.

"Rhizomatic" Texts versus "Arborescent" Texts

Deleuze and Guattari further develop the distinction between radical polysemy and rigid codes when they discuss "rhizomatic" versus "arborescent" texts. "Tree" books, or "arborescent" texts, have clearly defined and demarcated "leaves," "branches," "trunks," "roots" and "radicals." For Deleuze and Guattari, "arborescence" is synonymous with totalizing theory, restrictive models, top-down hierarchies, "false" binarism, rigid coding and fixed meanings. Deleuze and Guattari declare:

Arborescent systems are hierarchical systems with centers of signifiance and subjectification, central automata, like organized memories . . . In a hierarchical system, an individual has only one active neighbor, his or her hierarchical superior . . . The channels of transmission are preestablished. (A Thousand Plateaus 16)

In contrast, "rhizome" (or "rhizomatic text") refers to a textual entity that ceaselessly establishes connections between semiotic chains. Unlike "trees" or their "roots," the "rhizome" connects any point to any other point. The "rhizome" is an acentered, non-hierarchical, non-signifying system with the potential for both rigid coding and radical polysemy. Deleuze and Guattari assert:

Every rhizome contains lines of segmentarity according to which it is stratified, territorialized, organized, signified, attributed, etc. as well as lines of deterritorialization down which it constantly flees. There is a rupture in the rhizome whenever segmentary lines explode into a line of flight, but the line of flight is part of the rhizome. These lines always tie back to one another . . . You may make a rupture, draw a
line of flight, yet there is still a danger that you will reencounter organizations that restratify everything, formations that restore power to a signifier, attributions that reconstitute a subject, anything you like, from Oedipal resurgences to fascist concretions. Groups and individuals contain microfascisms just waiting to crystallize. (A Thousand Plateaus 9-10)

**Assemblages**

In the theory of Deleuze and Guattari, "multiplicities" and "rhizomatic texts" make it possible to understand better the nature of the "assemblage" concept. As John Johnston explains in his work, *Information Multiplicity*, Deleuzo-Guattarian "assemblages" are:

precisely a multiplicity made up of heterogeneous terms and functions that work together in a symbiosis, or sympathy. In contrast to a structure, which defines relations among homogeneous terms and functions, an assemblage is composed of relations, liaisons, and affiliations among and across an array of elements and processes that are completely different in kind. An assemblage, therefore, constitutes not a structural unity or totality but only a functional consistency or "jelling together" of diverse parts and processes. In short, it is nothing more than a functional arrangement of material and semiotic flows, and it has no other meaning than that "it works" (14).

**Abstract Machines**

. . . the abstract machine of language is not universal, or even general, but singular; it is not actual, but virtual-real; it has, not invariable or obligatory rules, but optional rules that ceaselessly
vary with the variation itself, as in a game in which each move changes the rules. (*A Thousand Plateaus* 100)

Defined diagrammatically in this way, an abstract machine is neither an infrastructure that is determining in the last instance nor a transcendental Idea that is determining in the supreme instance. Rather, it plays a piloting role. The diagrammatic or abstract machine does not function to represent, even something real, but rather constructs a real that is yet to come, a new type of reality. (*A Thousand Plateaus* 142)

One of the elements that facilitates the functioning of the "assemblage" is the "abstract machine." According to Manuel De Landa, the "abstract machine," like the BwO, helps explain the genesis of form without having to resort to Platonic essences or divine intervention (*A Thousand Years of Nonlinear History* 263). "Abstract machines" account for the inherent morphogenetic potential of matter-energy; they are virtual engineering diagrams which define structure-generating processes that give rise to more or less permanent forms. The interplay of "abstract machines" with "lines of flight" within an "assemblage" makes possible the proliferation of a potentially endless stream of forms.

Before Derrida, Baudrillard, and Deleuze and Guattari developed their respective projects and explored the meaning of nihilism in the late twentieth century, scientists during the first half of the century were preoccupied by attempts to develop totalizing theories that could establish unambiguous connections between theory, observation, and representation. By mid-century, virtually all these attempts had been defeated or had undergone substantial modification. In the West, the study of complex dynamical systems did not come into its own until computers became an accessible and integral component of scientific research during the 1960s and 1970s. These decades witnessed a
significant intellectual shift throughout the human sciences. The distinguishing feature of this shift was a break away from universalizing, totalizing perspectives and a move toward local, fractured systems.

A crucial turn (for the purposes of this study) comes when chaos is envisioned not as an absence or void but as a positive force. Between 1960 and 1980, cultural fields were configured so as to energize questions about how stochastic variations in complex systems affected the evolution and stability of these systems. In the assigning of a positive value to chaos, information theories and technologies played central roles. In addition to creating the necessary technological landscape, they laid the theoretical foundation for conceptualizing chaos as a dynamic presence rather than an absence.

**Information Theory: Entropy, Revisited**

Information theory, as developed by Claude Shannon, and its close relative, cybernetics, as envisioned by Norbert Wiener, combined to reconstruct the human subject as one information processing system in a universe of information flows. The discourses that followed these mid-twentieth century developments are crucial to understanding the transition away from the Enlightenment ideal of the rational humanist subject to the postmodern discursive construct of the cyborg. Information theory, which first emerged in the late 1940s, posits that to understand nature one must examine not only matter and energy, but information as well. Information represents a universal principle at work in the world, specifying the particular character of living and non-living forms and helping to determine the patterns of mind and human thought.

A significant step in the change of perspective regarding chaos came with the separation of information from meaning. Once this distinction was made, the way was open for information to be defined as a mathematical function that
depended solely on the distribution of message elements, independent of whether the message had any meaning for a receiver. This step in turn made it possible to see chaotic systems as rich in information rather than poor in order. The more chaotic a system is, the more information it produces. This perception is at the heart of the transvaluation of chaos, for it enables chaos to be conceived as an inexhaustible ocean of information.

**Information and Entropy: The Case of Maxwell’s Demon**

In his *Theory of Heat* (1871), James Clerk Maxwell created a thought experiment where he envisioned a microscopic being that could separate fast molecules from slow molecules in a closed system. “Maxwell’s Demon,” as the thought experiment came to be known, posited that the “Demon” is a liminal figure who stands at the threshold that separates “an ordered world of will from the disordered world of chaos.” (Hayles *Chaos Bound* 43)

If the demon could unmix the mixed molecules of a gas, sorting fast ones into one compartment and slow ones into another by opening and shutting a perfect, frictionless door, he could achieve the result ruled impossible by thermodynamics and reverse an irreversible process. For the sake of argument, the demon was supposed not to use any energy when opening or shutting the sliding door.

(Campbell *Grammatical Man* 48)

As conceived by Maxwell, the “Demon” was in principle capable of violating the second law of thermodynamics, generating order rather than increased entropy in its sorting exercise. For several decades, “Maxwell’s Demon” intrigued generations of scientists who attempted to answer the question: “Is information by itself enough to reduce the entropy of a system and make its energy accessible and useful again?” (Campbell 48)
In a 1929 paper entitled “On the Decrease in Entropy . . . by the Intervention of Intelligent Beings,” Leo Szilard observed that to do his work the “Demon” needed to remember where the fast and slow molecules were stored. Szilard showed that the “Demon,” simply in the act of obtaining information about molecules, creates at least as much entropy as would be eliminated by sorting the molecules into separate compartments. Szilard’s crucial insight, that there exists a relationship between information and entropy, would not receive much attention until French physicist Leon Brillouin resurrected Szilard’s paper in his own work (1951).

In reexamining Szilard’s paper, Brillouin declared that information is defined as “negentropy,” a real, physical commodity with as much concreteness as work, heat, and energy. Brillouin’s conclusion pitted information against entropy as an entity that could combat the encroachment of disorder.

**Shannon Takes the Opposite Approach**

Claude Shannon presented information theory to the world in 1948 via two papers that he published in the *Bell System Technical Journal*. Shannon was able to establish laws that hold true for all kinds of information. His equations dealt intimately with entropy, suggesting a powerful analogy between the levels of organized energy in a system and information. Entropy was the connecting link between them.

Where Brillouin had envisioned information and entropy as opposites carrying opposite signs, Shannon saw these two entities as identical. Shannon anticipated the contemporary view that proliferating information is associated with the production of entropy. Shannon’s definition of entropy allowed randomness to be reconceptualized as maximum information and chaos to be envisioned as the source of all that is new in the world.
Chaos Theory

Chaos theory is a broad, interdisciplinary research field that engages in “the qualitative study of unstable aperiodic behavior in deterministic nonlinear dynamical systems” (Kellert 2). Unstable aperiodic behavior is highly complex: it never repeats and it continues to manifest the effects of any small perturbation, producing a series of measurements that appear random. Chaotic systems are mathematically deterministic, following precise laws, but their sensitivity to initial conditions is such that any kind of long range prediction of system behavior is rendered inaccurate. As a qualitative study, chaos theory investigates a system by asking about the general character of its long term behavior, rather than seeking to arrive at exact numerical predictions about its future state. There is no simple, powerful, and comprehensive theory of all chaotic phenomena, but rather a cluster of theoretical models, mathematical tools, and experimental techniques. Almost any kind of energy-dissipating system that is aperiodic is likely to be chaotic. Arguably, this applies to virtually everything in the biosphere, since not only are all living organisms aperiodic, energy dissipating systems, but the same could be said for the atmosphere, plate tectonics, and turbulence of any kind. The mathematician Stanislaw Ulam once remarked that calling the study of chaos “nonlinear science” was like calling zoology “the study of non-elephant animals” (Gleick 68). In short, nature abounds with chaotic systems that defy simple, linear explanations.

Long before the “chaos theory” moniker was attached to the study of nonlinear dynamical systems, Henri Poincaré was wrestling with what was known as the “three body problem.” As part of a competition in 1889 sponsored by the king of Sweden, Poincaré attempted to use multiple differential equations in an attempt to prove that the solar system, as modeled by Newton’s equations, is dynamically stable. In 1890, Poincaré found results that upset the generally
accepted view of a purely deterministic universe, demonstrating that Newton’s laws did not provide a solution to the “three body problem” (which dealt with behavioral predictions about the earth, moon, and sun).

By proving that the introduction of small perturbations into linear equations was not in general sufficient to solve nonlinear problems, Poincaré implied that a new kind of science and mathematics was necessary to account for the dynamics of complex systems. Poincaré’s calculations revealed the essential characteristic of chaotic systems: small differences in the initial conditions produce great perturbations in the final outcome. In “Science and Method” (1908), Poincaré wrote:

If we knew exactly the laws of nature and the situation of the universe at the initial moment, we could predict exactly the situation of that same universe at a succeeding moment, but even if it were the case that the natural laws had no longer any secret for us, we could still only know the initial situation approximately. If that enabled us to predict the succeeding situation with the same approximation, that is all we require, and we should say that the phenomenon had been predicted, that it is governed by laws. But it is not always so; it may happen that small differences in the initial conditions produce very great ones in the final phenomena. A small error in the former will produce an enormous error in the latter. Prediction becomes impossible, and we have the fortuitous phenomenon.

Several decades later, Edward Lorenz would draw similar conclusions when he tried to model the earth’s weather. Lorenz thought that he could capture the essence of how weather changes through three nonlinear differential equations. Benefiting from an instrument that Poincaré did not possess (the
Lorenz was able to tinker with the data he put into the system and noticed that small discrepancies in the initial values introduced to the equations led to patterns that were quite different from the original computation. In his 1963 paper “Deterministic Nonperiodic Flow,” Lorenz arrived at what would thereafter be known as the “butterfly effect”: a dynamical system that exhibits sensitive dependence on initial conditions will produce markedly different solutions for two specifications of initial states that are initially very close together.

It implies that two states differing by imperceptible amounts may eventually evolve into two considerably different states. If, then, there is any error whatever in observing the present state, and in any real system such errors seem inevitable, an acceptable prediction of an instantaneous state in the distant future may well be impossible. ("Deterministic Nonperiodic Flow" 133)

**Schools of Thought**

N. Katherine Hayles (Chaos Bound) makes the case that two main schools of thought exist which use distinct modes of analysis and support different views regarding the meaning of chaos theory.

In the first, chaos is seen as order’s precursor and partner, rather than as its opposite. The focus here is on the spontaneous emergence of self-organization from chaos; or, in the parlance of the field, on the dissipative structures that arise in systems far from equilibrium, where entropy is high. The realization that entropy-rich systems facilitate rather than impede self-organization was an important turning point in the contemporary reevaluation of chaos [...] The second branch emphasizes the hidden order that exists *within* chaotic systems. Chaos in this usage is distinct from true
randomness, because it can be shown to contain deeply encoded structures called “strange attractors.” Whereas truly random systems show no discernable pattern when they are mapped into phase space, chaotic systems contract to a confined region and trace complex patterns within it. (9-10)

**General Characteristics of Chaotic Systems**

Nonlinearity, recursive symmetries, sensitive dependence on initial conditions, and feedback mechanisms represent primary characteristics of chaotic systems. Because nonlinear functions are intimately associated with chaotic systems, two more features become apparent: 1) the incongruity between cause and effect (small causes can give rise to large effects); and 2) the absence of explicit solutions to the nonlinear differential equations that describe the system.

In chaotic systems, symmetries are replicated over many scale levels. The different levels are considered to be connected through coupling points, where minute fluctuations can cause the system to evolve differently, making prediction of future behavior impossible. A byproduct of nonlinearity and recursive symmetries, chaotic systems display sensitive dependence on initial conditions, amplifying small, initial uncertainties on the micro scale into considerable upheaval expressed on the macro scale.

Chaotic systems create feedback loops in which the system’s output feeds back into the system as input, in a process known as *iteration*. This particular feature of chaotic systems went largely unexamined until the advent of computers powerful enough to create mathematical simulations of the feedback taking place in the system.

**Chaos Theory and Deconstruction: Convergences and Divergences**

Chaos theory and deconstruction emerged as intellectual forces in the 1960s and 1970s. They share more than simply a historical period. Chaos theory
shows that deterministic physical systems become chaotic because initial conditions cannot be specified with infinite precision. Deconstructive readings operate upon texts to reveal the indeterminacy that results from the lack of an absolute, originary ground for language. In Derrida, “always already” marks the absence of an origin, just as the inability to specify initial conditions with complete accuracy represents a core idea among chaoticians.

Deconstruction, like chaos theory, breaches the boundaries of classical systems by opening them to a new kind of analysis in which information is created rather than conserved. Both discourses invert traditional priorities: 1) chaos is deemed to be more fecund than order; 2) uncertainty is privileged above predictability; and 3) fragmentation is seen as the reality that arbitrary definitions of order would deny (Hayles Chaos Bound 176).

Significant differences also exist between chaos theory and deconstruction. Literary theorists like Derrida value chaos primarily because they view it as a tool for subverting order; they are preoccupied with exposing the arbitrary, ideological underpinnings of classical ideas concerning order and meaning. Chaos theorists, by contrast, value chaos as the engine that drives a system toward a more complex kind of order. For them, chaos makes order possible.

**Complexity Theory as “a physics of biology”**

Deeply interdisciplinary in nature, chaos theory affects the developments in a variety of research areas and disciplines. Biology, for example, is populated with the kind of self-organizing systems that chaos theory seeks to explain: open, nonlinear, dynamical systems that generate complex forms in the bid to evolve and stay alive. The study of self-organization and the evolution of complexity in a wide variety of systems have led to the emergence of a chaos-related field known as complexity theory.
Complexity theorists speculate that a set of relatively simple rules lies at the root of all complex systems; from the behavior of molecules to the actions of nation-states, they endeavor to identify what may yield a grand unification of the life sciences. A central tenet of complexity theory is that critically interacting system components self-organize to form potentially evolving structures exhibiting a hierarchy of emergent system properties. Complex systems are information rich, neither static nor chaotic, positioned on “the edge of chaos,” where a small change can either push the system into chaotic behavior or lock the system into a fixed behavior.

The essence of self-organization in complexity theory is that a system’s structure often appears without explicit pressure or involvement from outside the system. The constraints on formal organization are internal to the system, resulting from the interactions among the components and usually independent of the physical nature of those components.

Theoretical biologist Stuart Kauffman, a pioneer in the study of complexity, believes that a robust theory of evolution must encompass the roles of both self-organization and Darwinian natural selection. Interested in the emergence of order in evolutionary systems, Kauffman maintains that self-organization is a natural property of complex genetic systems: “There is ‘order for free’ out there, a spontaneous crystallization of order out of complex systems, with no need for natural selection or any other external force” (Lewin 24-25). While self-organizing networks arise spontaneously and naturally because of the laws of complexity, natural selection finds its role as the shaper of “order for free” (Kauffman 90-91), molding the structures of these systems so that they are poised on “the edge of chaos.”

Kauffman believes that Darwin was not wrong as much as there are things he simply could not have known, like the self-organizing properties of
complex systems and the role of genetics in evolution. In the postmodern period, other scientists have modified Darwinian orthodoxy in light of Post-Darwinian findings and discoveries. Chief among them are Richard Dawkins and Stephen Jay Gould.

**Dawkins: Of Selfish Genes and Survival Machines**

Richard Dawkins’s background in ethology sensitized him to the problem of adaptation: the fit between organisms and environment is the central problem evolutionary biology must explain. To understand adaptation properly, Dawkins argues that we must focus primarily on natural selection at the level of the gene. Dawkins conceives of the fundamental struggle of evolution as the struggle of genes in gene lineages to replicate.

To use Dawkins’s term, genes are “selfish” in that their *raison d’être* involves self-replication above and beyond anything else: “a central truth about life on earth . . . is that living organisms exist for the benefit of DNA rather than the other way around” (*The Blind Watchmaker* 127). In this scenario, human beings are no more than machines created by genes: “We are survival machines, robot vehicles blindly programmed to preserve the selfish molecules known as genes” (*The Selfish Gene* v).

In the same manner that he reduces the history of life to a history of a mostly invisible war between gene lineages, Dawkins reduces the mechanism of evolution to natural selection. Playing off of the Enlightenment, Deist view of God as the divine watchmaker, Dawkins, an avowed atheist, creates the moniker of *blind* watchmaker to describe the role of natural selection.

Natural selection, the blind, unconscious, automatic process which Darwin discovered, and which we now know is the explanation for the existence and apparently purposeful form of life, has no purpose in mind. It has no mind and no mind’s eye. It does not
plan for the future. It has no vision, no foresight, no sight at all. If it can be said to play the role of “watchmaker” in nature, it is the *blind* watchmaker. (*The Blind Watchmaker* 5)

While the idea of absolute progress has become problematic and *persona non grata* in most scientific intellectual circles in the roughly 150 years since Darwin was formulating what would become *The Origin of Species*, Dawkins argues for a kind of relative progress based on the dance between natural selection and adaptation. For Dawkins, progress is a tendency for lineages to improve their adaptive fit to their particular way of life. During his lifetime, Stephen Jay Gould, who for a long time argued against Dawkins on several points, strongly opposed Dawkins on the issue of evolutionary progress.

**Stephen Jay Gould and Punctuated Equilibrium**

Trained as a paleontologist, Gould’s fundamental concerns often dealt with the phenomenon of extinction and its causes, and this, in turn, led him to a different conception of the mechanism(s) of evolution, a different view of the way natural selection works, and an emphasis on the role of chance in the evolutionary process.

Gould believed that natural selection is a necessary, but by no means sufficient, principle for explaining the full history of life (“Self-Help for a Hedgehog Stuck on a Molehill” 1022). Gould asserts that massive extinctions have played a major role in shaping the direction of evolution; the survival of species through these cataclysmic events is truly random, rather than the work of natural selection. Survival, in Gould’s view, depends more on luck than on fitness.

Human beings, who once were considered the culmination of the evolutionary process, are now, Gould posited, the products of chance, not design or direction. In *Wonderful Life* (1989), Gould likened the origin of *homo sapiens* to
“a tiny twig on an improbable branch of a contingent limb of a fortunate tree . . . In Darwin’s scheme, we are a detail, not a purpose or embodiment of the whole” (291).

Perhaps Gould’s most significant challenge to Darwinian orthodoxy came in the form of the theory of punctuated equilibrium, which he developed along with Niles Eldredge. This view of evolution emphasizes that the fossil record reveals not so much gradual development (as would be expected from Dawkins’s view of evolution) as long periods of stasis (equilibrium) punctuated by sudden extinctions, or the apparently sudden emergence (in geological time) of new species.

The picture of humanity emerging from Dawkins’s and Gould’s discourses is a bleak one. God is very much dead for both Gould and Dawkins and *homo sapiens* is by turns considered a servant to his or her genetic endowment (Dawkins) and/or a freak accident in a long history of freak accidents (Gould). For both men, there is no aim or purpose to existence and the procession of random events through time is impeded only by the blind agency of natural selection.

This chapter has addressed the progressive banalization of nihilism during the postmodern period as well as the reevaluation of chaos, from the negative connotation of previous periods to its positive status as the source of order and innovation in the postmodern context. Chapter four provides an analysis of two significant transitions that symbolize the move from modernism to postmodernism.

The first trajectory explores the supplanting of the modernist metaphor of the vortex by the postmodern trope of the virus. The Vorticist movement, conceived primarily by the likes of Ezra Pound and Wyndham Lewis, expressed many of the hallmark concerns of modernism. As the twentieth century unfolded
and postmodernism came into its own, the vortex imagery gave way to the notion of the virus as expressed in the work of William Burroughs, Jean Baudrillard, and Jacques Derrida.

The chapter’s second major focal point concentrates on the metamorphoses of myth during the twentieth century. During the modernist period, James Frazer, Otto Rank, Carl Jung, Joseph Campbell, and Claude Levi-Strauss all studied the role of myth as a central, defining feature of civilized societies. In the postmodern period, the advent of memetics ushers in the repositioning of myth as a type of meme, a cultural entity that succeeds in propagating throughout a culture regardless of its truth or utility value. The work of Robert Aunger and others will be addressed in an attempt to better understand the myth as meme.
CHAPTER FOUR:
VORTEX TO VIRUS, MYTH TO MEME

The transition from the modernist sociocultural matrix to the postmodernist sociocultural matrix gave rise to several significant intellectual trajectories, two of which are relevant to this study. The first trajectory explores the transition from the modernist symbol of the vortex to the postmodernist metaphor of the virus. Vorticist aesthetics staunchly upheld the more general modernist belief that the artist is capable of capturing the truth through representation in art and language. Postmodernists like Burroughs, Baudrillard, and Derrida look upon language quite differently, as a mutating, viral entity that destabilizes and delocalizes meaning and signification.

The second trajectory examines the changing perspectives on the nature of myth during the pre-modernist, modernist, and postmodernist periods. Long considered bearers of timeless truth, modernists like Eliot and Joyce made use of ancient myths to enhance the aesthetic quality of their works while simultaneously calling attention to how modern man had become alienated from his mythic past. In the postmodern period, we witness a radical revision in how myth is viewed. No longer seen as a source of truth, the myth becomes a type of meme, a self-replicating idea or complex of ideas whose function is to spread like a contagion rather than to impart eternal wisdom.
Ezra Pound’s Energetic Aesthetics

We might come to believe that the thing that matters in art is a sort of energy, something, more or less, like electricity or radioactivity, a force transfusing, welding, and unifying. (Literary Essays of Ezra Pound 49)

Historically speaking (1912-1915), Vorticism is the English analog to Cubism and Italian Futurism, a subjection of Futurist dynamism to Cubist technical control. The geometrical, abstract, hard-edged appearance of Vorticist art is synonymous with the work of Wyndham Lewis. To understand the Vorticist vision, however, one must turn to the figure of Ezra Pound.

Pound, the unofficial theoretician of the movement, addressed the implications of Vorticism, developing a polymathic aesthetics that drew inspiration from a wide range of sources. Pound used many extended analogies to physics, chemistry, biology, and engineering and their accompanying concepts of energy, force, pattern, and efficiency to illuminate the work of art and its creation. The crux of Pound’s aesthetics could be found in his intense interest in the relationship of energy to pattern.

Pound looked upon language and the work of art from an essentialist perspective: words are imbued with energy. On this matter, he was greatly influenced by the work of Ernest Fenollosa, who saw the natural world as consisting of a continual exchange of forces. Language, for Fenollosa, represented a means for mirroring that energetic exchange. In his work on the Chinese written character, Fenollosa asserts that “the eye sees noun and verb as one: things in motion and motion in things” (The Chinese Written Character 10).

When masterfully arranged by the artistic genius, the work of art reveals a patterned energy, a signature integrity that is unmistakably the sign of its creator. The Vorticist work of art is that which best illustrates the phenomenon of
synergy, producing the maximum amount of energy possible from its constituent parts.

**Virtù and “Luminous Details”**

The soul of each man is compounded of all the elements of the cosmos of souls, but in each soul there is some one element which predominates, which is in some peculiar and intense way the quality or virtù of the individual; in no two souls is this the same [...] This virtù is not a “point of view,” nor an “attitude toward life”; nor is it the mental caliber or “way of thinking,” but something more substantial which influences all these. (*Selected Prose: 1909-1965* 28)

Like the work of art, the artist also manifests a spectrum of forces, which Pound referred to as virtù: “It is by reason of this virtù that we have one Catullus, one Villon” (Kenner 156). In finding the unique energetic signature of all that he/she does, the artist makes palpable new energies and energy constructs that were always possible but never realized.

The donative author seems to draw down into the art something which was not in the art of his predecessors. If he also draws from the air about him, he draws latent forces, or things present but unnoticed, or things perhaps taken for granted and never examined. (Kenner 155)

Artistic genius makes use of masterful technique as the machinery for transmitting power through the work of art. For Pound and Fenollosa, the transmission of power was synonymous with the expression of truth: “All truth has to be expressed in sentences because all truth is the transference of power. The type of sentence in nature is a flash of lightning” (Kenner 157). Pound likened the creative process to that of an engineer seeking maximum efficiency from a
custom-built machine: “latent energy is made dynamic or ‘revealed’ to the engineer in control, and placed at his disposal.” (Selected Prose: 1909-1965 24-25).

As “engineers” of a sort, artists and scholars are engaged in a quest to find the “luminous detail.”

Luminous details are the transcendental in an array of facts: not merely “significant” or “symptomatic” in the manner of most facts, [but rather] patterned integrities which transferred out of their context of origin retain their power to enlighten us (Kenner 152-152)

The luminous detail is that perception or fact that gives one “a sudden insight into circumjacent conditions, into their causes, their effects, into sequence, and law [. . .] A few dozen facts of this nature give us intelligence of a period” (Selected Prose: 1909-1965 22). In Pound’s aesthetic vision, luminous details are closely related to the poetic image as he conceived it.

**Image and Vortex**

In *The Literary Essays of Ezra Pound* (1954), Pound declares that the primary form of expression for poetry is the image: “An image is that which presents an intellectual and emotional complex in an instant of time” (4). Pound further elaborates that “the image is not an idea” in *Gaudier-Brzeska: A Memoir* (1916), but rather “a radiant node or cluster [. . .] from which, and through which, and into which, ideas are constantly rushing” (92). The poetic image’s combination of inherent dynamicism and structural integrity lead Pound to the *vortex*.

Let us imagine that words are like great hollow cones of steel of different dullness and acuteness [. . .] Let us imagine them charged with a force like electricity, or, rather, radiating a force from their apex, some radiating some sucking in [. . .] Some of these kinds of force neutralize each other, some augment; but the only way any
two cones can be got to act without waste is for them to be so placed that their apexes and a line of surface meet exactly. When this conjunction occurs let us say their force is not added one’s to the other’s, but multiplied the one’s by the other’s; thus three or four words in exact juxtaposition are capable of radiating this energy at a very high potentiality [my emphasis]. (Ezra Pound “I Gather the Limbs of Osiris, IX: On Technique” The New Age (1912) in Selected Prose: 1909-1965 34)

Energy in all its forms always retained mystical properties for Ezra Pound, who viewed words as electrified cones teeming with energy: “This particular energy which fills the cones is the power of tradition, of centuries of race consciousness, of agreement, of association” (Kenner 160). The vortex represents Pound’s most ambitious attempt to isolate a fundamental unit of aesthetics. Though others in the Vorticist movement (Wyndham Lewis, Henri Gaudier-Brzeska), also employed the word “vortex,” the term stands out as Pound’s contribution to Modernist aesthetics.

The vortex is Pound’s quark: an imaginary aesthetic entity capable of presenting itself as that point of interconnection where all the arts meet (Albright 162-164). Indeed, the vortex represents a nexus of dynamic intellectual and emotional energies. Pound preferred texts in which meaning articulated itself from some original germ, some shaping chromosome (Albright 167). The vortex represents a membrane, a tunnel through which the subjective passes into the objective; through which the world of absolute shapes, processing in absolute rhythm, passes into the quotidian (Albright 170).

Pound asserted that every great culture has a vortex or paideuma: “a people’s whole congeries of patterned energies, from their ‘ideas’ down to the things they know in their bones” (Kenner 507). Within a great culture, any vital
art movement of the past or the present possesses a particular energy complex that distinguishes it from all the others. Influenced by the vortices of their respective cultures, artists represent what Pound called "the antennae of the race" (The Literary Essays of Ezra Pound (1954) 58), gathering from the air the vibrations of live tradition and amplifying their impact via the work of art.

Pound’s Vorticist aesthetics resonates with the larger cultural phenomenon of modernism in several respects. Like the Cubists and Futurists that preceded and influenced them, Vorticists strove to express the essential qualities of their subjects via an artistic medium. Secondly, Pound’s development of “luminous details,” his definition of the poetic image, and the culmination of these ideas in his presentation of the vortex all betray a deep-rooted belief in language’s inherent ability to reflect reality faithfully. Finally, Vorticism, like the lapidary modernism of Joyce, Eliot, Proust, and Mann, is thoroughly elitist in every sense. The artist, as perceived by Pound, is tantamount to a force of nature. Pound espouses clearly a belief in master works, whose force and precision should not be confused with the dilettante’s superficial facility with conventional forms.

The macrocosmic transition from modernism to postmodernism can be perceived on the microcosmic level when Pound’s vortex is juxtaposed with William Burrough’s *virus* tropology. The literary universe that Burroughs inhabits has forsaken the idea of the almighty Author relying on the power of language to arrive at some essential truth about the human condition. The structural integrity of the vortex is gone, replaced by the postmodernist view of language as an unruly, mutating entity whose power to signify lies beyond the control of the author.
Virus

We are all tainted with viral origins. The whole quality of human consciousness [. . .] is basically a virus mechanism. (*Cities of the Red Night* 25)

I have frequently spoken of word and image as viruses or as acting as viruses, and this is not an allegorical comparison. It will be seen that the falsifications in syllabic Western languages are in point of fact actual virus mechanisms. The *IS* of identity is in point of fact the virus mechanism [. . .] The categorical *THE* is also a virus mechanism, locking you in *THE* virus universe. *EITHER/OR* is another virus formula. It is always you *OR* the virus, *EITHER/OR*. This is in point of fact the conflict formula which is seen to be an archetypical virus mechanism. (*Word Virus* 312)

For William Burroughs, identity is ultimately a symptom of parasitic invasion, the expression within the subject of forces originating from outside: "*language is a virus from outer space.*" Long before Richard Dawkins theorized about "*selfish genes*" and coined the term "*memes*" to describe units of cultural transmission, William Burroughs understood that words were viruses.

And what then is the written word? My basic theory is that the written word was literally a virus that made spoken word possible. The word has not been recognized as a virus because it has achieved a state of stable symbiosis with the host. ("*The Electronic Revolution, Part One: Feedback from Watergate to the Garden of Eden*" 2)

Burroughs's word virus and Dawkins's meme share a trait. Like the meme, the purpose of Burroughs's word virus is not to indicate or communicate any particular content, but merely to replicate itself. Word viruses and memes
are reproductive machines, containing all the information needed for their own replication.

In novels such as Cities of the Red Night, The Ticket That Exploded, Naked Lunch, and The Place of Dead Roads, Burroughs frequently writes about viruses as "simply very small units of sound and image" (Word Virus 301) that "can be made to order in the laboratory" (Word Virus 303), a fictional foreshadowing of the meme concept that Dawkins would later develop.

In The Ticket That Exploded, Burroughs speculates that word viruses may once have been healthy neural cells, but now are parasitic organisms that invade and damage the central nervous system (49). The novel portrays language as an infectious agent, penetrating consciousness, often causing unspeakable horror and death. Words come to represent everything that is alien or artificial to the human organism.

Modern man has lost the option of silence. Try halting your sub-vocal speech. Try to achieve even ten seconds of inner silence. You will encounter a resisting organism that forces you to talk. That organism is the word. In the beginning was the word. (49-50)

Burroughs asserted that as parasitic organisms, word viruses impose "image and soundtrack" (Word Virus 301) on susceptible hosts, against the will of the subjects. Summarizing Burroughs, Shaviro states:

Our bodies are never ourselves, our words and texts never really our own. They aren’t "us," but the forces which crush us, the norms to which we have been subjected. ("Two Lessons from Burroughs" 38)

A virus has no morals […] and similarly the language virus has no meanings […] It is not 'I' who speaks, but the virus inside me. (42)
Burroughs' chilling memorandum, "Technical Deposition of the Virus Power" (Word Virus 275), suggests that unspecified, sinister forces have mastered and harnessed the power of the word virus, unleashing it upon the human population with enough "variety" to keep humanity forever guessing at the "meaning" and "origins" of the virus. In this passage, Burroughs foreshadows the awesome power of twentieth century, sound-and-image-driven communication technologies. Those who have the power over these technologies can spread thought and/or image contagions throughout a population because the information being disseminated is quasi-animate and viral, fully capable of infecting their unsuspecting hosts. Burroughs's narrator tells us of the technologically-induced mutations made to the already unstable word virus that make it exceedingly difficult to decipher, prompting scientists and critics to attribute the inscrutability to the "richness of nature" and the polyvalence of texts.

Like Burroughs, Jean Baudrillard makes frequent use of biological metaphors to expound on the human condition. In The Transparency of Evil, Baudrillard concludes: "man is nothing but a dirty little germ---an irrational virus marring a universe of transparency" (61). The view that humanity is a virus is made possible because "the religious, metaphysical or philosophical definition of being has given way to an operational definition in terms of the genetic code" (The Ecstasy of Communication 50).

We are in a system where there is no more soul, no more metaphor for the body---the fable of the unconscious itself has lost most of its resonance. No narrative can come to metaphorize our presence; no transcendence can play a role in our definition [. . .] This having been established, there are no more individuals, but only potential
mutants. From a biological, genetic, and cybernetic point of view, we are all mutants. (*The Ecstasy of Communication* 50-51)

As a mutant entity, postmodern humanity constantly changes via its "solicitation of and voraciousness for images" (*The Ecstasy of Communication* 35). While Burroughs makes a case for "language as a virus," Baudrillard argues that images, too, are viral in nature. The fatal characteristics of postmodern culture, Baudrillard states, stem from the "promiscuity and ubiquity of images, the viral contamination of things by images" (35-36). Like viruses, "images can not be prevented from proliferating indefinitely, since they do not breed organically and know neither sex nor death."(36)

If, as Burroughs and Baudrillard claim, viral words, images, and genetic codes have superseded metaphysical and religious codes, what becomes of philosophy? In the case of deconstruction, Derrida's work amounts to a *logos*-corrupting entity, taking over the systemic machinery of the western philosophical tradition to destabilize its most fundamental premises and truth claims.

[...] all I have done, to summarize it very reductively, is dominated by the thought of a virus, what could be called a parasitology, a virology, the virus being many things [...] The virus is in part a parasite that destroys, that introduces disorder into communication. Even from the biological standpoint, this is what happens with a virus; it derails a mechanism of the communicational type, its coding and decoding. On the other hand, it is something that is neither living nor nonliving; the virus is not a microbe. And if you follow these two threads, that of the parasite which disrupts destination from the communicative point of view--disrupting writing, inscription, and the coding and decoding of
inscription---and which on the other hand is neither alive nor dead, 
you have the matrix of all that I have done since I began writing. 
(Brunette and Wills, Deconstruction and the Visual Arts 12)

The vortex-to-virus trajectory represents one of the two tropological 
metamorphoses used in this chapter to symbolize the transition from modernism 
to postmodernism. The other involves the changing perspectives on the function, 
meaning, and value of myth in the twentieth century.

From the Enlightenment onward, different totalizing grand narratives 
(Freudian, Jungian, Marxist, structuralist) have attempted to explain the role of 
myth in the evolution of civilization. Each case harks back to George Eliot’s 
memorable character, Edward Casaubon, in Middlemarch. Casaubon spends his 
life in a futile attempt to find a comprehensive explanatory framework for the 
whole of mythology. He is writing a book which he calls A Key to All Mythologies, 
where he intends to show that all the mythologies of the world are corrupt 
fragments of an ancient corpus of knowledge. The deluded Casaubon believes 
that only he has the key to putting all the pieces together. Casaubon’s young wife 
Dorothea is at first dazzled by what she takes to be his brilliance and erudition, 
only to find, by the time he is on his deathbed, that the whole plan was absurd 
and she can do nothing with the fragments of the book that she is supposed to 
put into order for publication.

The fictional Casaubon, in turn, is preceded by a real life scholar who 
created a totalizing account of the history and significance of myth, Giambattista 
Vico.

**Giambattista Vico and his New Science**

In the first half of the eighteenth century, Giambattista Vico introduced a 
new way of looking at myth as part of his New Science, which first appeared in 
1725 (revised second edition: 1730; final version: 1744). According to Vico, the
critical, etymological study of the classic myths of the Greeks and Romans would prove invaluable for reconstructing the pre-history of classical civilization. Vico’s comparative study of classical and primitive myths led him to believe that mythology constituted a mental language common to the nations, a symbolic language composed of concrete figures or acts which initially served as vehicles for more abstract and general concepts not yet fully conceived.

Vico’s theory of the development of civilized mankind posits four stages of evolution: the age of the gods, the age of heroes, the age of man, and the ricorso period. The age of the gods is the prehistoric, primitive age of culture when mankind attributes all causal action to divine, supernatural beings who regulate the powers of nature. The age of the gods is the fountainhead of myth according to Vico. During this period, Vico’s “theological” poets, “the earliest sages of the pagan nations” (Vico 397), produced the first myth of the gods whom they themselves had created out of their own imaginations. Motivated by the fear of thunder and lightning, the theological poets were “heroes who sang true and severe myths” (Vico 388).

The first theological poets invented the first divine myth, which was the greatest myth ever invented: Jupiter, the king and father of the gods and men, in the act of hurling a thunderbolt. The figure of Jupiter was so poetic, that is, popular, exciting, and instructive, that its inventors at once believed it, and they feared, revered, and worshipped Jupiter in frightful religions [. . .] people now believed that everything they saw, imagined, or even did themselves was Jupiter [. . .] and they endowed all the universe and its parts with the being of an animate substance. (Vico 147)

The age of heroes marks the beginning of the civil or political state and corresponds to the period when professional bards or poets emerge to sing of the
deeds of the culture’s heroes. These “heroic” poets, as Vico refers to them, “altered and corrupted” (Vico 388) the true and severe myths of the age of gods, bringing to the fore traditional, semidivine heroes that introduced the basic social institutions and laws of human society.

From Vico’s point of view, both theological poets and heroic poets created “true narratives” (vera narratio). Lacking developed, rational powers of reflection, primitive man expressed his feelings and the impressions of his senses in what Vico called “believable impossibility”: “the proper subject of poetry is a believable impossibility” (Vico 149).

For them [the ancient Greeks], the mythical tales about heroes who performed impossible actions like flying, descending to hell, or turning into gods were, for that reason, not unreal, but even more real: they described human actions which were not actual or possible for men in this world, but which, in themselves, were credible. Such descriptions extended, as it were, the range of possible human actions beyond the limit of natural reality, but not beyond that of human reality. They kept them within the limits of what Vico calls “credible impossibility,” which, he adds, is the “origin” and “the proper material of all worthy poetry.” (Mali 201)

James Joyce was very responsive to Vico’s work because he saw in Vico’s personal search for a new science of history that pattern of experience which was closely related to his own struggle for a new art of literature. The task of the historian, according to Vico, is to save the logos of ancient myth and make it significant for the modern, eighteenth century mind. Two centuries later, Joyce sought to adapt the Homeric types to the conditions of modern bourgeois life in his novel Ulysses. In the characters of Stephen Dedalus and Leopold Bloom, Joyce sought to show that for modern, twentieth century man, these archaic dreams of
mythology were a refuge from the nightmare of history. Upon finishing Ulysses, Joyce remarked that one of his prime goals in this work had been “to transpose the myth sub specie temporis nostri” (Letters of James Joyce I 147), namely to make the ancient myth meaningful and significant for our own time.

Joyce chose not to declare his debt to Vico when he constructed the general design of Ulysses; the novel stands on its own without any support from the New Science. In Finnegans Wake, however, the Vichian patterns are part of the work’s public meaning, they pervade every aspect of its structure and language. In recounting the history of civilizations, Joyce adopts Vico’s three ages (the age of gods, the age of heroes, the age of men) and retains many of Vico’s imaginative details, like the divine thunderclap, always represented in the novel by a hundred-letter thunder-word.

As late as 1871, English anthropologist Edward Tylor viewed myth as a primitive precursor to modern science, a crude attempt to account for the phenomena of the natural world by resorting to supernatural gods. Tylor read myths literally, assuming that the function of myth was to explain nature. In the twentieth century, the literalist interpretation of myth gave way to a number of readings by theorists who believed that myths work on a symbolic level. The idea that myth functions to explain the external, natural world was replaced by theories which postulated that myth helps to explain the internal, psychological dynamics of human beings.

Myths function neither as literal explanations of external reality nor symbolic explanations of psychological truth. Instead, myths are a type of meme, cultural entities which replicate and spread throughout a population like a contagion, leaving their neural footprints on the cognitive maps of individuals “infected” by the myth.
Edward Tylor: *Primitive Culture*

In *Primitive Culture* (1871), Edward Tylor argues that myth arises and functions solely to explain events in the physical world. Tylor’s “primitives” invented myth to account for their observations of the natural world. Rather than transforming dead and inert phenomena into living, sentient entities, primitives hypothesized souls and gods to account for the life and activity that they experienced around them.

For Tylor, myth is to be read literally as a causal explanation of how gods act to control the physical world. He opposes those who read myth poetically, metaphorically, or symbolically.

The basis on which such [mythic] ideas […] are built is not to be narrowed down to poetic fancy and transformed metaphor. They rest upon a broad philosophy of nature, early and crude indeed, but thoughtful, consistent, and quite really and seriously meant.

(*Primitive Culture* 285)

Tylor’s theory holds that primitives see and hear what moderns do. While not critical in the manner of modern man, primitives are not illogical. Like moderns they work inductively, from observations to inferences to generalizations. However, primitives invent myth and religion rather than science. Tylor speculates that one important reason for the difference between moderns and primitives is that moderns display a critical attitude, a willingness to seek out alternative hypotheses. The modern seeks out causes that are both predictable and testable; the primitive, by contrast, does not rigorously question the inferences drawn from their sense impressions. Once primitives hypothesize souls and gods as the causes of natural events, they experience the world as filled with these souls and gods.
Tylor’s distinction between moderns and primitives leads to a conflict between science and myth, a battle that myth is doomed to lose. Tylor argues that both science and myth attempt to explain the same phenomena. Science triumphs, in large measure, because it can test its hypotheses concerning the natural world.

We are being trained to the facts of physical science, which we can test and test again, and we feel it a fall from this high level of proof when we turn our minds to the old records which elude such testing, and are even admitted on all hands to contain statements not to be relied on. (*Primitive Culture* 280)

Whereas myth explains the whole world teleologically as determined by the actions and decisions of gods, science offers modern man an impersonal, mechanistic vision of the processes at work in nature. Tylor’s primitive relies on supernatural narratives that cannot be validated, while the modern scientist strives for explanations that can be empirically verified.

A pivotal turning point in the study and interpretation of myth came when another English anthropologist, Sir James Frazer, conducted a landmark study of myth (*The Golden Bough*) in which he interpreted gods and mythic events symbolically, rather than literally. For Frazer, myths about the death and rebirth of the god of vegetation, the chief god of the pantheon, are merely symbolic descriptions of the annual death and rebirth of vegetation itself. For Tylor, by contrast, the mythology surrounding the vegetation god constituted literal descriptions of the death and rebirth of the deity believed responsible for the course of vegetation.

**Sir James Frazer: *The Golden Bough***

In the first quarter of the twentieth century, Sir James Frazer’s monumental work, *The Golden Bough* (1911), redefined myth studies and made a
significant impact among the modernist literati (Eliot, Joyce, Yeats). For literary studies, Frazer represents "as fully seminal a mind as Freud or Marx" (Vickery 105).

What *The Golden Bough* shows us is that the interest in myth became a cultural force in twentieth-century artistic and literary circles only when the full significance of mythic activity was revealed by the new forms of science and history. Although not an advocate of Freud and psychoanalysis, Frazer was intrigued by the way in which the sexual instinct molded the religious consciousness of man. Consequently he devoted much space to charting the phallic character of primitive cults. Frazer's detached chronicling of these groups was the anthropological equivalent of Freud's exploration of modern man's sexual impulse.

While Darwinists, Freudians, and Marxists were framing the issue of the struggle for survival in biological, psychological, and socioeconomic terms, Frazer was developing his own dialectic of myth and reality. Frazer's ancient peoples sought to endure by invoking myths of divine assistance and rites in which perfect performance assures divine conquest over enemies and hence human survival. The net result of concentration upon the concepts of sex, superstition, and survival in *The Golden Bough* suggested that the primitive savage was still deeply ingrained in modern man and posed a serious threat to civilization itself.

In organizing his abundant anthropological material under the controlling concept of the dying-and-reviving vegetative, fertility deity, Frazer exhibited ironically both the rational powers of man, which his research had seemed to deny, and the religious character of man's salvation, which his personal inclinations had led him to question. *The Golden Bough* embraced two pairs of
antithetical concepts; it presents not only the irrational and unstable character of human life but also its order and stability.

In literary modernism, myths broadened their significance from that of a predominantly ornamental beauty to a dynamic illumination of the wellsprings of the human imagination. In this historical development, no work provided a broader basis or a more suggestive set of metaphors and images for this transition than did *The Golden Bough*. The closeness between Frazer's anthropology and the mythopoetic outlines of modern literature is indicated clearly by the extent to which *The Golden Bough* figures not only as a shaping force but also as a participant in the imaginative worlds of writers like T.S. Eliot and James Joyce.

Of all the poems in the twentieth century to bring *The Golden Bough* to bear on cultural analysis and diagnosis none is more famous than Eliot's *The Waste Land*, where anthropological details and methods are used for the exploration of the human soul. In addition to contributing to the shaping of the elaborate quest patterns found in the poem, *The Golden Bough* also provided Eliot with his underlying archetypal figure, the protagonist. As Frazer points out, the hero-savior of a culture or society is regarded traditionally as a representative of his people, a microcosmic equivalent of the nation or tribe. He is more than an individual; the protagonist embodies the spirit of a community or even of mankind.

In *Ulysses*, James Joyce presents a more conceptual and functional view of myth, a view in keeping with the dominant tone of *The Golden Bough*. Though Stephen, Bloom, and the author scatter a substantial welter of mythological allusion throughout the book, the final achievement is not their transformation into Odysseus or Christ or Hamlet. Rather, the characters of *Ulysses*, both major and minor, are items or illustrations of anthropological archetypes. The four
major characters receive the bulk of Joyce’s attention, so that by the end of the novel they have clearly taken on the lineaments of scapegoat, fertility goddess, priest-king, and rational intellectual. In doing so, they follow both Frazer’s pattern and method. As a result, the pagan world of Molly, the Jewish one of Bloom, and the Christian aura that dominates Stephen’s universe are drawn together into a single multi-stratified universe that becomes a kind of secular surrogate for the religious mystery of the Trinity.

As we read further in *Ulysses*, it becomes clear that Joyce uses *The Golden Bough* and folklore as a means of intimating the decline of custom and belief in cultural meaning and also as a way of defining the precise sensibility of the early twentieth century. Joyce and Frazer both seek to define the abundance of superstition, the residual convictions of the supernatural that constitute the greater, albeit hidden, portion of the human mind even in modern times. The obscure and powerful presence of the primitive in the civilized mind was a perception never far from the center of Frazer’s consciousness. To a significant extent *Ulysses* dramatizes this insight through a number of small, but revelatory, observations. The result is a cumulative impression of the perdurability of patterns of human behavior and of quasi-vestigial persistence of customs and beliefs that no longer retain their original cultural function.

Tylor’s literalist reading of myth and Frazer’s symbolic approach to myth both address natural phenomena external to mankind: how to explain the processes involved in the “birth-death-rebirth” cycle of vegetation. In contrast, Sigmund Freud and Carl Jung looked upon mythic narratives and symbols as reflective of processes internal to mankind. Freudian psychoanalysis, here represented by the theory of Otto Rank, and Jungian theory both explore myth as a commentary on the inner dynamics of the human psyche. Rank’s *The Myth of
the Birth of the Hero (1909) represents the views of early psychoanalytic theory on the origin and meaning of hero myths.

**Otto Rank: The Myth of the Birth of the Hero**

Rank’s orthodox Freudian interpretation of hero myths emphasizes the hero’s Oedipal relationship to his parents. The structure of hero myths, according to Rank, parallels the structure of infantile and neurotic fantasies.

We feel justified in analogizing the ego of the child with the hero of the myth, in view of the unanimous tendency of family romances and hero myths; keeping in mind that the myth throughout reveals an endeavor to get rid of the parents, and that the same wish arises in the fantasies of the individual child at the time when he is trying to establish his personal independence. (“The Myth of the Birth of the Hero” In Quest of the Hero 62)

As a matter of fact, the hero myths are equivalent in many essential features to the delusional ideas of certain psychotic individuals who suffer from delusions of persecution and grandeur---the so-called paranoiacs. Their system of delusions is constructed very much like the hero myth, and therefore indicates the same psychogenic themes as the neurotic family romance. (76)

At the heart of the hero myth, Rank maintains, we find the hostile attitude of the hero towards his father, stemming from the hero’s bid for the affection of the mother.

Erotic factors are especially apt to be involved, and as a rule the deepest, generally unconscious root of the dislike of the son for the father, or of two brothers for each other, is related to competition for the tender devotion and love of the mother. (66)
Hero narratives, like Oedipal fantasies, deploy the mechanism of projection so as to justify the hero’s animosity toward the father and attraction for the mother. Too horrendous to face, the true meaning of the hero myth is covered up by the concocted story. Rather than owning up to his hostile feelings, the hero is portrayed as an innocent victim or justified avenger. The abandonment or exposure of the son by the father is the excuse for the feelings which the child harbors against the father.

The exposure in the myth, therefore, is equivalent to the repudiation or non-recognition in the romantic fantasy. The child simply gets rid of the father in the neurotic romance, while in the myth the father endeavors to lose the child. Rescue and revenge are the natural terminations, as demanded by the essence of the fantasy. (63)

By identifying with the hero of the myth, Rank’s myth maker or reader vicariously lives out in the mind an adventure that, if ever fulfilled in reality, would be acted out on the parents. The hero’s triumph serves as an instrument or vehicle for ego gratification in the creators and readers of the myth.

In investing the hero with their own infantile history, they [myth creators and readers] identify themselves with him, as it were, claiming to have been similar heroes in their own personality. The true hero of the romance is, therefore, the ego, which finds itself in the hero, by reverting to the time when the ego was itself a hero, through its first heroic act, i.e., the revolt against the father. The ego can only find its own heroism in the days of infancy, and it is therefore obliged to invest the hero with its own revolt, crediting him with the features which made the ego a hero. (70-71)
Rank’s monograph, representative of orthodox Freudian thought on myth, reflects the general Freudian trend to concentrate on the pivotal events that make up the first half of life, from birth to young adulthood. The Freudian hero is the individual who has succeeded in becoming independent from his parents and has also found success in work and love.

By contrast, Jung’s analysis of hero myths reveals a bias toward the second half of life. The Jungian hero succeeds by trying to find a meaning in life beyond professional or marital fulfillment. The key to success lies in reestablishing a relationship with the unconscious. For Jung, the unconscious was far more than a repository of repressed feelings and drives. The Jungian unconscious, or “collective unconscious,” is populated by archetypes, which trigger the formation of symbols, stir the emotions, and shape mankind’s experience of the world.

**Carl Jung**

Whereas Tylor and Frazer considered the subject matter of myth to be physical processes external to the individual, Carl Jung argued that myth addresses internal, psychological processes.

Myths are original revelations of the preconscious psyche, involuntary statements about unconscious psychic happenings, and anything but allegories of physical processes. ("The Psychology of the Child Archetype" *The Archetypes and the Collective Unconscious* 154)

For Frazer, the chief myths of all religions describe the death and rebirth of vegetation, a process symbolized by the myth of the death and rebirth of the god of vegetation. By contrast, Jung interprets the myth of the death and rebirth of a god as a symbolic expression of a process taking place not in the world but in the mind. That process is the return of the ego to the unconscious, a kind of
temporary death of the ego, and its reemergence, or rebirth, from the unconscious.

Like Jung, Sigmund Freud also thought that myths represented a symbolic elaboration of internal psychodynamics. For both Freud and Jung, mythic thinking is akin to dream thinking, but on the nature of dream thinking they differ. Freud posited that myths, like dreams, represented a compromise between primary process thinking, which operates according to the pleasure principle, and secondary process thinking, which operates according to the reality principle. Myths and dreams, according to Freud, were a product of “dream work,” the elaborate process by which a myth’s latent meaning is converted into manifest meaning. As a result, both myths and dreams mask a distinctive way of thinking, that of the pleasure principle.

Jung grants the Freudian claim that dreams and fantasies stem from personal experiences, events forgotten or repressed. However, in addition to these manifestations of the personal, Freudian unconscious, Jung asserts that myths emanate from a collective unconscious and cannot be explained as something individually acquired. Rather than the creation of an individual unconscious, myths emerge from what Jung considered a common human instinctual organization.

The collective unconscious, being the repository of man’s experience and at the same time the prior condition of this experience, is an image of the world which has taken aeons to form. In this image, certain features, the archetypes or dominants, have crystallized out in the course of time. They are the ruling powers, the gods, images of the dominant laws and principles, and of typical, regularly occurring events in the soul’s cycle of experience.

*(Two Essays on Analytical Psychology 105)*
Jung described the archetype as a “system of readiness” that responds to environmental cues, a dynamic nucleus of concentrated psychic energy ready to be actualized, as an affect-image and as an autonomous, numinous structural element outside the comprehension of the ego (Maduro and Wheelwright 182). Jung believed that archetypes had a biological foundation; he viewed them as “mentally expressed instincts” (*Letters II, 1951-1961* 521). Regarding their origin, Jung once wrote:

> It seems to me that their origin can only be explained by assuming them to be deposits of the constantly repeated experiences of humanity [. . .] The archetype is a kind of readiness to produce over and over again the same or similar mythical ideas. (“On the Psychology of the Unconscious” *Two Essays on Analytical Psychology* 69)

Archetypes prepare and prompt human beings to react instinctively and spontaneously to the presence of environmental cues like parents, male and female lovers, and children. For example, Jung would argue that human beings are naturally inclined to seek something resembling a mother in the outside world because the behavioral pattern of “being mothered” is already imprinted on our unconscious by the mother archetype.

Archetypes are themselves unrepresentable elements of the instinctual structure of the human psyche. We know of them indirectly through their effects, through the images and symbols they produce in the mind. Symbols and images are to archetypes as actions are to instinctual, physiological urges. Just as the instincts and drives trigger certain actions, archetypes like the *hero*, the *anima*, and the *trickster* initiate the formation of a wide array of symbolic representations. Throughout history, symbolic representations have constituted the threads that make up the fabric of myth.
From the Jungian perspective, myths are essentially culturally elaborated representations of the deepest recesses of the psyche, the world of the archetypes. Myths contain multiple archetypes, with each archetype harboring an inexhaustible number of meanings. Myths represent these archetypal structures not in a historical vacuum but rather in terms of the worldview of a particular age and culture. For Jung, the creation of myths brings what is relatively timeless (the symbol as representation of the instinctual world of the archetypes) into the world of human history.

Jung’s theories concerning myth, archetypes, and the collective unconscious influenced the thought of another writer who took up the analysis of myth, Joseph Campbell.

**Joseph Campbell**

Joseph Campbell presents a far more romantic view of ancient man’s relationship to myth than either Freud or Jung. For Campbell, modern man has nothing to teach his less sophisticated ancestors, who were more in tune with the meaning and importance of myth. Myth served mankind in earlier periods by revealing the existence of the unconscious in a manner accessible to the people of those times. The difference between previous cultures and modern mankind is that previous cultures had sages to interpret myth psychologically. Until psychoanalysis, modern man was bereft of skilled interpreters of myth who could go beyond the surface level of a literalist reading and address the symbolic dimension of myth.

In Campbell’s *The Hero with a Thousand Faces* (1949), the author focuses on two objectives. Campbell first aims to prove that all hero myths are basically the same, conforming to a pattern which he calls the *monomyth*. Secondly, Campbell argues that the correct approach to all hero myths possesses a psychological dimension and a metaphysical dimension.
Based on his analysis of the similarities of hero myths from all over the world, Campbell presents what he believes to be the narrative prototype (the monomyth) from which all hero myths derives.

The standard path of the mythological adventure of the hero is a magnification of the formula represented in the rite of passage: 

\textit{separation-initiation-return} [\ldots] A hero ventures forth from the world of common day into a region of supernatural wonder: fabulous forces are there encountered and a decisive victory is won: the hero comes back from this mysterious adventure with the power to bestow boons on his fellow man. \textit{(The Hero with a Thousand Faces 30)}

Campbell insists that hero myths possess a metaphysical dimension that supplements the psychological reading of the myth. The hero’s journey, in Campbell’s estimation, reveals a supernatural realm beyond common, everyday existence.

And so, to grasp the full value of the mythological figures that have come down to us, we must understand that they are not only symptoms of the unconscious (as indeed are all human thoughts and acts) but also controlled and intended statements of certain spiritual principles, which have remained as constant throughout the course of human history as the form and nervous structure of the human physique itself. Briefly formulated, the universal doctrine teaches that all the visible structures of the world, all things and beings, are the effects of a ubiquitous power out of which they arise, which supports and fills them during the period of their manifestation, and back into which they must dissolve. \textit{(257)}
Campbell declares that myth serves four distinct functions: to instill and maintain a sense of awe and mystery before the world; to provide a symbolic image for the world such as that of the Great Chain of Being; to maintain the social order by giving divine justification to social practices; and above all to harmonize human beings with the cosmos, society, and the unconscious part of themselves (Segal *Hero Myths: A Reader* 17)

Of the theorists presented in this chapter, Campbell has the most affinity with Carl Jung. Like Jung, Campbell maintains that mythic narratives are a primary vehicle for the expression of archetypes. For Campbell, however, each generation creates archetypes anew out of its own experiences; Jung believed that archetypes were a product of heredity. Campbell’s vision of the hero resonates with Jungian theory as well. Both Campbell and Jung see the hero emerging in the second half of life, embarking on a quest to find existential meaning that goes beyond the mundane limitations of quotidian life.

Jung and Campbell differ, however, on the ultimate value of myth. Jung urges mankind to learn from myth without abandoning itself to it. Myth is neither necessary nor sufficient for human fulfillment. Campbell, on the other hand, believes that myth is needed in order to attain the deepest fulfillment. Myth contains all the wisdom mankind needs and Campbell encourages an active “living out” of myth that Jung finds dangerous. To identify oneself with a myth is to lose touch with the rest of the personality. Carried to an extreme, identification causes a breakdown rather than an enhancement of the psyche.

Where Campbell’s analysis of myth owed a debt to Jung and the psychological perspective, the French anthropologist Claude Levi-Strauss would draw from the ideas of Ferdinand de Saussure and structuralism in formulating his interpretation of myth.
Myth, Levi-Strauss, and Structuralism

Structuralism is appealing to some critics because it adds a certain semblance of scientific objectivity to the realm of literary studies. In structuralism, the analysis of patterns, systems, and structures supplants the study of the particular author. The text is a function of a system, not of an individual. We do not originate language, but rather inhabit a structure that enables us to speak. Structuralism envisions these linguistic structures as universal and timeless. Language itself, rather than the liberal humanist subject, is the center of self and meaning.

Claude Levi-Strauss brought this structuralist perspective to cultural anthropology and the study of myth, in particular. In "The Structural Study of Myth," Levi-Strauss explains why myths from different world cultures seem so similar. Levi-Strauss insists that myth is language, because myth has to be told in order to exist. It is also a language, with the same structures that Saussure described belonging to any language.

Like language, myth consists of both langue and parole, both the synchronic, ahistorical structure and the specific, diachronic details within the structure. A myth, according to Levi-Strauss, is both historically specific, almost always set in some time long ago, and ahistorical, and so timeless. As history, myth is parole; as timeless, it is langue.

According to Levi-Strauss, myth can be translated, paraphrased, reduced, expanded, and otherwise manipulated without losing its basic shape or structure.

Poetry is a kind of speech which cannot be translated except at the cost of serious distortions; whereas the mythical value of the myth is preserved even through the worst translation. Whatever our
ignorance of the language and the culture of the people where it originated, a myth is still felt as a myth by any reader anywhere in the world. Its substance does not lie in its style, its original music, or its syntax, but in the story which it tells. (*Structural Anthropology* 206)

At the most fundamental level, Levi-Strauss claims that myths are comprised of *gross constituent units* (mythemes) that are put together according to certain rules. Mythemes form relations with each other that are based on binary oppositions. Levi-Strauss concentrates on what he termed the *bundles of relations* that comprise these mythemes, asserting that: "it is only as bundles that these relations can be put to use and combined so as to produce a meaning" (207).

Levi-Strauss’s method involves reducing any myth to its mythemes and laying these mythemes out so that they can be read both diachronically and synchronically. The story, or narrative, of the myth exists on the diachronic axis in non-reversible time (*parole*); the structure of the myth exists on the synchronic axis, in reversible time (*langue*). Once the mythemes are laid out, they can be interpreted in an almost infinite number of ways.

Levi-Strauss concluded that the structural method of myth analysis brings order out of chaos by providing a means to account for widespread variations on a basic myth structure. Structuralist analysis is designed to enable the practitioner to perceive some basic logical processes which are at the root of mythical thought.

Claude Levi-Strauss applied Saussurean linguistics and structuralist principles to the analysis of myth. Beginning in the late 1960s, another French theorist, Jacques Derrida, would challenge Saussure, Levi-Strauss, structuralism, western metaphysics, and seemingly all discursive practices in an assault that
would leave western myth on the same precarious footing as the rest of the cultural matrix.

Jacques Derrida: Play, Bricolage, Difference

In his essay "Structure, Sign, and Play in the Discourse of the Human Sciences," Derrida reveals that the built-in assumptions of structuralism and western metaphysics (the concepts of a fixed center, point of origin, absolute presence) are mythical themselves, in the pejorative sense of the word. According to Derrida, "all names related to fundamentals, to principles, or to the center have always designated an invariable presence" (Writing and Difference 279-280) that simply does not exist. In the realm of language, Derrida claims that the "central signified, the original or transcendental signified, is never absolutely present outside a system of differences. The absence of a transcendental signified extends the domain and the play of signification infinitely" (280).

Derrida’s position would invalidate Levi-Strauss’s assertion that mythemes constitute fully present, fundamental units of analysis. What, for Derrida, are the repercussions for the analysis of myth?

There is no unity or absolute source of the myth. The focus or the source of the myth are always shadows and virtualities which are elusive, unactualizable, and nonexistent in the first place . . . The discourse on the acentric structure that myth itself is cannot itself have an absolute subject or an absolute center. (286)

For Derrida, structural discourse on myths, the very project that Levi-Strauss was engaged in, "must itself be mythomorphic" (286). Ironically, this would mean that Levi-Strauss’s analysis of myth is itself a myth. To further illustrate this point, Derrida calls attention to Levi-Strauss’s use of the terms *bricolage* and *bricoleur.*
Seen through Derrida’s eyes, Levi Strauss defines the *bricoleur* as someone who uses "the means at hand," the instruments he finds at his disposition, those which are already there, which had not been especially conceived with an eye to the operation for which they are to be used and to which one tries by trial and error to adapt them, not hesitating to change them whenever it appears necessary, or to try several of them at once, even if their form and their origin are heterogeneous (*Writing and Difference* 285). The *bricoleur*’s binary opposite is the *engineer*, who is contrasted with the *bricoleur* in the following passage from Christopher Norris’s *Derrida*:

The *bricoleur* is a kind of Heath Robinson figure, happy to exploit the most diverse assortment of myths, or random combinatory elements, in order to create a working hypothesis about this or that feature of social life. The opposite approach is that of the typecast *engineer*, one who starts out with a well-defined concept of the machine (or explanatory theory) he wants to construct, and who follows this blueprint through to its logical conclusions. (134)

From Derrida’s point of view, every discourse is *bricolage*; the idea of a subject who is the absolute origin of his own discourse and who would construct this discourse "out of nothing/out of whole cloth" (*Writing and Difference* 285) [like the *engineer*] is a myth produced by the *bricoleur*. The breakdown of the distinction between *engineer* and *bricoleur* has far-reaching consequences; the destabilization of this binary opposition leads to a collapse of the distinctions between theoretical concepts and myths created via *bricolage*.

If the line is forever blurred between *engineers*, those who would create stable totalizing systems of meaning, and *bricoleurs*, what is left of the interpretive process? Derrida would argue that any interpretive engagement with a text must consider the inherent *play* at work in the text. Derridean
deconstruction maintains that the faux fixity and stasis of western metaphysics masks the dynamic phenomenon at work in discourse: play. Derrida asserts: 

Play is the disruption of presence. The presence of an element is always a signifying and substitutive reference inscribed in a system of differences and the movement of a chain. Play is always play of absence and presence, but if it is to be thought radically, play must be conceived of before the alternative of presence and absence. Being must be conceived as presence or absence on the basis of the possibility of play and not the other way around. (292)

Derrida sees interpretation as taking two possible paths. The first interpretive strategy "seeks to decipher, dreams of deciphering a truth or an origin which escapes play and the order of the sign" (292). The second interpretive strategy "affirms play and tries to pass beyond man and humanism" (292). Both strategies are, however, motivated by the emergence of memes and memeplexes, cultural entities that originate in the brain and spread throughout a population like viruses.

The Birth and Evolution of the Meme

For a biologist it is tempting to draw a parallel between the evolution of ideas and that of the biosphere. For while the abstract kingdom stands at a yet greater distance above the biosphere than the latter does above the nonliving universe, ideas have retained some of the properties of organisms. Like them, they tend to perpetuate their structure and to breed; they too can fuse, recombine, segregate their content; indeed they too can evolve, and in this evolution selection must surely play an important role.

(Monod Chance and Necessity 165)
Richard Dawkins’s *The Selfish Gene* introduced the concept of the meme in 1976. A devout neo-Darwinist, Dawkins proposed the idea that the theory of evolution had broader applicability. In the following passage, Dawkins addresses what he believes is at the heart of evolutionary theory:

[. . .] is there anything that must be true of all life, wherever it is found, and whatever the basis of its chemistry? [. . .] if I had to bet, I would put my money on one fundamental principle. This is the law that all life evolves by the differential survival of replicating entities. The gene, the DNA molecule, happens to be the replicating entity that prevails on our planet. There may be others. If there are, provided certain other conditions are met, they will almost inevitably tend to become the basis for an evolutionary process.

(191-192)

Dawkins proceeds to make the case for a new replicator at work in the "primeval soup" of human culture. Memes, according to Dawkins, are "tunes, ideas, catch-phrases, clothes fashions, ways of making pots, or of building arches" (192). Dawkins’s meme replicates via imitation. However, not all memes replicate with equal ease and success: "just as not all genes that can replicate do so successfully, so some memes are more successful in the meme-pool than others. This is the analog of natural selection" (194).

The meme/gene analogy is instructive, but not perfect, and Dawkins is quick to point this out. He states that "in general memes resemble the early replicating molecules, floating chaotically free in the primeval soup, rather than modern genes in their neatly paired, chromosomal regiments" (196-197).

While Dawkins coined the expression "meme" and initiated the research into its potential as an explanation for cultural evolution, Daniel Dennett really put memes on the intellectual map with the ideas he presented in two books,
Consciousness Explained (1991) and Darwin’s Dangerous Idea (1995). In Consciousness Explained, Dennett builds upon Dawkins’s initial list of "meme" examples, stating first that memes are "not the simple ideas of Locke and Hume (the idea of red, or the idea of round or hot or cold), but the sort of complex ideas that form themselves into distinct memorable units" (201). Dennett’s list includes:

- wheel
- wearing clothes
- vendetta
- right triangle
- alphabet
- calendar
- The Odyssey
- calculus
- chess
- perspective drawing
- natural selection
- Impressionism
- Deconstruction

Like Dawkins before him, Dennett also explores the meme/gene analogy, stating that memes, like genes, are invisible entities carried by vehicles that tend to produce characteristic, phenotypic effects: pictures, books, tools, buildings. Dennett begins to describe the meme transmission dynamic when he states: “A wagon with spoked wheels carries not only grain or freight from place to place; it carries the brilliant idea of a wagon with spoked wheels from mind to mind.” (203-204)

Perhaps Dennett’s most radical hypothesis is that human consciousness and subjectivity is itself a huge complex of memes, an artifact created when memes restructure the human brain in order to make it a better habitat for memes. As for human creativity, Dennett theorizes that:

[...] when memes come into contact with each other in a mind, they have a marvelous capacity to become adjusted to each other, swiftly changing their phenotypic effects to fit the circumstances---and it is the recipe for a new phenotype that then gets replicated when the mind broadcasts or publishes the results of this mixing.  
(Darwin’s Dangerous Idea 355)
In *The Meme Machine* (1999), Susan Blackmore further develops this line of thought, explaining the formation of meme conglomerations she calls "memeplexes." Memes, like genes are selected against the background of other memes in the memepool. The result, according to Blackmore, is that gangs of mutually compatible memes (co-adapted meme complexes or memeplexes) are found co-habiting in individual brains. By analogy with gene complexes, memes "cooperate" in mutually supportive memeplexes which are supportive within the memeplex but hostile to rival memeplexes. Like Blackmore, this study argues that religious, political, and other sociocultural ideologies would fall under the category of memeplexes.


A meme, then, is essentially the state of a node in a neuronal network capable of generating a copy of itself in either the same or a different neuronal network, without being destroyed in the process. (325-326)

The social transmission of memes occurs when memes stimulate the host to engage in a behavior that produces a social signal that can be perceived by a second organism. Sensory receptors in the receiving organism then convert this signal back into a neural pattern that can instigate the local replication of the memetic state in the second organism’s brain (327).

The second way that memes are transmitted is via artifacts, defined by Aunger as “abiotic substrates for signals located in the macroenvironment” (328). With respect to memes, artifacts function as storehouses of information. At some point in culture’s evolutionary past, memes came to involve themselves with artifacts, either by helping to construct artifacts or by using them as templates for
the signals they produce (328). Over time, the evolution of culture has come to depend more and more significantly on the evolution of artifacts.

After examining myth anthropologically (Tylor, Frazer) and psychologically (Rank, Jung), the primary long-term benefit of the memetic approach to myth is that it directly connects advances in the biological and neurological sciences to the explanation of sociocultural phenomena like myth. Neuromemetics may eventually provide a testable mechanism for explaining the emergence and propagation of myths and other cultural entities. If, in the future, neuroscientists are able to do for the meme what Watson and Crick did for DNA and genetics, mankind will need to redefine the boundaries of the “nature versus nurture” debate.

The first four chapters of this study constitute a foundation for the analysis of nihilism and chaos in three landmark novels of the modernist and postmodernist periods. The next three chapters will examine how each novelist, immersed in his respective sociocultural matrix, addresses the emergence of nihilism and chaos as significant factors shaping the lives of their characters and, by extension, the cultural life of the twentieth century.
CHAPTER FIVE
JAMES JOYCE’S ULYSSES: THOUGHTS WITHOUT A THINKER, SEEKING TRUTH IN A PATHLESS LAND

James Joyce’s Ulysses, from the standpoint of the matrix model, represents a seminal work in literature because Joyce redefines the boundaries of what constitutes a self immersed in the turbulence of the twentieth century. Bloom, Stephen, and Molly compel the reader to look at the nature of subjectivity in a radically new way, as discursive entities, as sentient programs, as processes engaged in the perpetual interpretation and schematization of the sociocultural matrix known as Dublin. The revolutionary aspect of Joyce’s narrative resides in the particular manner in which Joyce uses the stream of consciousness technique, as a tool for collapsing the distinction between inside and outside, subject and object, self and world. No-thing, no-body experiences the world, but rather cultural information disseminates throughout a vast network populated by entities we call “institutions,” “media,” “individuals,” et al. Memes are the mutating, viral bundles of cultural data that in-form our sense of self and define the language-mediated world that surrounds us.

Joyce’s “fictional” Dublin refers to the Irish city, but it also points to something more, an evolving matrix of information where no static, monolithic reality exists, but rather a multiplicity of perspectives. This perspectivism reveals a Nietzschean dimension in Joyce’s novel which, when combined with the
chaotic model of the self presented in chapter one, “The Matrix Model,” provides a framework for understanding how these perspectives, these selves, emerge and evolve while maintaining a sense of identity. Finally, a novel that questions our sense of objective reality by way of proliferating perspectives, that presents the self ontologically as made up of other people’s words, begs the question: “Is Ulysses representative of a ‘literature of nihilism’?” The complex response requires that we examine the dialectic between creative nihilism and secular humanism that runs throughout the novel via Stephen and Bloom’s respective streams of consciousness.

**Ulysses Reloaded: Dublin as Matrix**

The Matrix movie trilogy, written and directed by the Wachowski brothers, provides the visual and conceptual metaphor for the sociocultural matrix concept I am applying to the analysis of Ulysses. In the trilogy, the vast majority of mankind is enslaved by a totalizing, virtual reality program known as “the Matrix.” As cinematic embodiments of Baudrillardian hyperreality and simulation, the films portray “reality” as technologically manufactured, a boundless ocean of digitized information comprised of mutating bit strings of 1s and 0s. While the films epitomize the best and worst of special effects-driven science fiction, maverick scientists exploring the interface between theoretical physics and information theory (John Archibald Wheeler, Ed Fredkin, Stephen Wolfram) have conceptualized information-based models of physical “reality” that resonate with the Wachowski’s vision.

A physicist perhaps best known for coining the phrase “black hole,” John Archibald Wheeler’s study of these astrophysical phenomena led him to conclude that information and physical existence are inextricably linked. Matter/energy organized or structured in any way contains information about how its parts are put together: “information and reality have some sort of mutual
relationship. On the one hand, information is real, not merely an abstract idea. On the other hand, reality---or existence---can somehow be described, or quantified, in terms of information” (Siegfried 3). Wheeler’s perspective can be summarized with his phrase “It from Bit”: “The universe and all that it contains (“It”) may arise from the myriad of yes-no choices of measurement (the “bits”).” (Wheeler 340)

Edward Fredkin “insists that the universe is a computer simulation. All the things we see, know, and do are merely shadows in the software of some unfathomable computer” (Siegfried 57). The idea that all of nature’s activities can be described as information processes forms the basis for Fredkin’s digital philosophy, which holds that all quantities in nature are finite and discrete. Atoms, electrons, quarks, in short, the “stuff” of which the universe is made consist of bits governed by a single programming rule. This single principle that governs the universe lies somewhere within the class of computer programs known as cellular automata.13

Cellular automata are discrete, dynamical systems made up of a spatial lattice of many cells, each of which may be in a finite number of states. A cell may change state only at fixed, regular intervals, and only in accordance with fixed rules that depend on the cell’s own values and the values of neighbors within a certain proximity. According to Stephen Wolfram in A New Kind of Science, the behavior of these cellular automata may very well hold the key to explaining the emergence and evolution of complexity from simple rules.

Decades before The Matrix trilogy and the emergence of an info-centric view of reality, Joyce experimented with the idea of creating Dublin as a vast field of cultural information. In Ulysses, Joyce melds the physical with the virtual by way of the memetic; in other words, the distinction of a concrete world “out there” and a mental world “in here” collapses. Perception is interpretation,
interpretation is perception and memes represent the “quanta” at the heart of the process. Bloom and Stephen experience the sights, sounds, smells, tastes, and touches of June 16, 1904 in terms of an allusive, richly interconnected web of cultural fragments drawn from literary texts, philosophical works, popular culture, and other sources that span two millennia of Western history. I propose that Joyce’s fictional world of 1904 Dublin is a sociocultural matrix, a sprawling discursive entity teeming with cultural data which envelops its characters and defines the codes with which the characters interpret the world. These codes are comprised of memes, the discrete bundles or chunks of cultural information which serve as seeds of reality that influence the subject’s stream of consciousness.

Through the stream of consciousness technique, Joyce reveals that in the Dublin matrix no single “reality” predominates; each stream of consciousness (Bloom, Stephen, Molly) manufactures a dynamic worldview synthesized from the memetic material available to it. Furthermore, no unitary, cohesive ego commands the stream of consciousness; competing, conflicting drives and needs produce a radically decentered, destabilized subject reminiscent of Nietzsche in *The Will to Power*:

> It is our needs that interpret the world; our drives and their For and Against. Every drive is a kind of lust to rule; each one has its perspective that it would like to compel all the others to accept as a norm. (267)

**Perspectivism as both epistemology and ethos**

While the Nietzschean imprint on Joyce’s writing is not as pronounced as it is in the work of Thomas Mann and others, Joyce’s fiction nevertheless resonates with important themes addressed in *The Will to Power, The Gay Science*, and other texts in the Nietzschean oeuvre. Joyce and Nietzsche both opposed the
reification of dogmatic thought of any kind and embraced a radical perspectivism that accommodates the contingencies of existence within dynamic and always provisional systems of interpretation. In “Beyond Truth and Freedom: The New Faith of Joyce and Nietzsche,” Joseph Valente opines that the “perspectival conflict” found in the characters also characterizes the text itself.

_Ulysses_ moves the reader among textual differences, types of discourse, interpretive categories and conventions, whose interplay is an analogue of the perspectival conflict producing consciousness. Rather than distinct items, the subject-reader and object-book are interwoven parts of the same fabric. (100)

Joyce and Nietzsche disagreed with the “correspondence model of truth,” the idea that a reality-in-itself exists, theoretically accessible to conceptualization. Both men sought to discredit static, universal forms, believing experience to be irreducible to the logical categories of truth and falsehood. The idea of a permanent reality underlying and unifying the flow of appearances is the product of mankind’s fictive self-image, an image rooted in the notion of an autonomous, cohesive ego.

For each [Joyce and Nietzsche], the reality that emerges from our system of language, logic, and value may be the necessary condition for our present existence, but that does not mean that this reality is the case in any absolute sense . . . (Valente 88)

Joyce and Nietzsche viewed the subject as a decentered construct, a multiplicity of perspectives whose struggle for dominance produces thought. These perspectives, seen through the matrix model, are composed of memes and memeplexes that have been assimilated by the subject, the building blocks of the paradigms and schemas used to interpret the world. Joyce in particular uses stream of consciousness to reveal that the self manufactures “reality” by
processing the blitz of external stimuli in terms of an ever-expanding, protean body of memetic material.

The technique of interior monologue reveals consciousness to be a tissue of borrowed phrases and categories, points of reference and comparison [. . .] Stephen’s identity, displaced across the times of his life, is also dispersed across a range of discourses which produce and circumscribe his reality [. . .] “Countless meanings” have been prepared for Stephen, and these are precisely the marks of the other perspectives bearing upon and giving rise to his own.

(Valente 92)

Memes function as seeds of reality which evolve and become imbricated with other memes, forming what amounts to a complex web of perceptual filters. By cross-referencing the incoming sensory data with the dynamic array of schemas and codes that comprise the subject’s worldview, memes constitute the vehicles through which raw sensory data becomes meaningful, culturally-specific information at the speed of thought. As we become acculturated, our evolving cognitive machinery precludes us from distinguishing naked fact from interpretation.

In The Will to Power, Nietzsche tells us that there are no facts, only interpretations: “We cannot establish any fact ‘in itself’: perhaps it is folly to want to do such a thing” (267). We are driven “not ‘to know’ but to schematize—-to impose upon chaos as much regularity and form as our practical needs require” (278). In Ulysses, Joyce’s characters are not flesh-and-blood subjects, but rather names given to distinctive processes of interpretation and schematization. “Stephen,” “Bloom,” and “Molly” remind us of Gertrude Stein’s Oakland (“there is no ‘there,’ there’): not things or beings as such, but rather sentient discursive
programs, entities engaged in the never-ending process of assimilating memes into their evolving, internal schemas.

**Chaos in Ulysses**

The issue of chaos in Joyce’s *Ulysses* hinges on the reader’s perspective. The novel may be read as a locked text, a rigid partitioned conglomerate, or, on the contrary, as a mobile, open text where everything ceaselessly circulates.

We are dealing with a text that is highly organized, firmly coded and programmed down to its most minute units, but whose organizational law has been carefully camouflaged by systemic fragmentation and even pulverization . . . He [Joyce] carefully places insidious discordances at strategic spots, gathers them together in a montage by juxtaposition and makes this the privileged vehicle of meaning. (Topia 107)

Throughout the novel, a battle rages between the forces of randomness, represented by the “external” welter of stimuli and the “internal” stream of consciousness of the characters, and the organizational elements of the text (referrals to Homeric myth and other landmark Western cultural artifacts). Structural parallels to the *Odyssey*, the *Hamlet* allusions, the Gilbert-Linati schemas, and numerous other organizational devices appear intermittently amidst the seemingly endless barrage of sensory stimulations that trigger the profusion of thoughts emanating from the central characters.

As Umberto Eco observes, important things no longer happen in the novel; the trivial, inessential minutiae of quotidian life vaults to center stage, presented in an orderless, incoherent flow.

It is the epic of the *un-significant* [my emphasis], of the *bêtise*, of the un-chosen, because the world is actually the total horizon of insignificant events which bind themselves in continuous
constellations, each one the beginning and the end of a vital relation, center and periphery, first cause and last effect of a chain of meetings and oppositions, parenthoods, and contradictions.

(“The Aesthetics of Chaosmos” 58)

In the “chaosmos” of 1904 Dublin, Joyce problematizes the issue of the characters’ personal identities. In the continuous flow of perceptions, the boundaries between self and environment, “inside” and “outside” become blurry and vague: “In the open sea of the stream of consciousness one finds no individual minds that think the events but only events flowing in uniform distribution which are gradually thought by someone” (42-43). Something is speaking which structures the language, matrices of discourse which emerge in the form of what Eco calls personages.

From the very moment that we are familiar with the narrative technique of Ulysses, we are able to isolate the various personages in the magma of voices, figures, ideas, and odors that constitute the general field of events . . . Each personage is constituted by the same undifferentiated field of physical and mental events, yet each is united by a personal style of discourse. Bloom’s stream assumes characteristics diverse from Stephen’s and Stephen’s stream differs from that of Molly’s. (43)

With each of the three main personages (Bloom, Stephen Dedalus, and Molly), the reader is confronted on the one hand with bewildering unpredictability (the reader cannot ascertain or predict what the next thought, observation, or perception will be), and on the other hand, with emergent, distinctive patterns of ideas to which each personage returns. Situated in the interstice between randomness and order, Joyce’s central characters exemplify
the chaotic model of the self described in chapter one of this dissertation, “The Matrix Model.”

The chaotic self is, according to Hofstadter, the most complex of all symbols in the mind, a renormalized, feedback-driven entity in constant communication with the vast ensemble of symbols and subsystems stored in the brain (Gödel, Escher, Bach 385). By way of strange loops and tangled hierarchies, the “I” or self maintains a delicate, dynamic equipoise by locking-in to its chaotic attractor. The welter of sensory data streaming in from the outside world and the constant feedback flowing between the symbols and ideas that make up the psyche serve as inputs in the self’s search for its most stable configuration.

With each individual forming its own optimal self-configuration based on cultural inputs and biological parameters, “reality” refers to a proliferation of processes in flux rather than a fixed objective concept for the whole human population. Argyros argues that the more sophisticated an entity’s capacities to receive, store, manipulate, and transmit information, the more world it has at its disposal. (A Blessed Rage for Order 131)

Memes influence dramatically the amount of world an individual has at its disposal. True polymaths, on the order of a Joyce, Beckett, or Pynchon, can perceive a more complex “reality” thanks in part to a memetic storehouse of varied cultural knowledge that far exceeds that of most individuals. This storehouse changes the way an artist like Joyce looks at the phenomenon of memory. “Remembering” is no longer an act of volition carried out by a subject, but rather an event produced subconsciously by the interactions between memes and memeplexes in response to an environmental trigger. The chaotic flow of perceptions and memories we encounter in Joyce’s characters amounts to a choreography of the dance taking place among and between the memetic attractors vying for a position within the characters’ streams of consciousness.
Memes structure the mind in a way that considerably influences what characters perceive and how they interpret those perceptions without turning the subject into a rigid automaton. In the chaotic flow of Bloom’s consciousness, death, sex, religion, advertising, and Irish history and politics serve as basins of attraction that shape Bloom’s idiosyncratic stream of thought. For example, his thoughts return unpredictably, yet repeatedly, to events like Dignam’s funeral, the deaths of his father and son, scenes of his daughter Milly’s childhood, and so forth. The Keyes advertisement, as well as advertisements for Agendath Netaim and Plumtree’s Potted Meat, flickers in and out of his consciousness. Martha Clifford’s letters, lines from Sweets of Sin, and, most of all, his wife Molly spring into his stream of consciousness on an irregular, but frequent basis. Memory fragments from their courtship, like making love to Molly on Howth Hill, are interspersed throughout the narrative, as are momentary thoughts on Molly’s impending tryst with “Blazes” Boylan. No matter what context Bloom finds himself in on this June 16, 1904, this particular constellation of psychological attractors give a distinctive shape, if not predictability, to his thought patterns.

Stephen Dedalus’s personage is likewise drawn to attractors that emanate from the historical nightmare from which he is trying to awaken. Throughout the text, memetic fragments and shards emerge in his consciousness, alluding to Shakespeare, Dante, Aquinas, Aristotle, and various other lesser known cultural figures. Firmly embedded, these fragments haunt him throughout the narrative, along with his loss of faith, his Jesuit education, his days in Paris, and, most importantly, his refusal to pray for and with his dying mother at the time of her passing. While death, religion, sex, and Irish history and national politics figure prominently in the minds of both Bloom and Stephen, their streams of consciousness remain quite distinct; Stephen’s defiant intellectualism propels the vector of his thought in a different direction than that of Bloom, whose thought
processes are predominantly shaped from years of experience in the advertising and business worlds.

The “Penelope” chapter represents the novel’s most extensive experiment in stream of consciousness: eight sprawling, rambling “sentences” worth of Molly Bloom’s thought in the pre-dawn hours of June 17, 1904. As thoughts, memories, opinions, and speculations bleed into one another haphazardly, the reader can ascertain recurring patterns in the Molly Bloom personage. While sexual relations, both real and imagined, punctuate her stream of thought frequently and emphatically, Molly also returns to thoughts of her rivalry with daughter Milly, her criticisms of other women (Mrs. Riordan, Josie Breen, et al.), her youth in Gibraltar, what it would be like to be a man, and the numerous shortcomings and few saving graces of her husband Leopold Bloom. Her lack of a formal education vis-à-vis Stephen and Bloom, and the social construction of her gender as of 1904 Dublin are two important reasons why the subjects in her stream of thought differ so dramatically from the two male characters.

**Nihilism and Ulysses**

The literary nihilist [...] finds the open form specially suited to his needs. Everything in his imaginary universe is relative, provisional, held in balance, so that yes and no, darkness and light, life and death, God and Satan, purpose and absence of purpose, meaning and utter lack of meaning, nothingness and plenitude, are involved in a polar dance that seems for a fleeting moment to imply but never actually achieves the harmony of opposites. All he perceives is a world of phenomena that each person interprets in his own way, and these interpretations add up to nothing he can describe with certainty. (Glicksberg 30)
Is *Ulysses* a work of literary nihilism? No one would confuse Joyce’s novel with Dostoevsky’s *Demons* or *The Brothers Karamazov*. Yet, as the reader becomes acquainted with the streams of consciousness of Stephen and Bloom, the thought patterns of the characters suggest that Joyce straddles the interface between creative nihilism on the one hand (most often associated with Stephen) and a form of secular humanism on the other (most frequently manifest in Bloom). Nihilism and secular humanism share a common body of assumptions.

Both believe that man is alone, both reject faith in the supernatural. But whereas the secular humanist then proceeds to declare that man is the measure, the sole source and touchstone of value, the nihilist repudiates all such man-made values as illusions, mere as-if fictions designed to hide from human eyes the emptiness and futility of existence.

[... ] the nihilist distrusts the coinages of the mind, the stratagems of the duplicitous self, the abstractions that it creates and then hypostatizes as sacred realities. He applies the same stringent skepticism to his own negative conclusions. He turns to literature as a means of contemplating the universe through a variety of disparate perspectives, realizing as he does so that literature is in itself but a symbolic confrontation of reality that can illuminate but cannot solve his existential conflict. (Glicksberg 17-18)

Stephen’s stream of consciousness resonates with Glicksberg’s description. He rejects the Judeo-Christian value system he was raised on and skewers the political situation existing in his native Ireland. Finding philosophical systems untenable, he aspires to live the life of an artist, seeking to forge “the uncreated conscience of my race.” However, Stephen’s will to negation proves to be a hindrance to his own creativity; he cannot believe in his
own interpretation of Shakespeare. While he is no Stavrogin, Kirilov, or Ivan Karamazov, he does epitomize the Luciferian rebel, as evidenced by his “I will not serve” in Portrait (263) and his “The intellectual imagination. With me all or not at all. Non serviam!” in Ulysses (p. 475/15: 4227-4228).

Intriguingly, for all of his bold talk, Stephen’s mind has been in a very real sense “colonized” by the memeplexes of Western cultural history. Stephen reveals that his consciousness, despite his lack of faith and rebellious opposition, is governed in large measure by the dictates of two institutions that figured prominently in shaping the minds of early twentieth century Roman Catholics.

I am a servant of two masters, Stephen said, an English and Italian [. . .] The imperial British state, Stephen answered, his colour rising, and the holy Roman catholic and apostolic church. (p. 17/1: 638-639, 643-644)

In “Scylla and Charybdis,” Stephen’s interior monologue reveals “Coffined thoughts around me, in mummy cases, embalmed in spice of words . . . They are still. Once quick in the brains of men. Still: but an itch of death is in them, to tell me in my ear a maudlin tale, urge me to wreak their will” (p. 159/9: 352-358). Stephen’s intellectual and spiritual quandary is summed up by Glicksberg:

Though the nihilist has presumably abandoned the quest for ultimate meaning, he never actually ceases to question or cry out or seek a solution to the mystery of being. If he did so, he would have to give up entirely his career as a writer. The dialectic of nihilism is charged with unresolvable elements of complexity [. . .] The writer as nihilist may, in his work as in his life, be at odds with himself. He believes and disbelieves at the same time. (15-16)
Stephen is not alone in experiencing the dark night of the soul. Even though Bloom inhabits a lower intellectual stratum, he also ponders the vanity and futility of existence while he walks the streets of Dublin. One of Joyce’s more existential commentaries on the ephemeral, impermanent nature of human life surfaces in Bloom’s mind in “The Lestrygonians” chapter.

Useless words. Things go on same, day after day: squads of police marching out, back: trams in, out [. . .] Dignam carted off. Mina Purefoy swollen belly on a bed groaning to have a child tugged out of her. One born every second somewhere. Other dying every second. Since I fed the birds five minutes. Three hundred kicked the bucket. Other three hundred born, washing the blood off, all are washed in the blood of the lamb, bawling maaaaaa.
Cityful passing away, another cityful coming, passing away too: other coming on, passing on. Houses, lines of houses, streets, miles of pavements, piledup bricks, stones. Changing hands. This owner, that. Landlord never dies they say. Other steps into his shoes when he gets his notice to quit [. . .] Pyramids in sand. Built on bread and onions. Slaves Chinese wall. Babylon. Big stones left. Round towers. Rest rubble, sprawling suburbs, jerrybuilt. [. . .]
No-one is anything. (p. 134-135/8: 477-493)

Bloom is a character who tries to broaden his intellect, dabbling in scientific concepts like parallax (p. 126/8: 110). In frustration at his own ignorance, Bloom arrives at a disheartening conclusion.

Never know anything about it. Waste of time. Gasballs spinning about, crossing each other, passing. Same old dingdong always. Gas: then solid: then world: then cold: then dead shell drifting
around, frozen rock, like that pineapple rock. The moon. (p. 137/8: 581-584)

Through Bloom’s stream of consciousness, Joyce examines twentieth century Catholicism as seen by an outsider, a lapsed Jewish advertising canvasser intrigued by the fragments of dogma and ritual he encounters. According to André Topia, Bloom’s perceptions in the “Lotus Eaters” chapter (p. 65-68/5: 318-451) signal the pulverization of the Catholic text. The great ritual discourse omnipresent in the lives of the Dubliners, it [the Catholic text] appears eminently vulnerable to the milieu in which it is used, whereas it should be the standard invulnerable to any distortion. The fragmentation and dissemination of the liturgical language of the priest during the Mass are in themselves evidence of the profound debasement suffered by the sacred Word. The great Christian body (sacred corpus of the Church and corpus of sacred texts), the indivisible and unfragmentable totality of the teachings of Christ, is no more than a powder of isolated words [emphasis added], a sprinkling of short sentences and scraps of sentences separated from the living spiritual continuity which gave them all their incantatory and sacred power, cut off from the great text of the divine Logos, and therefore vulnerable to all blasphemous manipulations and distortions. (“The Matrix and the Echo: Intertextuality in Ulysses” 113)

Furthermore, Topia suggests that Joyce’s use of juxtaposition and counterpoint creates a leveling effect that collapses the distinction between sacred and profane discourses.

One never knows if one is in the orthodox sacred text or in one of its corrupt variations. Little by little the idea becomes clear that
Catholicism, by its very essence as code and ritualized institution, itself secretes these parasitic practices, to a point where it could be said that in this constant oscillation, there is no longer a true Christianity to distinguish from its worldly distortions. The corruptions are not mere avatars of the sacred text, but are the text itself.

Wherever we find Bloom’s consciousness coming into contact with Catholic ritual, like the All Hallows’ Church scene in “Lotus Eaters” and the Dignam burial in “Hades” (p. 85-87/6: 593-682), the sacred word is a background noise, over which the profane and blasphemous variations created by Bloom’s thoughts emerge (Topia 114).

The strictly sacred text is no longer there except as a reference point which reappears here and there to allow us to measure both its distance from and its proximity to the degraded variations descended from it, which make up the very substance of Dublin Catholic discourse. (114)

In “Eumaeus,” Joyce presents the reader with the differences between Stephen’s creative nihilism and Bloom’s secular humanism. We find out that while Bloom does not espouse a specific religious or philosophical school of thought, he does endorse a kind of non-denominational pacifism.

I resent violence and intolerance in any shape or form. It never reaches anything or stops anything. A revolution must come on the due installments plan. It’s a patent absurdity on the face of it to hate people because they live round the corner and speak another vernacular, in the next house so to speak. (p. 525/16: 1099-1103)

Further on, Bloom, believing that a great deal of the quarrels and bad blood in the world “were very largely a question of the money question which
was at the back of everything” (p. 526/16: 1113-1115), reveals what amounts to a socialistic political view.

I want to see everyone, concluded he, all creeds and classes pro rata having a comfortable tidysized income, in no niggard fashion either, something in the neighborhood of £300 per annum. That’s the vital issue at stake and it’s feasible and would be provocative of friendlier intercourse between man and man. At least that’s my idea for what it’s worth. I call that patriotism . . . Where you can live well, the sense is, if you work. (p. 526/16: 1133-1140)

Stephen’s verbal and non-verbal reactions to Bloom are quite telling, for in them we recognize the gulf that stands between them.

Over his untastable apology for a cup of coffee, listening to this synopsis of things in general, Stephen stared at nothing in particular . . . Then he looked up and saw the eyes that said or didn’t say the words the voice he heard said, if you work.

Count me out, he managed to remark, meaning work. (p. 526/16: 1141-1148)

Where Bloom has faith that a “Bloomusalem” can be built, Stephen as nihilist and iconoclast refuses to buy into Bloom’s program: “We can’t change the country. Let us change the subject” (p. 527/16: 1171). While both men agree that the religious path is untenable as a source of ultimate meaning, they differ on how best to engage the Void. For Stephen, the rebellious intellectual, nothing short of the great work of art will suffice. Bloom, on the other hand, envisions socioeconomic reform as the vehicle for improving the human condition.

Ultimately, Joyce’s ambitious attempt at creating a totalizing gesamtkunstwerk meets with partial success. *Ulysses* does not succeed in representing the total cultural genome of the West, but it does manage to suggest
tacitly the enormity and complexity of such an undertaking. The novel succeeds in weaving a multiplicity of cultural strands into a matrix that explains a great deal about how significant aspects of Western culture have evolved from Odysseus’s epic journey to Bloom’s quotidian walkabout. Along the way, Joyce’s use of myth in the novel suggests that what once provided humanity with spiritual sustenance now serves a technical function as narrative scaffolding, an aid to the artist seeking to realistically depict the twentieth century world. In the turbulent iconoclasm of modern culture, myth has become meme, no longer a vessel carrying ultimate truth, but rather a cultural fragment ceaselessly jostling with other fragments in a cultural matrix cut off from any access to the Absolute.
CHAPTER SIX:
SAMUEL BECKETT’S THREE NOVELS: THE UNBEARABLE VIRUS OF BECOMING

You will encounter a resisting organism that forces you to talk. That organism is the word. (Burroughs The Ticket that Exploded 49-50) Language, however, is only one among those systems of marks that claim this curious tendency as their property: they simultaneously incline toward increasing the reserves of random indetermination as well as the capacity for coding and overcoding or, in other words, for control and self-regulation. Such competition between randomness and code disrupts the very systematicity of the system while it also, however, regulates the restless, unstable interplay of the system. (Derrida “My Chances” 2)

William Burroughs’s language virus opens the way for a meme-oriented approach to Samuel Beckett’s Three Novels. As a viral entity, language territorializes and deterritorializes the subject; it imposes codes, schemas, and systems of meaning that are always already poised for destabilization and what Deleuze and Guattari call lines of flight, vectors which trace not only paths of escape from dominant codes and systems of meaning, but also map lines of transformation and metamorphosis. Infected with the Unbearable Virus of Becoming, Beckett’s narrators feel compelled ostensibly to engage in discursive
thought and in failed narratives in a ceaseless effort to find and definitively name who and what they are. As we follow the tortured thoughts and quasi-plots of the narrators, Beckett reveals that the coherent, integrated, rational cogito is nothing more than an impotent by-product, an outdated memeplex, generated by a language virus. When language formats the subject’s cognitive machinery, an irreversible program is initiated and launched. Language becomes the vehicle through which the subject vainly seeks to represent and establish “metaphysical presence.” One of the profound ironies of Beckett’s Three Novels resides in language’s equally inherent inability to represent “metaphysical absence.” If Beckett’s characters are clueless about how their respective situations began, they are equally uncertain about how things will end.

Solitude, emptiness, nothingness, meaninglessness, silence
---these are not the givens of Beckett’s characters but their goal, their new heroic undertaking. To say that Beckett’s message is that the world is meaningless, etc. is as ironically and dead wrong as to say it of Kierkegaard or Nietzsche or Rilke, for whom emptiness or perfect singleness are not states---not here and now---but infinite tasks. (Cavell Must We Say What We Mean? 156)

Beckett’s characters find themselves, much like the word virus, in that liminal space between life and death, being and non-being, meaning and meaninglessness, that defies satisfactory explanation. Ironically, that very space we cannot affirm or negate that language mutates and gives rise to not only metaphysical concepts (and their negations) but also a large number of our other cultural memes as well. “Order,” “system,” “God,” and “self” are some of the other memes that become idées fixes in the tormented minds of Molloy, Moran, Malone, and “the Unnamable.” As subjects, we are what Richard Dawkins calls survival machines (The Selfish Gene 19), evolving, sentient programs which not
only protect and envelop a genetic endowment, but also serve as host to the mutating, parasitical entity of language. From the time we are introduced to language, our energies become irrevocably linked with the evolution of the sociocultural matrix that defines us.

Nihilism represents a particular contagium within the matrix for which post-Nietzschean, twentieth century philosophers, theorists, and writers have attempted to formulate discursive antidotes. As Simon Critchley writes in *Very Little . . . Almost Nothing*, a response to nihilism and its crisis of meaning will not consist in the restoration of a new totality of meaning derived from a new thesis on Being (Heidegger), the creation of new values (Nietzsche), or the achievement of philosophy as revolutionary praxis (Marxism): “Such would be the ‘more and more faded positivities’ of the true nihilists with their active desire for overcoming” (27). A more appropriate response to nihilism, Critchley claims, can be found in the work of Samuel Beckett:

Beckett is not a nihilist, that is, he is not flatly stating that life is meaningless or celebrating the meaninglessness of existence, rather he indicates how meaninglessness can be seen as an achievement [. . .] The world is all too easily stuffed with meaning and we risk suffocating under the combined weight of competing narratives of redemption—whether religious, socio-economic, scientific, technological, political, aesthetic, or philosophical—and hence miss the problem of nihilism in our manic desire to overcome it. What Beckett’s work offers, I think, is a radical de-creation of these salvific narratives, an approach to meaninglessness as the achievement of the ordinary, *a redemption from redemption.* (27)

How does Beckett “redeem” the subject from redemption? In *Subjects Without Selves: Transitional Texts in Modern Fiction*, Gabriele Schwab maintains
that Beckett mocks “literary fictions whose characters are built according to the conventions of literary realism [. . .] exposing them to the light of philosophical models of subjectivity” (133). Simultaneously, he forces the most basic philosophical assumptions to collapse by embedding them within the concreteness of a fictional life and exposing their untenability.

In subjecting philosophical abstractions to the conditions of empirical concreteness, he produces a literary subjectivity that is subversive to both philosophical and empirical notions of the subject. (133)

Both the transcendent subject of philosophical discourse and the literary subject of realist fiction conceive subjectivity in terms of a fixed point attractor, a locus of identity where consciousness invariably returns when cognitive activity comes to a rest. Moreover, as the seat of consciousness, that same locus initiates and controls thought and action in its sphere of influence. Beckett’s subjects, on the other hand, exhibit “swarm consciousness” or “hive mind” an appropriate metaphor in light of Moran’s bees (Molloy 168-169) and the states of mind of the different narrators. “Swarm consciousness,” like Moran’s bees, creates “a great variety of figures and rhythms” (168), but there is no one bee “in control” of orchestrating and choreographing the swarm. “Swarm consciousness” is distributed and decentralized rather than concentrated in one place. The emphasis is on becoming rather than being, or as Kevin Kelly phrases it, “there is a shift from nouns to verbs.” (Out of Control: The New Biology of Machines, Social Systems, and the Economic World 27). No “thinker” exists as such, but rather an indescribably complex, dynamic process of “thinking.” Beckett’s work explores subjectivity with an intensity few writers can match; his examination marks the boundary where Cartesian ego-centered thought collapses of its own internal contradictions.
Floyd Merrell points out in *Simplicity and Complexity: Pondering Literature, Science, and Painting* that Beckett’s subjects display a resilience not of their own choosing. Internally, they experience an “entropic push toward stasis and meaninglessness” (195); externally, the world is “a dynamo of restless activity that is at every moment threatened by entropic disorder and meaninglessness” (195). Yet they exist in the ineffable interstice, the excluded middle between hope and despair.

The yes and the no, optimism and pessimism, hope and despair, Beckett’s “I can’t go on, I’ll go on” of affirmation and negation bring with them the vague suggestion that there is some-*thing* in between the two horns of every dichotomy. Indeed, Beckett’s axiom, in the final analysis, is *Let everything cancel itself out*. But there is never really the grand absolute nor absolute absence, neither monolithic being nor nonbeing. There is only the quite modest $\sqrt{-1}$. Oscillation between the +1 and the -1; between what is and what is not; that is the question to which there is no answer. . . .

(198)

“Words and images run riot in my head, pursuing, flying, clashing, merging, endlessly” *(Malone Dies 198)*

In *The Principles of Psychology* (1890), William James theorized that the human infant’s impression of the world is “one great blooming, buzzing confusion” (462). The process of acculturation, of which language acquisition is an integral part, introduces memes and memetic aggregates which pattern the information we receive via the welter of sensory stimuli. In short, memes code the chaos that surrounds us; as *prima materia*, language programs the wetware\textsuperscript{14} that gives rise to our streams of consciousness.
The computing analogy breaks down when we realize that language is more than an inert binary code, more than a static bit string of 1’s and 0’s. Its inherent tendency to mutate and thus deterritorialize our codes of meaning leaves the postmodern subject in a state of epistemological uncertainty and ontological anarchy. The disintegration of the subject (and its entropic devolution back toward “blooming, buzzing confusion”) plays a prominent role in Beckett’s Three Novels.

The fracture into multiple voices beyond the subject’s understanding begins in Molloy and comes to a climax in The Unnamable. Molloy first becomes aware of a sound “which begins to rustle in your head, without your knowing how, or why” (40). It is a sound he does not like, an uncontrollable sound he fears. William Burroughs refers to this autonomous voice as the “Other Half,” his moniker for “a separate organism attached to your nervous system on an air line of words” (The Ticket That Exploded 49). According to Burroughs, the word virus is the primary reason why modern man has lost the option of silence¹⁵.

Try halting your sub-vocal speech. Try to achieve even ten seconds of inner silence. You will encounter a resisting organism that forces you to talk. That organism is the word. (The Ticket That Exploded 49-50)

Jacques Moran, the irascible misanthrope in search of Molloy, suffers from a similar “symptomology.” Moran’s physical response to the incompatibility that exists between the phenomenal world and the linguistic codes used to represent it is quite telling.

The blood drains from my head, the noise of things bursting, merging, avoiding one another, assails me on all sides, my eyes search for two things alike, each pinpoint of skin screams a
different message, I drown in the spray of phenomena [emphasis added]. (Molloy 111)

In Three Novels, Beckett’s characters suffer from something akin to cognitive dissonance, a psychological state in which two or more cognitions are contradictory on account of their logical inconsistency or because of an incompatibility between experience and cognition. Throughout Beckett’s work, numerous aporias dealing with doomed attempts to represent the unrepresentable emerge to baffle and torment the narrators. The representation of death or non-existence by way of something that exists (language) and the irresolvable gap that exists between the spoken word and the written word and Being itself are two conundrums that trouble the narrators ceaselessly throughout Three Novels.

In Moran’s case, the teeming multiplicity of the phenomenal world eludes any attempt to categorize and classify his (and by extension, our) experience of it. Moran’s attempt to understand the “dance” of his bees offers further illustration.

And in spite of all the pains I had lavished in these problems, I was more than ever stupefied by the complexity of this innumerable dance, involving doubtless other determinants of which I had not the slightest idea. (Molloy 169)

Moran’s plight underscores a two-fold problem in the human subject: 1) abstract theorizing fragments empirical reality in an artificial way that precludes our full understanding of dynamic phenomena; and 2) relying on empirical observation exclusively is always incomplete. No matter how diligently we observe phenomena, a total comprehension based on perfect information is beyond our capabilities. In the spirit of Heisenberg, Beckett crafts his own Uncertainty Principle: the more you purportedly understand about one dimension of a problem, the faster the other dimensions flee from your grasp.
Malone Dies: “My notes have a curious tendency, as I realized at last, to annihilate all they purport to record.” (Malone Dies 259)

Like Moran, Malone finds it increasingly difficult to make sense of his experience of the phenomenal world. As his physical condition deteriorates, so too does his ability to distinguish meaningful sound from random noise.

. . . the noises of the world, so various in themselves and which I used to be so clever at distinguishing from one another, had been dinning at me for so long, always the same old noises, as gradually to have merged into a single noise, so that all I heard was one vast continuous buzzing. The volume of sound perceived remained no doubt the same, I had simply lost the faculty of decomposing it. The noises of nature, of mankind, and even my own, were all jumbled together in one and the same unbridled gibberish. (Malone Dies 207)

Like Malone, Malone’s characters are afflicted by the same malady. Sapo “could make no meaning of the babel raging in his head, the doubts, desires, imaginings, and dreads” (193). Mrs. Lambert’s mind is “a press of formless questions, mingling and crumbling limply away” (217). Finally, Malone’s description of Lemuel is perhaps the most vivid.

For when not rooted to the spot in a daze he [Lemuel] was to be seen, with heavy, furious, reeling tread, stamping up and down for hours on end, gesticulating and ejaculating unintelligible words. Flayed alive by memory, his mind crawling with cobras, not daring to dream or think and powerless not to [emphasis added], his cries were of two kinds, those having no other cause than moral anguish and
those, similar in every respect, by means of which he hoped to forestall same. (267)

Beckett’s characters support the contention that if such an entity as a Cartesian ego exists, it is by no means in control of thought processes. Once introduced, memes engage in the process of self-organization, coagulating into memeplexes or disassembling such aggregates based on the subject’s receiving continuous feedback from the environment. As transmittable clusters of cultural information, memes play an important role in acculturation. In many cases, social groups (like religious denominations and political parties) acculturate their novices by introducing them to binary schemas for processing their culture-specific “reality” (good/bad, right/wrong, true/false). Memes represent a culture’s way of distinguishing between meaningful information and meaningless noise. If memes were the ontological equivalent of Platonic essences, cultures could conceivably stay intact indefinitely. However, memetic mutations in our wetware can lead to changes that range from the subtle (the acceptable length of a hemline) to the cataclysmic (the line of flight represented by a paradigm shift in science [the transition from the Newtonian worldview to the quantum/relativistic worldview]). Beckett’s fiction anticipates the theoretical contention that binary oppositions like “subtle” and “cataclysmic” are so dynamic and contingent upon feedback mechanisms that any meaningful, permanent distinction is lost. The line between subject/object, self/other, information/noise, et al., becomes irreversibly blurred. Malone and his characters sense this on a level below the threshold of consciousness:

They feel something in their bones, though they know not rightly what it is and can hardly even begin to say it. They claim they have somewhere to go, something to say, but all roads lead to chaos. (Merrell 196)
“Order,” too, is viewed as a memetic construct subject to constant mutation. In *Molloy*, the narrator intimates that “the spray of phenomena” constitutes primary reality. In *Malone Dies*, one can interpret that Malone views “order” as a vestigial meme that lingers in our language even though we can no longer discern “order” in our selves or our surroundings.

That must be in the natural order of things, all that pertains to me must be written there, including my inability to grasp what order is meant. For I have never seen any sign of any, inside me or outside me. *I have pinned my faith to appearances, believing them to be vain* [emphasis added]. (*Malone Dies* 210)

Dovetailing with Moran’s observations in *Molloy*, Malone reiterates that if there were such a thing as a transcendent natural order (be it cosmic, biological, psychological) we would be unable as “participants” to perceive it. Our very subjectivity, tenuous as it is, warps and distorts reality so as to preclude anything approaching a totalizing picture of the real. Our points of view are forever relegated to examining slices of reality and increments of time, and by the time we pieced all the fragments together, the whole will have changed dramatically into something else.

*The Unnamable*: “He who seeks his true countenance, let him be of good cheer, he’ll find it, convulsed with anguish, the eyes out on stalks” (*The Unnamable* 347)

The violence of the language virus stems from its creation and simultaneous denial of the possibility for a punctual, fully self-conscious, pre--semiotic consciousness. Samuel Beckett’s *The Unnamable* dares to represent a matrix in which raw, undifferentiated consciousness becomes territorialized by language, creating a narrative voice. “The Unnamable” narrator represents a precursor to what Deleuze and Guattari call a “Body without Organs” or BwO:
It is nonstratified, unformed, intense matter, the matrix of intensity [. . .] the full egg before the extension of the organism and the organization of the organs, before the formation of the strata; as the intense egg defined by axes and vectors, gradients and thresholds. 

*(A Thousand Plateaus 153)*

[. . .] the BwO is that glacial reality where the alluvions, sedimentations, coagulations, foldings, and recoilings that compose an organism—*and also a signification and a subject* [emphasis added]—occur. (159)

In *A Thousand Years of Nonlinear History*, Manuel De Landa further defines the BwO as a “special state of matter-energy information . . . a flowing reality animated from within by self-organizing processes constituting a veritable *nonorganic life*” (260). Furthermore, De Landa theorizes that the concept of the BwO was created in an effort to conceive the genesis of form (in geological, biological, and cultural structures) as related exclusively to immanent capabilities of the flows of matter-energy information and not to any transcendent factor, whether platonic or divine. (263)

When viewed as a “connection of desires, conjunction of flows, continuum of intensities” *(A Thousand Plateaus 161)*, “The Unnameable” narrator represents a sentient nexus of matter/energy information, a BwO, infected by the language virus code from which it is attempting to draw a line of flight. The Unbearable Virus of Becoming propels the nexus towards an emergent, albeit problematic, self-awareness, inducing “the madness of having to speak and not being able to” (324). Compelled to speak and to seek metaphysical presence, “the Unnamable” narrator finds its identity split in two. On the one hand, “the Unnamable” is the subject of language, the “I” that participates in discourse. Simultaneously, “the Unnamable” is radically Other, exterior to language, beyond representation.
[. . .] the words are everywhere, inside me, outside me
[. . .] I’m in words, made of words, others’ words
[. . .] the place too, the air, the walls, the floor, the ceiling, all words, the whole world is here with me, I’m the air, the walls, the walled-in one, everything yields, opens, ebbs, flows, like flakes, I’m all these flakes, meeting, mingling, falling asunder, wherever I go I find me, leave me, go towards me, come from me, nothing ever but me, a particle of me, retrieved, lost, gone astray, I’m all these words, all these strangers, this dust of words, with no ground for their settling [emphasis added][. . .] I’m something quite different, a quite different thing, a wordless thing in an empty place [emphasis added], a hard shut dry cold black place, where nothing stirs, nothing speaks. . . . (386)

“The thing to avoid, I don’t know why, is the spirit of system.” (The Unnamable 292)

As enigmatic as “the Unnamable” narrator, the collective “they” split the narrator’s subjectivity by exposing it to discourse and narrative. Serving as vectors responsible for his acculturation, “they” lecture the narrator mercilessly about life, God, and other matters.

They gave me courses on love, on intelligence, most precious, most precious. They also taught me to count, and even to reason. Some of this rubbish had come in handy on occasions, I don’t deny it, on occasions which would never have arisen if they had left me in peace. I use it still to scratch my arse with. Low types they must have been, their pockets full of poison and antidote. (298)

The ontological status of “they” is never clearly defined. On the one hand, “They” may be viewed as flesh-and-blood human beings. Secondly, “they” may
occupy loci on a vast Derridean discursive field where disparate “texts” converge and engage in semiotic free play. Thirdly, “they” may be interpreted as representing sentient programs whose mutating wetware codes are undergoing constant revision, contingent upon feedback from stochastic events in the cultural environment. These sentient programs weave, splice together, and recombine the cultural paradigms and epistemes that make up the matrix and disseminate linguistically-coded “reality” to the subject/host.

Out of the collective “they” springs Mahood, whose influence pervades “the Unnamable” narrator to such an extent that serious doubt is cast as to whether they remain separate entities or have fused into one subject.

It was he [Mahood] told me stories about me, lived in my stead, issued forth from me, came back to me, entered back into me, heaped stories on my head. I don’t know how it was done. I always liked not knowing, but Mahood said it wasn’t right. He didn’t know either, but it worried him. It is his voice which has often, always, mingled with mine, and sometimes drowned it completely. Until he left me for good, or refused to leave me any more. I don’t know. (309)

Together, “They” and Mahood are the agents that sever “the Unnamable” narrator from the Lacanian Real and introduce the Symbolic register, a cognitive mapping program that forever approaches the Real asymptotically without ever fully representing it. The Lacanian Real is both beyond and behind Imaginary perception and Symbolic description.

It [the Real] is an algebraic $x$, inherently foreclosed from direct apprehension or analysis. The Real [. . .] is that before which the Imaginary falters, and over which the Symbolic stumbles [. . .] He [Lacan] meant that saying or seeing the Real objectively was not
possible. Perception of Real things and lived experiences are immediately filtered through a personal and interpretive grid.

(Ragland-Sullivan 188)

This linguistic and imagistic “grid” system which structures the sociocultural matrix governs and maps the interface between subject and the Real, introducing new indeterminacies and uncertainties with each attempt at representation. If, as subjects, we manage to find the words or images to convey something about “reality” that we could not convey before, we can only do so at the cost of introducing new items which require other representations, which in turn require other representations, ad infinitum. The Real is never fully present in the matrix, which simulates the Real and endlessly defers it along chains of signification; ultimately, we cannot express it. As an “impossible kernel at the heart of symbolic reality” (Babich “The Order of the Real: Nietzsche and Lacan” 44), the Real forever eludes “the Unnamable” and its efforts to represent it via narrative and symbol.

In Molloy, Beckett’s narrator also addresses how the “system” meme fails ultimately in bringing the human subject any closer to understanding reality. Despite the pervasiveness of “system”-inspired thinking in the education process, Molloy is left horribly confused by his attempts to learn astronomy, geology, anthropology, and related disciplines (39). Looking for insight into “the essence of the system” (25) and a way “to trace back to its ultimate source a given comportment” (25), Molloy finds his education leaves him “in the dark, most of the time” (25) and concludes: “a lifetime of observations had left me doubting the possibility of systematic decorum, even within a limited area.” (25)

Molloy’s stone-sucking fiasco (69-74) illustrates the ridiculous extent to which “system” has become ingrained in our collective consciousness. Molloy’s mania for method, his aversion for doing things in a haphazard fashion, has
become “a bodily need” (74). Despite the mental exhaustion of organizing his stones in the optimal way, the self-professed “inelegance” of his solution, and the bodily discomfort brought on by the implementation of his system, Molloy perseveres only to conclude: “deep down it was all the same to me whether I sucked a different stone each time or always the same stone, until the end of time. For they all tasted exactly the same.” (74)

According to Jude Meche, Molloy’s system for sucking stones, his “mania for symmetry” (85) in kicking the charcoal burner by applying the same method to both sides of the poor victim’s body, and other such obsessive behaviors are a response to existential nothingness.

As the narrators find less and less or no meaning or purpose to their lives, they create these patterns to impose upon whatever they find senseless or reasonless. It is for this reason that Molloy struggles with his sucking stones. He can find no order in his life, and therefore, must create order for his own security. (Obsessive-Compulsive Behavior in Samuel Beckett’s Trilogy 9)

“The indestructible chaos” of time-bound things

While a cursory reading of Three Novels may give the impression of a rambling, chaotic, nondescript chain of events (“the repetition of nothing by no one” [Banham 56]), Rubin Rabinovitz argues that repetition in the works is part of a highly structured pattern underlying the apparent chaos of its surface meanings (“Repetition and Underlying Meanings in Samuel Beckett’s Trilogy” 31). Beckett makes extensive use of recurring elements throughout Molloy, Malone Dies, and The Unnamable; Gontarski addresses the reiteration of words, phrases, sentences, actions, and ideas by the various narrators, positing: “Molloy is Beckett’s undoing the repetition of Joyce in particular and the Modernist text
in general and the embodiment of a post-Joycean aesthetics.” (“Molloy and the Reiterated Novel” 59)

This “post-Joycean aesthetics” simultaneously obliterates and reiterates the tradition of the novel, “returning to and reasserting the most fundamental structures in the history of narrative art” (59): the literature of quest or journey, the archetypal detective story of self-discovery, and the oral tale descended from Homer and other sources (folk tales, fairy tales).

These fundamental structures represent memetic attractors that have emerged in the sociocultural matrix, contagious composites of culturally-coded narrative material transmitted to the host/author via language. Alexander Argyros posits that “the bulk of human ideas, theories, beliefs, or desires can be represented by chaotic attractors of varying degrees of complexity” (A Blessed Rage for Order: Deconstruction, Evolution, and Chaos 296): the higher the degree of complexity, the larger the number of dimensions required to represent the entity in mental phase space. As chaotic or “strange” attractors, memeplexes (like quest narratives and detective stories, for example) tend to be globally isomorphic while allowing for random local configurations. Argyros notes that the chaotic structure of an idea can be likened to the dynamics of a city.

Clearly, a city is a dynamical entity, interacting constantly with other cities or countries and with its own microstructure. In fact, a city is a system both constituted and supported by feedback from the outside and from the inside. A city is a vague, amorphous, and flexible system (where does New York city end?), yet it is undeniably real [. . .] Although part of many vertical and horizontal networks and ever in dynamic flux, a city tends to have a real and unmistakable identity [. . .] like cities, concepts or ideas are fractally self-similar, dynamical systems whose shape or amorphousness is
the result of a dialectical feedback synthesis with both their
environment and their history [. . .] and like cities, ideas can
perhaps be best conceptualized as attractors, or eddies, in the
turbulence of personal, social, historical, and evolutionary
processes. (300)

In *Three Novels*, Beckett seems intuitively aware of and sensitive to this
turbulence; he creates characters and especially narrators that represent
processes more than self-contained products. Beckett assigns names to these self-
perpetuating patterns of narrating-inquiring-affirming-denying (Molloy, Moran,
Malone, “the Unnamable”), calling attention to “what” is going on and
questioning “who” is engaged in the actions. No fixed, stable self exists. In a
sense Beckett presents us with “*n* verbs in search of a subject.” Each narrator
seeks a fixed point attractor as a solution to their own individual dilemma:
Molloy endeavors to find his mother, Moran to find Molloy, Malone to tell his
stories and conduct an inventory of his possessions, “the Unnamable” to speak
with its own voice and be done with speaking. What each narrator lacks is an
awareness that the human subject is a chunked, emergent symbol representing
an unfathomably complex battery of dynamic processes and forces too mercurial
to grasp consciously. In trying to make sense of “the spray of phenomena”
(*Molloy* 111), the subject’s only recourse is to the ideas, concepts, and symbols (in
short, the memes) it has been introduced to. These cognitive entities themselves
are constantly evolving, springing forth from the ongoing dialectic between
sensory feedback and the self-organizing codes of our wetware. Out of this
maelstrom of activity, a stream of consciousness is born, an emergent flow of
thought that bootstraps into existence out of the dynamic interplay between
internal memetic infrastructure and the “spray of phenomena” that goad the
subject towards an attempt at understanding.
CHAPTER SEVEN:
THOMAS PYNCHON’S GRAVITY’S RAINBOW: MATRIX, MYTH, AND
(INFORMATION) MULTIPICITIES

Thomas Pynchon’s most celebrated novel, Gravity’s Rainbow, presents the reader with a semiotic matrix as vast and formidable as Joyce’s Dublin was in Ulysses. Like Dublin, Pynchon’s “Zone” has geographical coordinates and physical parameters, but what commands the reader’s attention is its ontological status as a mutating discursive entity, a dense web of scientific, technological, mythological, and historical references from numerous other sources that overwhelms Pynchon’s major and minor characters, many of whom turn to various myths of transcendence as a way of coping with information overload and the runaway pace of change in the aftermath of World War II.

Hitler’s V-2 Rocket plays a pivotal role in these myths. For some characters, the Rocket represents the quintessential techno fetish: the worship of the technological object as the gateway or portal to transcendence. For others, the Rocket is a Holy Text to be deciphered, “picked to pieces, annotated, explicated, and masturbated till it’s all squeezed limp of its last drop” (Gravity’s Rainbow 520). Still others approach the Rocket in silence, seeking some sort of pre- or trans-symbolic mystical union that will reveal the seamless, unbroken Whole that transcends subject/object duality.
The palpable and visible signs of entropic decay which pervade the novel puncture the characters’ myths of transcendence with all the subtlety of a V-2 Rocket strike. In the world of closed physical and cultural systems, Entropy is God and transcendence is impossible. No myth exists that can ward off the encroachment of chaos and disorder in a time-bound world made up of matter, energy, and information.

Although deprived of transcendence, mankind finds its motivation to live fully by way of the “line of flight” and “faith” in the power of negentropy. Characters, like the protagonist Tyrone Slothrop, become Deleuzo-Guattarian vectors, tracing paths of escape from oppressive codes and systems of meaning, mapping lines of transformation and metamorphosis, and averting cultural “heat death” in the process. By way of the “line of flight,” Slothrop as postmodern self remains open to the possibility of new social and cultural forms of order emerging from the chaotic aftermath of the war. In his disintegration and scattering toward the end of the novel, we find a revelation: the postmodern self is an “information multiplicity,” an evolving nexus of polysemous cultural information capable of disseminating its constituent information as fragments to be absorbed by other similarly constituted “selves.”

The “Zone” as Matrix

In Thomas Pynchon’s *Gravity’s Rainbow*, the author creates a semi-fictional, semi-historical “Zone,” “a state of structural disintegration and social turbulence where individual subjects may exist anonymously as nomads and aggregate into rhizomes” (Rosenberg 103). Simultaneously, the “Zone” also functions as a matrix of sorts where ideological, philosophical, and mythological fragments espoused by the characters compete to survive and form part of the post-World War II, postmodern information grid.
[. . .] the Zone encompasses the space between “the zero,” or absolute destruction of an older (mainly European) political order, and “the one,” or unity of the newly emerging technological order of the trans-national rocket-state. The Zone is thus a space of ruins and the allegories they spawn, where geographies are mental maps and vice versa, but above all a space of indeterminacy and singularity, where no patterns converge. (Johnston 78)

Indeed, Pynchon’s “Zone” represents a liminal space where memes and memetic aggregates engendered by a vast array of pre-twentieth century sources are challenged and in some cases supplanted by memes emerging from the nearly four decades of cultural and political upheaval, scientific paradigm shifts, and technological innovation that preceded World War II:

“Somewhere between December 18, 1944 and September 14, 1945, one can locate the temporal cusp between the modernist era that concludes with World War II and the postmodern era incipient in the chaos of the ‘Zone’.” (Conte 166)

In the “Zone,” the two-pronged Western epistemological practice of reducing phenomena to clearly defined, component parts and creating absolute hierarchies clashes with newer epistemologies founded on complexity and probabilities. The “Zone” represents a place and a time where closed systems, rigid binarism, cause-and-effect thinking, and static “Order” yield to multiplicities, the turbulence of open systems, and emergent, dynamic negentropy. While “control” is the goal of many a character, indeterminacy reigns in the “decentered topos of multiple codes” (Best and Kellner 43) which comprise the “Zone.”

In the aftermath of the Allied victory over the Axis powers, shattered epistemological frameworks and broken moral compasses lie strewn all over
Europe; a capitalistic, techno-scientific elite ("They"-system or "The Firm"), intent on using any means necessary to ensure and perpetuate their power base, assumes command.

[...] this war was never political at all, the politics was all theater, all just to keep people distracted [...] secretly it was being dictated instead by the needs of technology [...] by a conspiracy between human beings and techniques, by something that needed the energy-burst of war, crying. “Money be damned, the very life of [insert name of Nation] is at stake,” but meaning, most likely, dawn is nearly here, I need my night’s blood, my funding, funding, ahh more, more [...] The real crises were crises of allocation and priority, not among firms---it was only staged to look that way---but among the different Technologies, Plastics, Electronics, Aircraft, and their needs which are understood only by the ruling elite. (Gravity’s Rainbow 521)

The “They” system can be interpreted as a prime example of what Deleuze and Guattari call a “signifying regime of signs,” a semiotic apparatus comprised of people, institutions, discursive practices, and technologies that single out certain signs and signifiers and encode them into highly formalized systems. In the lexicon of Deleuze and Guattari, “They” function as an “abstract machine,” an overcoding agency “which organizes subjects, statements, and materials into binary oppositions, thus insuring their convertibility and translatability, in short, their usefulness to the Firm” (Johnston 81). “They” semiotize the world according to rigid categories and taxonomies, imposing criteria of instrumental reason across the entire spectrum of phenomena.

To overcome the potential entropy inherent in the system, “They” foment a culture of paranoia that places the ultimate value on “order” and “control.”
According to Marion Muirhead, this burgeoning techno-centric world order defines the human subject in relation to machines and information systems in which the human being constitutes a compilation of statistics or data (*Complexity and Dissipation: Chaos and Information in the Technological Novel* iv). This encroachment of the machinic and informatic upon the organic leads directly to social entropy; human beings become increasingly machine-like and amoral, engaging in repetitive or addictive behavior and losing their distinctiveness as unique individuals. (2)

One of the profound ironies of Pynchon’s novel is that the ruling elite depend on the control of information, which by its very nature is partially uncontrollable. In *Information Multiplicity*, John Johnston further explores this irony.

[. . .] what most distinguishes information at the human level is its viral power, its tendency to proliferate [. . .] This viral proliferation of information always brings about uncertainty, even making uncertainty itself a structural feature of the systems defining our world [. . .] Thus, while information has led to a new medium of control, it has also generated something that always exceeds control. (2)

The viral power of information, its inherent ability to ramify and mutate, make it impossible to “know” and “control” a phenomenon with a total degree of precision. What begins as a small anomaly in our epistemological systems always has the potential to metastasize into a radical paradigm shift or full-blown epistemological nihilism. Semyavin, one of the minor characters in the novel, comically articulates the modernist subject’s yearning for a simpler time: “Information. What’s wrong with dope and women? Is it any wonder the
world’s gone insane, with information come to be the only real medium of exchange?

(Gravity’s Rainbow 258)

While the corporate, bureaucratic “They” system emerges and grows, a counter-system simultaneously blossoms. This “Counterforce” “consists of a whole network of countercultural connections and relays which attempt to subvert and desecrate the rationalizing semiotic processes of the Firm, or They system, through its own scatological refusals, alternative sign systems, and ‘drug epistemologies’” (Johnston 81). The “Counterforce” is comprised of the nomad subjects and marginal groups of the “Zone” who commit transgressions that violate the rules and norms that “They” seek to impose. Whereas the technocracy thrives on deterministic order, these individuals and groups survive in a state of contingency: “These characters wander and then aggregate into temporary alliances, like chance love-dalliances, larger orgiastic convolutions, and black market activities, at the margins of the nation-state war machines.” (Rosenberg 103)

In “Invisibility, the War Machine, and Prigogine,” Martin Rosenberg subdivides Pynchon’s “Zone” into a “zone of power” and “zone of indiscernability” (where the technocratic elite dominate), and a “zone of impotence” (where the Counterforce is most subversive).

The “zone of power,” indicating the coercive force of the state, is continuous with the “zone of indiscernability,” the capillaries of power (described by Foucault) that are beyond the realm of concrete observation because they remain within the realm of discourse, binding the populace together through various institutional and ideological regimes. Within or beyond these two zones lies the “zone of impotence,” where cultural “flows” of desire and human “quanta” cease to be observable to those regimes and
thus lie beyond the control of state power [. . .] the state fears the “zone of impotence” as its source of random activity, its socio-political entropy, its historical uncertainty as a system. (Rosenberg 102)

Dwelling in the “zone of power” increases a character’s likelihood of being infected with the paranoia of the “They” system; “Their” memes foster deterministic, linear, cause-and-effect thinking among individuals within “Their” sphere of influence. “The Firm” promotes a totalizing rationalism that seeks to routinize charisma and eliminate chance from its designs. In the end, even the anarchic, schizoid sensibilities of the Counterforce are no match for the oppressive coding power of the burgeoning post-war technocracy.

Well, if the Counterforce knew better what those categories concealed, they might be in a better position to disarm, de-penis, and dismantle the Man. But they don’t. Actually, they do, but they don’t admit it. Sad but true. They are as schizoid, as double-minded in the massive presence of money, as any of the rest of us, and that’s the hard fact. The Man has a branch office in each of our brains, his corporate emblem is a white albatross, each local rep has a cover known as the Ego, and their mission in this world is Bad Shit. We do know what’s going on, and we let it go on. As long as we can see them, stare at them, those massively moneyed, once in a while. As long as they allow us a glimpse, however rarely. We need that. And how they know it---how often, under what conditions [. . .] They will use us. We will help legitimize Them, though They don’t need it really, it’s another dividend for them, nice but not critical. (712-713)
Pynchon reveals that while the Counterforce is in tune with the “entropies of lovable but scatterbrained Mother Nature” (324) (a position he appears to have an affinity for), the privileged memes (in the form of signs, images, and signifiers) of technocratic capitalism continue to infiltrate the consciousness of the masses, creating an increasingly docile, compliant, and malleable social body. Pynchon warns that our humanity is under constant assault: capitalism corrupts our moral fiber, science reduces us to component parts, and technologies mobilize us into serving a nameless, faceless elite.

What should the individual do in the face of such formidable obstacles? Pynchon refuses to privilege or endorse any one path. Instead, he creates characters that embody different points of view and represent paths of varying resistance to the machinations of the “They-system.” The novel presents us with:

- unbridled nihilists and hedonists (The Empty Ones [Otukungurua], the Anubis orgy episode) whose perversions resonate with the credo “If God is dead, everything is permitted”
- seekers and scientists in pursuit of an absolute Truth they believe the Rocket can reveal (Enzian, Mondaugen, Fahringer, Franz Pökler), even though that revelation comes at the expense of millions of innocent lives
- a motley crew of black marketers (Blodgett Waxwing, Gerhardt von Göll), industrial spies (Wimpe, the verbindungsmann), rogue intelligence officers (Vaslav Tchitcherine, Pirate Prentice), and other nefarious types who are “ethically challenged,” but do not have carte blanche membership in the “They-system”
- Pavlovian behaviorist Ned Pointsman and statistician Roger Mexico, the respective faces of cause-and-effect determinism
and its antithesis, the study of stochastic V-2 strikes and other aleatory processes

- Tyrone Slothrop, the flawed protagonist who escapes the clutches of the “They-system” via a “line of flight” (Deleuze and Guattari’s ligne de fuite]

Technology, Silence, and the Holy Text: The Fate of Three Myths of Transcendence in the Age of Information

In Gravity’s Rainbow, a widespread cultural and epistemological crisis of meaning affects the main characters. The brutal reality of fascism, the threat of apocalyptic destruction, and the bewildering semiotization of the world compel the characters to create personal and collective mythologies in an effort to impose order on the maelstrom of World War II. Through the characters, Pynchon provides the reader with an ambivalent, complex critique of myth.

On the one hand, he recognizes the deeply rooted cultural need for mythologies. For all of the science, technology, and rationalism associated with the twentieth century, powerful myths still play a significant role in shaping the thoughts and behaviors of the characters. As evidenced by the role of myth in the social, political, scientific, and military institutions embroiled in the war, Pynchon portrays myths to be as prolific in rationalist and technological culture as they were at the time of the Puritans.

On the other hand, Pynchon objects to the perversion and distortion of myths used to support fascist, capitalist, colonialist, and imperialist agendas and ideologies. These perversions and distortions are used to manufacture an artificial order for characters obsessed with specific ideological, scientific, or religious systems, like National Socialism, Pavlovian behaviorism, and the quasi-mysticism surrounding Hitler’s V-2 rocket.
Pynchon’s fictional Rocket mythology involves several interrelated meditations on the perilous state of myths of transcendence at the dawn of the Post-Industrial era. Numerous characters in the novel harbor a collective apocalyptic myth in which the Rocket functions as the medium of transcendence. For many of the male characters, the Rocket represents the symbolic screen onto which they project their eschatological fears as well as their desires for primordial unity and mystical oneness. Nowhere in the novel is this more evident than in the perverse thoughts and sadomasochistic rituals of Captain Weissmann/Dominus Blicero. In committing the “sacred” act of tying his young lover Gottfried to the *schwarzgerät* of the 00000 Rocket and proceeding to launch the weapon, the sacrifice of Gottfried underscores the androgynous nature of the Rocket myth:

> On the surface, the Rocket functions as a phallic symbol of masculine technology. But in his blasphemous ritual of sacrificing his juvenile lover Gottfried, Blicero envisions the Rocket as the archetypal Great Mother, whose metal body appears as a return of the feminine [. . .] Far from integrating masculine and feminine principles, the myth attempts to neutralize the feminine by absorbing it into the masculine. (Schwab 177)

The death of Gottfried aboard the 00000 Rocket serves as an exclamation point in Pynchon’s polemic against technocentric Western civilization. According to Pynchon, we in the West have contracted the *techno two-step*; we compulsively fetishize technology and simultaneously cast some of our technological objects as vehicles of transcendence. Pynchon’s fictional account of Nazi Germany’s rocket sub-culture and Weissmann/Blicero’s role within that culture suggest that we can interpret the *techno two-step* as a memetic phenomenon. Weissmann/Blicero represents the vector responsible for exposing and infecting the
Schwarzkommando’s leader, Oberst Enzian, with the V-2 virus, the particular strain of the *techno two-step* found in the novel.

It began when Weissmann brought him [Enzian] to Europe: a discovery that love, among these men, once past the simple feel and orgasming of it, had to do with masculine technologies, with contracts, with winning and losing. Demanded, in his own case, that he enter the service of the Rocket. . . . Beyond simple steel erection, the Rocket was an entire system *won*, away from the feminine darkness, held against the entropies of lovable but scatterbrained Mother Nature, that was the first thing he was obliged by Weissmann to learn, his first step toward citizenship in the Zone. He was led to believe that by understanding the Rocket, he would come to understand truly his manhood. (*Gravity’s Rainbow* 324)

The symbolic sexual dimension associated with the Rocket, the homoerotic charisma of the Rocket’s Prophet (Weissmann/Blicero), the promise of victory over nature, and the unmistakable, unequivocal sense of communal and sexual identity that came from “serving” the Rocket combined to make the V-2 virus irresistible to Enzian. At Peenemunde, two of the engineer/scientists of the novel (Mondaugen, Fahringer) succumb to the V-2 virus for different reasons.

For Mondaugen and Fahringer the path to true transcendence involves going beyond Weissmann’s Rocket worship rituals and embracing an all-encompassing silence. Both believe in the “myth of silence,” Schwab’s term for the belief that in the stillness of the pure Zen moment devoid of language, insight can be gained into the nature of the Rocket and the meaning of existence. In *Subjects Without Selves*, Gabriele Schwab argues that the novel’s myths of silence
stem from a desire to purify language from the excesses, slippages, and wastes of representation (183). Speech, with its endless barrage of language-mediated displacements and distortions, sabotages our desire for primordial, presymbolic unity. Aware of language’s inherent tendency to fracture, divide, and thus distort reality, Fahringer, the aerodynamics engineer/Zen archer, believes that the path to true oneness with the Rocket involves a radical withdrawal from language-based thought:

   The Rocket for this Fahringer was a fat Japanese arrow. It was necessary in some way to become one with Rocket, trajectory, and target—“not to will it, but to surrender, to step out of the role of firer. The act is undivided. You are both aggressor and victim, rocket and parabolic path and. . . .” (Gravity’s Rainbow 403)

In addition to Fahringer, the silent, contemplative path to transcendence meets Rocket techno-mysticism in the character of Mondaugen, the resident bodhisattva at Peenemunde. Mondaugen sees the combustion chamber of the Rocket as a cosmological egg in which fire and water, creation and destruction form a unity. As “one of these German mystics who grew up reading Hesse, Stefan George, and Richard Wilhelm” (403), Mondaugen develops “electro-mystical” parallels between electrical engineering and spiritual enlightenment.

   Think of the ego, the self that suffers a personal history bound to time, as the grid. The deeper and true Self is the flow between cathode and plate. The constant, pure flow. Signals—sense-data, feelings, memories relocating—are put on the grid, and modulate the flow. We live lives that are waveforms constantly changing with time, now positive, now negative. Only at moments of great serenity is it possible to find the pure, the informationless state of signal zero. (404)
Implicit in Mondaugen’s model of the self is the notion that sense-data, feelings, and memories are processed by the ego through language (I sense, I feel, I remember), an act which modulates the flow of the True Self and precludes us from directly perceiving who and what we are. Mondaugen’s myth is grounded in the belief that in the moment of great serenity, in the absence of speech and discursive thought, we can perceive reality as the seamless, unbroken Whole it truly is. The quest for signal zero reappears later in the novel when Mondaugen enunciates “the Law which will one day bear his name”: “Personal density […] is directly proportional to temporal bandwidth.” (509)

“Temporal bandwidth” is the width of your present, your now. It is the familiar “Δt” considered as a dependent variable. The more you dwell in the past and in the future, the thicker your bandwidth, the more solid your persona. But the narrower your sense of Now, the more tenuous you are. (509)

How do we dwell in the past or project into the future? By engaging in language-based constructs which recreate events that have happened or simulate scenarios that have yet to unfold, we literally manufacture a seemingly concrete, enduring sense of self that in reality is nothing more than an elaborate fiction. Awakening to the fiction of personal density, like perceiving the pure flow of the True Self, requires that we set aside the language-driven machinations of the ego and dissolve into the dynamic silence of the present moment.

Pynchon problematizes these myths of silence by making them complicit with the Nazi war machine. How can Mondaugen and Fahringer reconcile their views with the horrors of National Socialism? These engineers and scientists in the rocket program conducted their research and development either indifferent to or complicit with Nazi atrocities like the ones taking place at the Dora concentration camp. Mondaugen, for all of his Eastern metaphysics, proved to be
“ready to accept Hitler on the basis of Demian-metaphysics” (403). Ultimately, Pynchon undercuts silence as a path to transcendence. He represents passive detachment and silence in the presence of inhumanity as tantamount to endorsement of the Nazi agenda.

The third significant myth of transcendence which Pynchon undermines involves the myth of the “True Text” or “Holy Text.” In “Meteors of Style: Gravity’s Rainbow,” Joseph Tabbi considers the ramifications of reading the V-2 as Holy Text and symbol of what he terms “the postmodern sublime.”

The Rocket, worshiped by many characters in Gravity’s Rainbow as a “Holy Text,” provides a sublime uplift as text, a disembodied web of information that floats above nature’s gravity and belies its potential for causing real, material destruction. Language conceived as universal and all-powerful, the apocalyptic convergence of word and world, the belief that we can substitute for nature an image of our own complexity—these are wholly secular replacements that inspire if not the reverence of a religious deity, then a new kind of dread and anxiety in the presence of vast technological systems. (Postmodern Sublime 75)

While the readability of the world as text predates modernity and postmodernity, Pynchon features the Rocket as Holy Text to call attention to the modernist urge to reestablish a semantic foundation that can withstand the chaotic proliferation of signs which is a hallmark of the twentieth century.

Most characters in Gravity’s Rainbow [...] experience the semiotization of the world as a loss of reality. It seems as if for them the reliability of the world has dissolved into the instability of signs. From this perspective, their mythologies—especially the myth of the Rocket as Holy Text—are compensatory social
constructions aimed at semiologically stabilizing the inherent instability of signs. (Schwab 185)

In the novel, groups like the Schwarzkommando approach the Rocket as scriptural revelation. The Schwarzkommando’s collective belief in destiny is such that they have combined symbolic elements from their German oppressors’ rocket technology with their own cultural symbols to create a syncretic mandala (361) that serves as the group’s official insignia. The five positions of the launching switch in the A4 control car (K,E,Z,V,H) are integrated with the Zone Hereros’s beliefs about the unification of opposites in the mandala, prompting Andreas Orukambe to explain to Slothrop:

The four fins of the Rocket made a cross, another mandala. Number one pointed the way it would fly. Two for pitch, Three for yaw and roll, four for pitch. Each opposite pair of vanes worked together, and moved in opposite senses. Opposites together. You can see how we might feel it speak to us, even if we don’t set one up on its fins and worship it. But it was waiting for us when we came north to Germany so long ago […] even confused and uprooted as we were then, we knew our destiny was tied up with its own. That we had been passed over by von Trotha’s army so that we would find the Aggregat. (563)

From a postmodern perspective, the Holy Text is an untenable myth. The dynamism and complexity of reality is such that it forever eludes the grasp of a fixed system of signs. Through Enzian, the leader of the Schwarzkommando, Pynchon comments on the unsustainability of the Rocket as Holy Text.

It comes down to this day-to-day knitting and unraveling, minor successes, minor defeats. Thousands of details, any one of which carries the chance of a fatal mistake. Enzian would like to be more
out of the process than he is---to be able to see where it’s going, to know, in real time, at each splitting of the pathway of decision, which would have been right and which wrong [. . .] The details---valves, special tools that may or may not exist, Erdschweinhöhle jealousies and plots, lost operating manuals, technicians on the run from both East and West, food shortages, sick children---swirl like fog, each particle with its own array of forces and directions [. . .] he can’t handle them all at the same time, if he stays too much with any he’s in danger of losing others . . . (326-327)

This passage, with its oblique reference to Werner Heisenberg, helps to invalidate the Rocket as Holy Text by virtue of a semiotic equivalent to the Uncertainty Principle. Even in the case of something as ostensibly inert as the Rocket, referents amount to an ever-changing complex of variables; representing them via an absolutist, static system of signs is futile. In a parallel to Heisenberg, our participation via language in representing a certain aspect or dimension of a referent distorts and thus precludes our ability to simultaneously represent its other aspects or dimensions.

The Rocket is not the only purportedly Holy Text in the novel. Ivan Pavlov’s Lectures on Conditioned Reflexes (Volume 2) represents the text over which an ideological and philosophical war is waged by two of the novel’s diametrically opposed characters. To Ned Pointsman, Pavlov’s text is a Bible of sorts, the “new” New Testament that points the way to a fundamental understanding of the mind. Pynchon highlights Pavlov’s work as representative of the rigid, binary, cause-and-effect approach to explaining phenomena. As a “true believer,” Pointsman is the spokesperson for a deterministic biopsychology grounded in the principles of “The Book,” Pointsman’s shorthand way of referring to Pavlov’s Lectures.
Like his master I.V. Pavlov before him, he imagines the cortex of the brain as a mosaic of tiny on/off elements. Some are always in bright excitation, others darkly inhibited. The contours, bright and dark, keep changing. But each point is allowed only the two states: waking or sleep. One or zero. (55)

[Pointsman:] Pavlov believed that the ideal, the end we all struggle toward in science, is the true mechanical explanation [emphasis added]. He was realistic enough not to expect it in his lifetime. Or in several lifetimes more [. . .] His faith ultimately lay in a pure physiological basis for the life of the psyche. No effect without cause, and a clear train of linkages. (89)

Pointsman cannot tolerate the concept of continuous data, the excluded middle between polar opposites. His philosophical orientation is such that stochasticity is an evil to be eliminated. In dialectical opposition to Pointsman, Pynchon presents the statistician Roger Mexico, “the dour young man of ‘the White Visitation’” (40), who prefigures an emerging postmodern science built on the positions of Boltzmann, Poincaré, and quantum mechanics, that is based on statistical regularities and probabilities, and not on certainties or mechanistic causal links. Mexico is devoted to number and to method: “to Mexico belongs the domain between zero and one---the middle Pointsman has excluded from his persuasion---the probabilities” (55). Mexico conducts his analysis of the V-2 strikes on London using the Poisson equation, a formula used for offering probabilistic statements about events that are exceedingly rare but possible (Weisenburger 40):

The Poisson distribution counters Pavlovian binarism because it comprehends multiplicities rather than dualities, and most
importantly, it refutes the causal links between phenomena that
behavioral conditioning strives so diligently to achieve. (Conte 177)

The V-2 statistics ultimately cannot predict where the next rocket will
land; for all the technological research and development invested in the weapon,
an aleatory dimension haunts its violent existence that exceeds our ability to
predict the V-2’s behavior.

No matter how many have fallen inside a particular square, the
odds remain the same as they always were. Each hit is independent
of all the others. Bombs are not dogs. No link. No memory. No
conditioning [emphasis added]. (56)

Mexico’s pronouncements disturb Pointsman in the way that quantum
mechanics upset Einstein; the idea that “God plays dice with the universe”
destabilizes any hope for a totalizing model of the microcosm (the mind) or the
macrocosm (the universe). Pointsman feels threatened ideologically by the
prospects that an irreducible element of chance may hold the upper hand in the
affairs of men.

How can Mexico play, so at his ease, with these symbols of
randomness and fright? Innocent as a child, perhaps unaware
---perhaps--- that in his play he wrecks the elegant rooms of history,
threatens the idea of cause and effect itself [emphasis added]. What if
Mexico’s whole generation have turned out like this? Will Postwar
be nothing but “events,” newly created one moment to the next?
No links? Is it the end of history? (56)

From Mexico’s perspective, the vagaries of tracking V-2 rocket strikes has
convinced him the time has come to leave deterministic, cause-and-effect
thinking behind.
there’s a feeling about that cause-and-effect may have been taken as far as it will go. That for science to carry on at all, it must look for a less narrow, a less . . . sterile set of assumptions. The next great breakthrough may come when we have the courage to junk cause-and-effect entirely, and strike off at some other angle. (89)

The exchanges between Pointsman and Mexico give expression to Pynchon’s radical critique of modern mechanistic models of causality and rationality, undercutting the positivist belief that scientific experiments and laws will incrementally supply knowledge of the ultimate structures of reality and enable the scientist to control the most minute aspects of life. For Pynchon, disorder, chaos, violence, paradox, and enigma are constantly subverting such rationalist schemes (Best and Kellner 26). From Pynchon’s postmodern perspective, all we can have is probable knowledge, as indeterminacy and randomness prevail and a new vision of complexity and contingency emerges:

The universe is not a great chain of being, a machine, a clock, or a continuum of evolutionary natural selection. Rather, it is a frequently discontinuous process of indeterminacy, complexity, self-organization, and contingency. (Best and Kellner 31)

“When the World is Running Down, You Make the Best of What’s Still Around”

As he did previously in his short stories and The Crying of Lot 49, Pynchon explores the many ramifications of “entropy” in Gravity’s Rainbow. On a structural level, the novel’s built-in tendency toward textual dissolution figures as a simulacrum of entropy (Schwab 192). During a linear process of reading, Schwab opines, the reader is exposed to the development and dissolution of multiple storylines that never find a sense of closure (193). The entropic thrust which manifests itself on a structural level parallels Pynchon’s vision that
modern structures and institutions invariably give way to chaos and disintegration.

GR presents a dying universe, a traditional world thrown into disorder and chaos by World War II, followed by a system of reconstituted order emerging out of its rubble and ruin [. . .] the nascent corporate and state technoculture is depicted by Pynchon as itself a culture of death, a closed system that is bound, according to the second law of thermodynamics, to decay and disintegrate, eventually to give rise to a new system---or to take the planet down with it [. . .] (Best and Kellner 33)

The novel’s characters embrace existing myths or create new myths of transcendence in order to ward off the encroachment of chaos and entropy into their lives. Their efforts are thwarted and they remain powerless because the closed, rigidified, hierarchical System they belong to is doomed to a sociocultural form of “heat death.”

Taking and not giving back, demanding that “productivity” and “earnings” keep on increasing with time, the System removing from the rest of the World these vast quantities of energy to keep its own tiny desperate fraction showing a profit: and not only most of humanity---most of the World, animal, vegetable, and mineral, is laid waste in the process. The System may or may not understand that it’s only buying time. And that time is an artificial resource to begin with, of no value to anyone or anything but the System, which sooner or later must crash to its death, when its addiction to energy has become more than the rest of the World can supply, dragging with it innocent souls all along the chain of life. Living
inside the System is like riding across the country in a bus driven by a maniac bent on suicide... (Gravity’s Rainbow 412)

Simultaneously, Pynchon’s simulated entropy is tempered by a connective system of cross-references embedded in the text. The linkages between science, mythology, history, and other cultural sources open the possibility for “negentropy,” the emergence of self-organizing, sociocultural forms of order that can and will spring from the devastation of the war. If a glimmer of hope can be wrestled from this dark novel, it rests in the belief that open systems, both physical and sociocultural, hold the key to the generation of new order. In “Thomas Pynchon and the Advent of Postmodernity,” Steven Best and Douglas Kellner summarize Pynchon’s complex conceptual use of the “entropy” metaphor.

Yet chaos and entropy also provide the space for action and intervention, for chance and indeterminacy, for resistance and struggle, and for new forms of order and self-organization. Thus, there is both an optimistic and a pessimistic strain in Pynchon’s work operating simultaneously: as with some forms of chaos and complexity theory, new forms of order originate out of disorder, but as with classical entropy theory, dynamic systems wind down and collapse. Chaos and disorder thus foster such positive potentials as the breaking up and dissolution of oppressive forms of thought, society, and conformist behavior, but also the danger of calamitous dissolution into nothingness. (The Postmodern Adventure 38)

Entropy, then, in GR should be seen in relation both to life dissipating its energies and to information losing coded structure and collapsing into noise. The imbrication of human beings in both
natural and technical systems, the implosion of technology and the human, and the mediation of all life by machines and techniques have increased indeterminacy, contingency, noise, and chaos by making our view of the world more complex, multiplying crucial variables, and introducing new technologies, media, and their unpredictable offshoots and effects into natural and social systems. In this view, entropy always threatens mankind with disorder, depletion, and death; societies evolve and can collapse; and yet new social orders and structures, and new forms of human life, can be created out of chaos and disintegration. (51)

The Scylla and Charybdis effects of System-induced entropy and paranoia are most evident in Pynchon’s protagonist, Tyrone Slothrop. Immersed in the chaotic anarchy of the “Zone” and pursued by a technocratic elite bent on establishing its dominance, Slothrop embodies and personifies indeterminacy: Slothrop is “the stray freak particle, by accident, drifting against the major flow.” (51)

Raketenmensch: “a warrior arises in the infinity of a line of flight”

The trajectory of Slothrop’s story offers the reader an illustration of what Deleuze and Guattari call a “line of flight,” a vector which traces not only paths of escape from dominant codes and systems of meaning, but also maps lines of transformation and metamorphosis. “Like an arrow crossing the void” (A Thousand Plateaus 199-200), Slothrop’s tale drips with irony and paradox; he is a man of centripetal intentions whose quest yields only centrifugal results. Like other characters in the novel, Slothrop is in pursuit of a “Holy Center”; in his case, the point of convergence where his mysterious past intersects with the dynamic present of the Rocket. In Ideas of Order in the Novels of Thomas Pynchon,
Molly Hite reveals that Slothrop’s “Holy Center”, like those of his fellow characters, is always moving beyond reach:

The Holy Center is the terminus of the quest, the epiphanic point in both time and space where the questing hero realizes the full meaning of his search, life, and world. It is thus the conclusion toward which the narrative tends. In Pynchon’s books no major character reaches this Holy Center. The pattern of the quest is an infinite approach, one that brings the seeker closer and closer to a terminal revelation without allowing him to reach it. (Hite 22)

In his trek through the ruins of the “Zone,” Slothrop represents an avatar of the postmodern self: a hybrid, flexible, resourceful *bricoleur* whose identity constantly mutates in the rapidly changing technological and sociocultural matrix of postmodernity. On a “line of flight” away from the moribund modernist world order and struggling to keep up with the ever-accelerating pace of societal change brought on by emerging, global technocapitalism, Slothrop enters an existential void bereft of adequate mapping strategies. The static codes of modernity, with their emphasis on a timeless, inflexible rationality, are ill-equipped to handle the time-bound, burgeoning proliferation of information that is a hallmark of postmodernity. The codes of the technocratic elite, while more nimble and responsive to change than their modernist predecessors, require mankind to pay a huge psychological toll. Technological mastery and economic success come at the expense of dehumanizing individuals, fetishizing objects, and breeding fear and paranoia to facilitate an insatiable desire for control.

What does Slothrop do? He “disintegrates” and Pynchon’s choice to have his protagonist suffer this fate is telling on a number of levels. The narrative description of Slothrop’s disintegration calls attention to the postmodern subject as informational construct; superseding our status as flesh-and-blood organisms
is our equally real condition as informational entities. In the postmodern period, we are Mondaugen’s “waveforms constantly changing with time” (404), dynamic constellations of cultural information which obey Mondaugen’s law that “personal density is directly proportional to temporal bandwidth” (509). By applying Mondaugen’s logic, Slothrop’s bid to reconstruct his past broadened and thickened his sense of now, making his persona ostensibly more solid. Once he escaped the gravitational pull and paranoia of the “They” System (emblematic of all such totalizing systems of meaning) and entered the flux of the “Zone,” Slothrop’s temporal bandwidth collapsed radically toward zero and with it his sense of being a stable, historically-grounded self. Awakened to the fiction of his persona, Slothrop scatters all over the “Zone,” the information that constitutes his being dispersed among the preterite nomads who roam the region: “Some believe that fragments of Slothrop have grown into consistent personae of their own. If so, there’s no telling which of the Zone’s present-day population are offshoots of his original scattering.” (742)

The implication that Slothrop has fragmented, spread, and evolved like some kind of viral, informational entity is consistent with the chaotic model of the self described in chapter one, “The Matrix Model,” and what Johnston refers to as “information multiplicity.” “Slothrop” is Pynchon’s designation for one of the novel’s many feedback-dependent, sentient networks of symbols, evolving programs that constellate cultural information into memes which in turn form the basis of exchange with other similarly constituted “selves.” Slothrop as representative of the postmodern self and Gravity’s Rainbow as postmodern text represent “always excessive and polysemic” (Johnston 4) fields of information where uncertainty and ambiguity are “built in” to the linguistic networks that comprise them. The wholly probabilistic character of information “renders the reality of social structures highly uncertain and the experience of the individual
consciousness not only transient and arbitrary but also fragmentary and incomplete” (Johnston 12).

In light of this interpretation, the answer to whether we can classify *Gravity's Rainbow* as a “nihilistic” text is complex and ambiguous. On the one hand, the novel delivers an ostensibly meaningful, cautionary tale on the perils of closed sociocultural and techno-centric systems; the “centripetal force” of the text leads the reader toward the nihilistic conclusion that the post-war, multinational Rocket State represents the initial stage in the inexorable progression toward Western cultural “heat death.” Simultaneously, the novel’s structural and thematic lack of closure, its “centrifugal thrust,” prevents the reader from making the definitive conclusion that life in the “Zone” is totally void of meaning. Amidst the power plays of a technocratic elite severed from their humanity and the darkly perverse, “mindless pleasures” which narcotize their existential pain, the fate of Slothrop signals the possibility that new sources of meaning and order may emerge from the entropic wreckage of the war and its technocultural aftermath. If Pynchon has any “faith” at all, it stems from Nature’s uncanny propensity for autopoiesis, the generation of self-organizing systems in the midst of randomness. Through the character of Enzian, Pynchon reveals: “Somewhere, among the wastes of the World, is the key that will bring us back, restore us to our Earth and to our freedom” (525). So long as Nature continues to baffle and amaze us with structures that defy the Second Law of Thermodynamics, self-organizing pockets of meaning will continue to emerge, keeping hope alive in the teeming matrix of information that Pynchon calls the “Zone.”
CONCLUSION

The encroachment of nihilism and chaos upon the Western psyche during the modernist and postmodernist periods can be understood as a memetic phenomenon. In the matrix model described in chapter one, memes and memeplexes (bundles of cultural information that exhibit viral properties) disseminate from the sociocultural matrix, the conglomerate of epistemes, paradigms, and value systems embedded in the institutions, technologies, and discourses which envelop the individuals constituting a culture, subculture, or counterculture. Cultural innovation occurs when memes “mutate” within individuals as a result of the splicing and recombination of memetic material. Artists, authors, scientists, and other such innovators synthesize novel cultural compounds and reintroduce them to the sociocultural matrix as works of art/cultural artifacts; this process changes the sociocultural matrix in a fundamental way.

The figure of the cultural innovator (artist, author, scientist, et al.) provides us with an example of a complex adaptive system (CAS) at work. The artistic/literary innovator represents that locus of convergence where: 1) the sensory feedback from everyday life’s random events; and 2) the input from the internal nexus of unconscious drives, instincts, and “potential” X-factors (archetypes, epigenetic rules) combine to test the cultural schemata internalized by the author over time. The artistic/literary innovator-as-CAS represents a
particular manifestation of the chaotic model of the self. The chaotic model posits the self as a dynamical process, not a static entity, constituted by the never‐ending flux of feedback information streaming in from external stimuli and the equally constant information exchange between the self and its cognitive infrastructure. Amidst the strange loops and tangled hierarchies, the self’s sense of relative stability comes from the process of locking‐in, whereby a multineuronal system of symbols such as the self uses iteration and feedback to find its most stable configuration at any point in time.

As memes or memeplexes, nihilism and chaos have succeeded in becoming cognitive attractors in the minds of a wide range of individuals from all across the socio‐economic spectrum. Nihilism and chaos are not ideas in the logical positivist sense, but rather dynamic, evolving memeplexes understood as the chunked and emergent products of a vast network of other concepts. Their constitution, like that of the chaotic self, results from what Douglas Hofstadter calls renormalization and locking‐in. In other words, nihilism and chaos as memeplexes spring forth from dynamical syntheses that merge innate genetic proclivities with feedback from other individuals and the sociocultural matrix at large.

Dramatic changes in the sociocultural matrix have facilitated this emergence of nihilism and chaos: the ongoing epistemological and ontological revolution initiated in the nineteenth century by the likes of Schopenhauer and Nietzsche, the collapse of classical and Judeo‐Christian myth as a totalizing source of meaning, and the transition from a Newtonian, deterministic worldview to a quantum‐relativistic, chaotic worldview transformed the Western cultural landscape, paving the way for the “viral” spread of nihilism and chaos to different intellectual and cultural strata.
James Joyce’ *Ulysses*, Samuel Beckett’s *Three Novels*, and Thomas Pynchon’s *Gravity’s Rainbow* provide a “lapidary” modernist, late modernist, and postmodernist perspective on the influence of nihilism and chaos in shaping twentieth century intellectual and aesthetic sensibilities. As a quintessential, “lapidary” modernist novel, Joyce’s *Ulysses* strives to be a total work of art, borrowing from and alluding to canonical works and popular culture with equal ease, in an attempt to stave off the crises posed by an increasingly chaotic world. The irony of *Ulysses* is that for all of its encyclopedic virtuosity, it can be read, in part, as a meditation on the failure of totalizing systems of meaning (religious, philosophical, aesthetic) in the early twentieth century. Joyce’s main characters (Leopold Bloom, Stephen Dedalus, Molly Bloom) present vivid examples of the chaotic self described earlier; they are fluid, dynamic entities whose thoughts cannot be predicted, yet retain a “cognitive signature” that emerges as a result of the memetic attractors which shape their distinctive streams of consciousness.

Beckett’s *Three Novels* eschews the stylistic pyrotechnics of *Ulysses*, pursuing instead a minimalist aesthetic that calls attention to the same crises of meaning and representation that Joyce had addressed in a more openly flamboyant manner. In *Three Novels*, Beckett’s characters are besieged by doubts, obsessing and ruminating about language’s fundamental inability to provide solid epistemological and ontological footing. In trying to make sense of “the spray of phenomena” (Molloy 111), the subjects’ only recourse is to the ideas, concepts, and symbols (in short, the memes) they have been introduced to. Culture in general and language in particular are viruses that transmit memes like “order,” “self,” and “knowledge,” compelling Beckett’s narrators to find out the respective meanings of those terms. In their quests, Molloy, Moran, Malone, and “the Unnamable” illustrate the limitations of the logical positivist view of ideas and anticipate the Derridean, trace-oriented interpretation of ideas. Logical
positivists conceived of ideas as sovereign, simple, punctual, and irreducible pieces of information. At the opposite end of the spectrum, Derrida’s version of an idea is that of a temporary crystallization of an uncontrollable network of traces. The metaphysical presence and closure which the characters seek remains always already outside their grasp: Molloy endeavors to find his mother, Moran to find Molloy, Malone to tell his stories and conduct an inventory of his possessions, “the Unnamable” to speak with its own voice and be done with speaking. Beckett’s portrayal of these characters calls into question the very nature of our meaning-making machinery; Beckett’s narrators and secondary characters possess cognitive schemata which are ill-equipped for understanding themselves or the world around them. As we follow their failures, the very validity of schemas in general is put on trial, the characters condemned to an existence filled with uncertainty.

In Gravity’s Rainbow, Thomas Pynchon’s “Zone” represents the historical moment when the modernist sociocultural matrix gave way to the postmodernist sociocultural matrix. Ideological, philosophical, and mythological fragments engendered by a vast array of pre-twentieth century sources are challenged and in some cases supplanted by memes springing forth from the nearly four decades of cultural and political upheaval, scientific paradigm shifts, and technological innovation that preceded World War II. In the semiotic maelstrom of the “Zone,” two regimes of signs emerge: the dominant codes of the technocratic elite known as the “They” system or “the Firm,” and the subversive codes of “the Counterforce.” Like Beckett, Pynchon calls into question the validity of any kind of rigid, inflexible, totalizing schemas that attempt to reduce our experience of the world into fixed, binary codes and mathematical formulas.

With the last months of World War II as a backdrop, a number of Pynchon’s characters engage vainly in “Holy-Center-Approaching” (Gravity’s
Rainbow 508), but like Beckett’s characters, they do not succeed. Pointsman fails to find a “pure physiological basis for the life of the psyche. No effect without cause, and a clear train of linkages” (89). Tchitcherine will reach the mystical Kirghiz Light (359), but his heart is woefully unprepared to appreciate it. His half-brother Enzian, leader of the Schwarzkommando, fails in his bid to restore an enduring tribal unity to the displaced Zone Hereros. Tyrone Slothrop, who begins a paranoid quest for information concerning his past and its connection to the V-2 rocket, draws a Deleuzo-Guattarian “line of flight” and scatters all over the “Zone” without ever getting the answers he was looking for.

Other characters in the novel have abandoned any sort of pursuit of truth, preferring: 1) lives of “mindless pleasure” and debauchery; and/or 2) black market enterprises that are always moving one step ahead of the authorities. The sexual practices of the “Empty Ones,” the orgies on the Anubis, and the perversions of Weissmann/Blicero, Brigadier General Pudding, Margherita Erdmann and others underscore the moral nihilism that runs throughout the novel. The machinations of characters like Von Göll and Tchitcherine illustrate a black market ethos operating outside the sanctioned parameters of the emerging post-war superpowers; both Von Göll and Tchitcherine exemplify the strain of moral nihilism known as “egoism,” where one is morally obligated to realize or to fulfill oneself at whatever price to others.

Ultimately, Pynchon does not privilege any one particular ideology, philosophy, or point of view. His critique of the callous inhumanity of the technocratic “They” system should not be interpreted as a ringing endorsement for the subversive “Counterforce.” Pynchon rejects the totalizing rationalism that seeks to routinize charisma and passion and eliminate chance from its designs. While he appears to have an affinity for the anarchic, schizoid sensibilities of the “Counterforce” and the “entropies of lovable but scatterbrained Mother Nature”
(324), he does not create a work that glosses over and condones the perverse rituals, deviant sexuality, and inveterate drug use of many of the characters. In *Gravity’s Rainbow*, the encroachment of the machinic and informatic upon the organic, to paraphrase Marion Muirhead, leads directly to social entropy and dehumanization. One of the novel’s greatest ironies is that Western civilization has paid for its scientific breakthroughs and technological accomplishments with a precipitous decline in moral integrity.

In conclusion, this dissertation has spawned a number of topics for future investigation. I would like to follow up this project with a more detailed, comprehensive study of memes as cognitive phenomena: what transpires psychologically and biologically in the minds of people that makes certain ideas and images more “virulent” and “contagious” than others? Secondly, this study presents the possibility of looking at the self as a chaotic, complex adaptive system; I would like to further explore the epistemological and ontological ramifications of that hypothesis. Finally, in the “Preface” to *The Will to Power*, Nietzsche wrote that he was relating “the history of the next two centuries” (3). He spoke of nihilism as something to be overcome and called for a revaluation of all values. Modernism and postmodernism represent Nietzsche’s first hundred-year phase in the reign of nihilism. Historically situated at the beginning of the second hundred years, I would like to explore what direction(s) nihilism might take in the century to come. Given Western civilization’s current state of affairs, I can think of no more pressing an issue than the future of nihilism.
ENDNOTES


2 *phase space* refers to a mathematical construct that maps all the theoretical possibilities available to a system. It represents the sum total of possible states that a system can occupy.

3 an *attractor* is a point in phase space to which a system tends to move, a goal, either deliberate or constrained by system parameters or laws


7 Arthur Schopenhauer, *The World as Will and Representation*

8 Arthur Schopenhauer, *The World as Will and Representation*


15 Wetware denotes the emergent, human thought processes that serve as the biological analog to software in computer systems.

16 Beckett’s peculiar value is most evident, writes Stanley Cavell, in his radical sense of the problem developing in our relation to our words. (*Must We Mean What We Say?* 160)

   we have to talk, whether we have something to say or not; and the less we want to say and want to hear the more willfully we talk and are subjected to talk. (161)


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BIOGRAPHICAL SKETCH

Julio Armando Varela was born in Miami, Florida and attended the University of Miami where he earned a Bachelor of Business Administration degree in Marketing (1988). He received his Master of Arts degree in the Program in the Humanities at Florida State University in 1993 and received his Doctorate of Philosophy from the Program in the Humanities at Florida State University in 2004.