

***TODO Y NADA: INVESTIGATING  
CULTURAL CHAOS IN DON DELILLO'S  
UNDERWORLD***

by

**CHRISTOPHER J. FORBES**

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## Introduction

In a 1988 interview with Anthony DeCurtis, Don DeLillo is quoted as saying, "I think fiction rescues history from its confusions. It can do this in the somewhat superficial way of filling in blank spaces. But it can also operate in a deeper way: providing the balance and rhythm we don't experience in our daily lives, in our real lives" (56). DeLillo, the author of eleven novels including White Noise, Mao II, and Libra, asserts this "balance and rhythm" through a unique blend of postmodern techniques and a modern theoretical approach. His fiction is fragmented, his narratives non-linear, and his satire and black comedy scathing. Beneath the seemingly patchwork surface of his novels, however, lies a rhythm that connects the disparate elements of his fiction — a life force that, in proving to be the salvation for many of his jaded or frustrated characters, is also a unifying sensibility in his work. His latest novel, Underworld, perhaps best illuminates this "balance and rhythm." It is a text that spans the latter half of the twentieth century, shifting among the perspectives of a multitude of characters including a waste manager, an artist, a baseball fanatic, a teacher, a nun, and a former director of the FBI. Underworld illuminates both American culture and its substrata, its subculture, in a complex manner. This complexity, though, proves all the more astounding as the interconnections within the novel begin to emerge.

Underworld proves to be an exemplary novel through which to examine American culture at a specific point in time. Daniel Aaron describes DeLillo as "a popular culture specialist and possessor of a considerable stock of disparate information, some it pretty esoteric stuff acquired very likely by purposeful reading, a lot of it simply the by-product

of astute observation and bemused interest in what goes on about him" (306-7). Pop culture rears its head throughout Underworld: Jackie Gleason, Frank Sinatra, the '51 World Series, Mick Jagger, Andy Warhol, and the Zapruder film of John F. Kennedy's assassination all have cameo roles. Moreover, the novel traverses a vast range of locales and environments, from the deserts of Arizona to New York's South Bronx, from San Francisco to civil rights protests in Mississippi. The sheer scope of DeLillo's book provides fertile ground for cultural analysis, and its ambitiously wide-reaching yet minutely detailed portrayal of Cold War and post-Cold War American culture conveys the significance of had even the smallest aspect of this culture to the whole.

A definition of culture is thus needed in order to expound upon the novel in terms of its representation of contemporary American culture. Jay Clayton, in The Pleasures of Babel, deems culture to be "a whole range of phenomena once relegated to other domains: 'low' or 'popular culture,' the media, advertising, information technology, fashion, ritual, academic disciplines, public symbols, lifestyles, everyday practices, and more" (8). Cultural studies theorist Raymond Williams likewise supports such a broad, all-encompassing definition, noting the importance of the "informing spirit" of a culture, "the central interests and values of a 'people,'" and, most significantly in terms of study, "the specific forms taken by [their] cultural manifestations" (12). Thus, value is to be found in everything from the smallest cultural artifact to a society's government. This is clearly echoed in the structure of Underworld, a novel in which a Jell-O mould resonates with as much significance as an atomic bomb.

It is essential to recognize, however, that while Underworld may stand in here for American culture, the novel itself is by no means an objective portrait of this culture,

were such a thing even possible. Instead, it is DeLillo's portrait. Literary critic Katherine Hayles notes the dynamic, fluid nature of culture; as such, "we cannot describe the totality of [culture], which is incessant and infinite" (*Cosmic* 20). Hence, any attempt to anatomize culture drains the "dynamic essence" out of it, "for the static 'patterns' [we discern] never in fact existed as discrete entities" (*Cosmic* 20). Underworld proves to be an example of such a "static pattern;" yet, it is a book that never allows the reader any complacent illusion that it is, instead, an accurate and complete portrayal of American culture. By continually foregrounding the interconnections between its characters and the interdependence of these characters on the objects and events that constitute their realities, DeLillo's novel repeatedly reminds us of the truly dynamic essence of culture.

Underworld is an especially effective text through which to approach the subject of culture because of the way it gives the reader glimpses of a plethora of historical and cultural moments. These glimpses simultaneously act as hints that the events themselves in their grand influence are so rich with cultural significance they elude complete articulation. Sitting at lunch with the novel's central character, Nick Shay, Brian Glassic comments on two such moments — the assassination of John F. Kennedy and the 1951 World Series: "When JFK was shot, people went inside ... We were all separate and alone. But when Thomson hit the homer, people rushed outside. People wanted to be together" (94). An event of major cultural consequence affects millions, yet it is impossible to ever fully express this consequence, for it means something different to everyone. Thus, the important question becomes, "Where were you when Kennedy was shot?" (94). It is therefore impossible to ever fully know culture, but this should not preclude the importance of the relationship between the individual and the culture of

which he or she is a part. In recognizing the limitations of knowledge, cultural studies and contemporary literary approaches to culture highlight for us a notion that preoccupies the postmodern world: "what we see is a matter of what we examine" (Boon 73).

The possibilities of interdisciplinarity thus open up before us. In literary studies, postmodern theorists argue in favour of the challenge to boundaries as a means of discovering why such boundaries exist to begin with. Science, too, has seen an evolution away from typically Newtonian precepts towards theories which emphasize that "the angle from which we view the universe is only one among many" (Cosmic 49). Among these theories, Einstein's concept of relativity is perhaps the most famous. Hayles states that the theory of relativity posits "that the world is an interconnected whole, so that the dichotomies of space and time, matter and energy, gravity and inertia, become nothing more than different aspects of the same phenomena; and second, that there is no such thing as observing this interactive whole from a frame of reference removed from it" (Cosmic 49). The intellectual shift evident in both literary studies and the physical sciences can, according to Hayles, be attributed to larger cultural forces. As such, the disciplines are not as segregated as they might have us believe. The "convergences between disciplines" (Bound 3) consequently assume new importance, and, suggests Hayles, "one of the challenges in literature and science is to develop methodologies that can illuminate [these convergences] while still acknowledging the very real differences that exist" (Bound 3). Perhaps the most prevalent of these methodologies is chaos theory.

The science of chaos has its roots in the relativity of measurement. "Measurements [can] never be perfect," suggests James Gleick in Chaos (15). They are thus dependent on scale — that is, measurement is a metaphor, of sorts, related to and dependent upon the



object under scrutiny. Various researchers and scientists whose work falls under the rubric of chaos theory, including Benoit Mandelbrot, Edward Lorenz, John Hubbard, and Mitchell Feigenbaum, have fruitfully explored this. Their individual experiments and conclusions will be elaborated upon in this thesis as applicable. From a collective perspective, however, their work elucidates several key conclusions of chaos theory: that "simple systems give rise to complex behavior" (Gleick 304), that "complex systems give rise to simple behavior" (304), and that "the laws of complexity hold universally, caring not at all for the details of a system's constituent atoms" (304). Chaos theory celebrates the unpredictability that characterizes those systems that, because of their complexity, cannot be completely anatomized — turbulence in a river, a population of fish in a pond, measles epidemics, or static in an electronic transmission. The complexity of such systems arises out of the interaction of innumerable factors and levels, multiple scales. "The fundamental assumption of chaos theory," writes Hayles, "is that the individual unit does not matter. What does matter are recursive symmetries between different levels of the system" (Bound 170). Chaos theory is concerned with the search for patterns amid chaos, order amid disorder; as such, it is a useful tool with which to examine contemporary culture, a complex system of abundant levels and scales.

"Analogies between literary and scientific versions of chaos are important *both* for the similarities they suggest and for the dissimilarities they reveal" (Bound 3). Chaos theory is a useful analogy for the study of literature precisely because of the metaphors provided by the theory. Indeed, the central tenet of chaos theory — that measurement is a matter of relativity and perspective — carries over effectively into literary studies. In Chaos

Theory and the Interpretation of Literary Texts: The Case of Kurt Vonnegut, Kevin Boon

suggests that

Texts ... are webs constructed from multiple iterations that never exactly duplicate meaning, but, instead, construct isomorphisms from indeterminacy. Books are, as Hayles says, 'reservoirs of chaos,' sites where self similarity manifests itself and where we locate folds in the text. (71)

In other words, books themselves are complex systems constituted by information and meaning; their content appears chaotic or random but proves, in fact, to have deep structures of order embedded within it. Boon also suggests that "chaos theory offers us a means of examining literature without loyalty to any particular scale, and without allegiance to any single theoretical frame or critical approach" (73). It is both a postmodern science and a postmodern literary framework.

In Chapter One, "The Human Murmur," I will examine the importance of perspective in the novel. Throughout Underworld, characters have difficulty discerning or understanding the concept of reality, frustrated as they are over the banality of their daily lives and what DeLillo deems "cosmetic perception" — that quality of seemingly unconscious existence which these characters seek to overcome. The notion of reality is problematized by Nick and Marian Shay, Brian Glassic, Sister Edgar, and the Texas Highway Killer, all of whom search for some kind of meaning in their lives, a meaning which appears to be absent or hidden in the barrage of media and images which constitute contemporary culture. Exploring this "meaning" or "life force" leads to interesting conclusions with regard to the interdependent relationship of the individual and culture, a relationship that parallels that between order and chaos as presented in chaos theory. Ultimately, chaos theory and DeLillo's notion of the "human murmur" combine to focus

our attention upon the importance of shifting perspective and questioning structures that are reinforced by American culture.

These structures will come under further scrutiny in Chapter Two, "The Archipelago of Chaos." Deconstructing such binaries as culture and subculture, waste and product, and noise and signal reveals the underlying interconnections of these concepts and the ways in which the system of culture functions upon the propagation of such binaries. Chaos theory itself is founded on the principle that patterns and order arise out of complex and chaotic systems; the interdependence of order and chaos therefore elucidates the way in which even the most oppositional concepts inhere within one another. Additionally, viewing culture as a system allows the notion of entropy to be introduced in relation to it. This helps to illuminate the way in which DeLillo himself deconstructs binaries in his text by continually reshaping the meaning associated with specific symbols or events. Chapter Two will also incorporate information theory as a means of exploring redundancy, noise, and meaning as they are presented in Underworld.

Chapter Three, "The Implosion of Meaning," integrates theories of discourse and structuralist views on language in order to more fully investigate the relationship between the individual and culture in terms of language and meaning. Desire serves as the connecting theme of this chapter, providing a bridge between the role of the marketplace in contemporary culture and the role of language. The question arises as to why characters in the novel find some things meaningful while other things are mere noise. The work of postmodern critic Jean Baudrillard provides a theoretical approach to desire that assists in answering this question. As well, conclusions will be drawn with regard to the problematic relationship between signifiers and signifieds that appears to translate

into problems within culture at large. Such parallels also link up effectively with chaos theory's focus on the interdependence of scales within complex systems.

**Chapter One**  
*The Human Murmur*

“We accept the reality with which we’re presented.”  
(Christof in The Truman Show)

what if the sun refused to shine? what if the clouds refused to rain?  
what if the world refused to turn? what if the clocks would hesitate?  
what if what is isn’t true? what are you gonna do? what if what is  
isn’t you? does that mean you’ve got to lose? digging for the feel  
of something new (The Smashing Pumpkins, “Appels + Oranjes”)

How we perceive reality, and how we define reality, are quite telling of our positions within culture. As Kevin Boon suggests, “what we see is a matter of what we examine” (73). Frequently, our perceptions of reality are shaped by the patterns we observe emerging out of human experience, the order that appears to arise out of chaos. Einstein claims that an individual “seeks to form for him, in whatever manner is suitable for him, a simplified and lucid image of the world, and so to overcome the world of experience by striving to replace it to some extent by this image” (227). Both chaos theory and DeLillo’s Underworld prove intent on undermining the value which western ideologies place upon order as opposed to chaos. Chaos theory deconstructs classical science by showing that “measurements could never be perfect” (Gleick 14-15), and that science both affects and is affected by culture. The concept of the fractal shape to be explored here is significant in what it reveals about scale and how human perceptions are dependent upon it. Likewise, DeLillo’s novel foregrounds the importance of shifts in the scales we use to perceive things; through this, it becomes possible to restore an intuitive life force that the noise of the contemporary world has drowned out. Changing perspectives results in a tension that chaos theory upholds as the source of pattern amid chaos, order amid disorder. Truly, order and chaos are utterly

interconnected; like the various characters and events of Underworld, chaos and order are interlocked in a circular chain of causality. Exploring patterns which emerge throughout DeLillo's novel through reference to chaos theory allows us to draw conclusions about the limitations culture imposes upon the individual, the way in which the individual affects culture, and the necessity of shifting one's perspectives in order to comprehend these limitations and effects.

Chaos theory is founded upon this necessity. Benoit Mandelbrot, in his paper, "How Long is the Coastline of Britain?," was among the first mathematicians to shift emphasis away from Euclidean geometry, which deals largely with "lines and planes, circles and spheres, triangles and cones" to "the new geometry" which "mirrors a universe that is rough, not rounded, scabrous, not smooth" (Gleick 94). His solution to the question proved to be a break from conventional mathematics; the coastline was, he argued, "infinitely long" (Gleick 95-6) because its length depended entirely upon the unit used to measure it. Measured by the yard, the coastline would be much longer than it would be as measured by the kilometre on a topography, for the yardstick more accurately maneuvers around the sharp cliffs and large rocks. Measured by the inch, the coastline would again appear even longer, for the distance around smaller rocks and protrusions could be more accurately taken into account. "As the scale of measurement becomes smaller, the measured length of a coastline rises without limit ... at least down to atomic scales" (Gleick 96) where it may or may not come to an end. Perception depends upon the position of the observer: the closer one gets to an object, the more detailed it will appear to be, a notion that is vital to DeLillo's Underworld.

The concept of culture in the novel is one that is entirely dependent upon scale. Katherine

Hayles explains that culture is "composed not of particles but of 'events'" and, as such, "it is in constant motion, rendered dynamic by interactions that are simultaneously affecting each other" (Cosmic 15). Similarly, the dynamic nature of culture is presented by DeLillo in the novel as entirely interconnected. Hayles builds her idea of the "field concept" upon the notion of interconnectedness in culture. This concept involves searching for characteristics that are isomorphic across various scientific field models. It relies upon patterns to discern various elements of a universe that is constantly shifting and overwhelmingly chaotic.

Thus, by searching for patterns amid the culture of Underworld, it is possible to discern order amid chaos. Indeed, the novel's interconnectedness demands this. Race riots in Jackson, Mississippi, in 1964 are juxtaposed with a scene involving the Deming family in late 1950s suburbia in which Jell-O moulds and car waxing take on highly sexual overtones in light of son Eric's fondness for masturbating while looking at a photograph of Jayne Mansfield (514). In 1974, artist Acey Greene exhibits her paintings of Mansfield and receives scathing reviews. Acey's friend Klara Sax, in 1992, is reunited with Nick Shay, the man with whom she had an affair years earlier in New York City. Nick is a waste manager in the present day who works with Big Sims, an overweight black man who believes that when white people finally become aware of the true population of black Americans, the real race riots will begin: "white people gonna go weak in the knees and black people gonna get all pumped up" (335). Big Sims's comments thus mirror the Jackson race riots, and the chain of correspondences comes full circle in a dynamic system with no beginning or end point: DeLillo takes us from racial conflict to suburbia to the New York art scene and back again. Any event, character, or object can initiate numerous links with other events, characters, and

objects. Indeed, the central symbol of the novel is the baseball hit by Bobby Thomson that wins the 1951 World Series and which passes among various characters through the years, gaining its own history as it goes.

By examining cultural patterns in Underworld on specific levels of scale, it is possible to draw interesting conclusions regarding both order and chaos. Mandelbrot's vision of the importance of scale has significant consequences for any search for patterns amid chaos. His analysis of the length of Britain's coastline led him to examine the dependence of physical dimensions upon scale. In Chaos, James Gleick elucidates Mandelbrot's work using, quite fittingly in the context of my discussion, the analogy of a baseball. "From a great distance," Gleick writes, "the ball is no more than a point, with zero dimensions. From closer, the ball is seen to [be a sphere], taking up three dimensions. From closer still, the twine comes into view, and the object becomes effectively one-dimensional" (97).

This notion is furthered by Mandelbrot's concept of fractional dimension, "a way of measuring ... the degree of roughness or brokenness or irregularity in an object" (Gleick 98). It is significant in that, in analysing the Koch curve — a snowflake that somewhat resembles the Star of David — Mandelbrot discovered that fractional dimensions remained constant over different scales. In other words, the small filaments that form the arms of the snowflake proved to contain the same characteristics over changes in scale even while the arrangements of these characteristics were irregular. As one zooms in on any arm of the Koch curve, the filaments appear to branch off even more in a manner akin to the resolution a satellite attains as it focuses on a coastline. New details emerge as a new scale is adopted and the details of the previous scale slide out of focus. As with Mandelbrot's paper examining the measurement



of coastline, the Koch snowflake reveals an "infinite length crowding into finite area" (Gleick 102). The snowflake reveals total self-similarity; that is, "symmetry across scale," which implies "recursion [and] pattern inside of pattern" (Gleick 103). Self-similarity means that certain characteristics within a shape are isomorphic, regardless of scale. Mandelbrot termed these types of geometrical shapes "fractals" (Gleick 98).

Fractals prove to be vital to the search for cultural patterns in Underworld. As Kevin Boon states, "fractal discourse is a discourse of infinite possibility in finite space" (65). It is, in essence, symbolic of both order and disorder in that certain characteristics remain the same as the scale changes under which the shape is examined; yet, at the same time, a change in scale produces a completely new and original perspective. The fractal provides naturally occurring evidence of "the rich variety of the universe" (Boon 65) and "marks the boundary between chaos and order" (Boon 62).

The metaphor of the indeterminate boundary is rife with potential for cultural studies because, as Hayles explains, if culture is constituted as a complex system, a local site may be designated "within a culture where the self-similarities characteristic of the system are reproduced. Conceived as images of each other, [this site and culture] are related as microcosm to macrocosm, although each level also contains areas so complex they are effectively chaotic" ("Shifting" 320). In adopting Hayles's position, then, the boundary between systems becomes the focal point for studying the effects of one system upon culture as a whole. At the point where the symmetries between systems align, "cultures are ripe for change" ("Shifting" 320). In terms of fractals, for example, the characteristics of two respective fractal shapes must become isomorphic before the two shapes can converge. At

this point, as with culture, systems "become extremely sensitive to perturbations," and "small fluctuations will have large-scale effects" ("Shifting" 320). Thus, the potential inherent in the border between systems is of both a chaotic and ordered nature.

Culture itself proves to be of a fractal nature. In Underworld, specific elements *do* remain self-similar over the wide range of systems that constitute culture. One such element is celebrity. Like the infamous homerun baseball in the novel, celebrity serves as a point of connection; it carries with it "some solemn scrap of history" (16) because it manages largely to resist the dynamic shift of culture. The celebrity persona, like that of the Texas Highway Killer in the novel, is absorbed by culture. It becomes part of the self-similarity that defines culture in each of the infinite number of systems within that culture. Oddly enough, culture is often self-conscious about its own self-similarity. As Gleick points out, "self-similarity is an easily recognizable quality [and] its images are everywhere in the culture: in the infinitely deep reflection of a person standing between two mirrors, or in the cartoon notion of a fish eating a smaller fish eating a smaller fish" (103). Celebrity is inherent in the infinite scales of culture, and although its cognitive manifestations may vary, it is an element of the fractal nature of culture. Culture is infinitely deep and, on each regressive level, right down to an individual consciousness, exhibits the same characteristics as those that are pre-eminent in the all-encompassing system. The majority of characters in Underworld view celebrity as a conduit through which they might access the "hidden murmur" (320) or life force that the cultural system contains somewhere within it, and, because celebrity does not seem to shift along with the dynamics of culture, it is immensely attractive. Indeed, one of Klara Sax's early boyfriends works on an independent film that focuses on a woman from the town of

Normal, Illinois, who contracts the same illnesses that plague her favourite celebrities. As DeLillo writes, "It was the modern stigmata" (378).

In order to investigate further the tension between order and chaos in fractals, and, consequently, in culture, it is first necessary to invoke chaos theory to examine the tenuousness of boundaries. American mathematician John Hubbard's contribution to chaos involved the use of Newton's method, a "classic scheme for solving equations by making successively better approximations" (Gleick 217) through a process of iterated calculations. Hubbard's experimentation involved the equation  $x^3 - 1 = 0$  which yields only one real number solution; however, this polynomial also has two complex solutions:  $-\frac{1}{2} + i\sqrt{\frac{3}{2}}$  and  $-\frac{1}{2} - i\sqrt{\frac{3}{2}}$ . Hubbard input various points into the variables of the equation using Newton's Method, and when each approximation was graphed, the result was trilateral. If a calculation yielded an approximation that was closer to one solution than the other two, it was graphed, depending on which of these three solutions, in red, green, or blue. Interestingly, the boundaries between the three graphed zones were not definable at all; in fact, the boundaries were composed themselves of points made in all three colours. Hubbard's experiment provides concrete evidence of the nebulous nature of the zones between systems in a way that links this focus on boundaries intricately with chaos theory.

In Underworld, analysing the relationship between culture and various characters is essential to extracting patterns between systems that are inherent in culture. Subjective consciousness affects and is affected by the larger "*collective subjectivity*" or "way of life or outlook adopted by a community" (Alasuutari 25). While an atomistic procedure cannot be undertaken to explain something so complex and all-encompassing as culture, which "cannot

be adequately represented as the sum of its parts" (*Cosmic* 17), it is possible to draw conclusions about the culture of Underworld by focusing upon those characteristics which are isomorphic between different characters and their reactions to and inferences about post-World War II American culture.

Part One, "Long Tall Sally," is structured around the reunion of Nick Shay and Klara Sax, two ex-New Yorkers who were involved years earlier in an affair. The opening image of the section is an ironic one considering the excessive style of the novel — Nick, crossing the desert on his way towards Klara's isolated art project involving the repainting of abandoned military aircraft. The desert itself is deeply symbolic in the novel. It is a realm that has not been penetrated by the culture and society which exists all around it, and, as such, serves as an ironic but effective starting point for DeLillo's novel.

In fact, Klara, in a television interview, asserts the necessity of undertaking her artistic project in the desert, where "no other object, not a single permanent object can be located within a mile of the finished piece" (69). The desert represents, to Klara, a "lack of attachments" that is linked with "empty space" (208), an emptiness that is "white and pure and virginal" (386) not unlike an artist's canvas. This simile is deliberately ironic, for the scene abounds in such irony. Klara herself believes that the desert is free from culture, yet the pretensions she brings to it are completely reinforced by culture, just as the "virginal" canvas is in actuality culturally determined in terms of shape, size, material, and function. The same is true of the television crew assembled in front of the airplanes, which suggests a colonisation, of sorts, by culture. It is as if culture is attempting to define itself better by defining its opponent or "Other" more clearly. This is an irony that is particularly interesting

in light of Hubbard's mathematical conclusions. Despite attempts to lucidly draw a distinction between itself and an "Other," culture is, in fact, permeated by this Other (in the form of counter-culture or the underworld of the novel), just as culture itself permeates this Other. Thus, the chaos that Hubbard recognized as inherent in the zones between systems is apparent in Klara's art project. Irony itself is an undermining of order and expectations, a chaotic form of literary play. Klara's obliviousness to this irony is a comment upon her culture and its pretensions towards both order and the possibility of a clearly defined boundary between systems.

Klara's intentions, however, are revealing in their own right. In essence, she is clearing away as much culture as is possible — the sound bytes, the debris, the noise — so that she may get at "the ordinary thing, the ordinary life behind the thing ... to find an element of felt life" (77). She insists upon isolation as a means of obtaining access to a life force or "human murmur" (320) that is shuffled into the background by everyday existence, a force that the pollution of culture, both literal and technological, overwhelms. Many of the book's characters must come to terms with this unnameable force, a force representing fear, power, and paranoia, as well as hope and transformation.

Advertising executive Charles Wainwright, on an important business call, says, "This is the challenge, Dwayne. You have to read the mysterious current that passes in the night and connects millions of people across a continental landmass" (534). Indeed, this "mysterious current" is precisely what flows through both the culture presented in Underworld and the novel's very structure itself. This "human murmur," sought by Klara in the desert, proves to be the truly elusive centre to an otherwise baffling barrage of cultural information. The novel

itself approaches the condition of a seemingly endless series of sound bytes, a collection of apparently chaotic episodes involving Nick Shay and Klara Sax, their friends, and total strangers who appear out of nowhere, leave their mark, and fade away never to be heard from again. The postmodern architecture of "discontinuous surfaces ... unconnected by causal linkages" (Best and Kellner 40) is readily apparent in the novel's structure. At the same time, however, the chaos that seems to pervade the novel, a novel which jumps back and forth through time as well as from place to place and person to person without any frame of predictability, is not merely random. The structure appears chaotic as the result of friction between systems — between the impulse on the part of the reader and, consequently, American culture to order life and DeLillo's intention to make this impulse very difficult to gratify. In other words, the novel appears chaotic only when the reader and the novel operate against one another. Underworld is highly ordered; that is, its chaotic structure gives way to unique fractal patterning. Once the reader adopts an analogical framework for reading the novel, this order emerges quite lucidly, and disparate characters such as Sister Edgar and J. Edgar Hoover merge in an almost natural way.

This merging, both in terms of the analogical structure of the novel and the culture presented through it, is the result of an emergence of the very life force sought by Klara. In this way, as we shall see, the novel is a unique blending of modernism and postmodernism, relying upon postmodern style to convey a human essence that is discussed in a good deal of modern thought and criticism. DeLillo's novel presents a series of episodes so wide-ranging that they scrape against one another; Nick's suburban life in Arizona grates against scenes set in the South Bronx, and vice versa. This friction erodes the surface of the novel,

just as Nick's brother Matt is told by his mother while he scrubs a kitchen pot that he is "wearing out the steel" and will "clean right through it" (218). In terms of chaos theory, the novel's technique of using friction to produce order is explicable in fractal terms. After all, the seemingly irregular fractal curve actually "implies an organizing structure that lies hidden among the hideous complication of such shapes" (Gleick 114). DeLillo's style in Underworld manifests the fundamental viewpoint of chaos theory which recognises chaos as "an inexhaustible ocean of information rather than a void signifying absence" (Bound 8). Truly, this novel compresses this "ocean of information" to the point that an underlying presence is signified — the presence of a life force.

This life force has its roots in French philosophy. Henri Bergson, a philosopher of evolution, adopted many of the frameworks established by other philosophers and developed a paradigm that focused upon the "*élan vital*" or "vital impetus" of life (Edwards 292). According to Bergson, as quoted in Goudge,

The chief clue [to understanding evolution] is found in what intuition reveals of our own inner nature as living beings; we are typical constituents of the universe, and the forces that work in us also work in all things. When we focus upon what intuition discloses of ourselves, we find ... a consciousness of a vital impetus (*élan vital*), of our own evolution in time. (292)

This emphasis upon intuition as a means of locating a "current of consciousness" (Edwards 293) is carried forth in the writings of Sigmund Freud and D.H. Lawrence, who respectively assert the importance of the id and the unconscious. In An Outline of Psychoanalysis, Freud uses the term id to denote the oldest of "mental provinces or agencies" which "contains everything that is inherited, that is present at birth, that is fixed in the constitution" (2). For

Freud, the id is the locus of a life impulse — what Bergson would deem the "vital impetus" — for "the power of the id expresses the true purpose of the individual organism's life" (5). It is, as Freud writes, "the core of our being" (67). Lawrence, in Psychoanalysis and the Unconscious, likewise asserts the need to "discover, if we can, the true unconscious, where our life bubbles up in us, prior to any mentality" (208). He also states that this life force is a "process not susceptible to understanding" (210), and so it is not surprising that DeLillo does not directly attempt to pinpoint or anatomize the life force, but rather allows it to emerge through the chaos of the text.

Klara Sax's endeavours in the desert are an attempt to capture the essence of hope and transformation represented by this life force. Indeed, her project is "a work in progress ... changing by the day and minute" (75) just as the desert itself is refigured by "the wind that the sages of the old nations spoke about, evolving metaphors and philosophies ... blowing steadily, sometimes, for days" (402). For Klara and, correspondingly, the American culture presented in Underworld, the desert is a key metaphor for distance and space; it is a landscape with potential for, but which denies, systematisation, a sprawling void that awaits the complexity which culture has inflicted upon the rest of the geography. And, as Klara points out, because society has been unable to penetrate the desert, it becomes a place "to test our weapons" (71), which also ultimately fail in countering its power.

The importance of the notion of distance between self and culture cannot be understood prior to explicating the relationship between the two. Indeed, the self is a microcosm of culture in Underworld. DeLillo reveals in a 1988 interview for his novel Libra that "the secrets within systems, I suppose, are things that have informed my work. But they're almost



secrets of consciousness, or ways in which consciousness is replicated in the natural world" (DeCurtis 61). The consciousness of characters is composed of cognitive systems that have been structured by culture itself, a notion developed by Louis Althusser and which I will examine more fully. It is precisely because this is true that the observer (the self) and the observed (culture) belong to the same field. Characters in Underworld are inextricably involved in a complex system in which they are affected by culture and, conversely, shape this culture themselves. The boundary between the microcosmic cognitive systems of the self and the macrocosmic systems of culture is as dynamic and irregular as the boundaries which Hubbard graphed using Newton's Method and different colours.

It is no surprise that so many of the novel's characters seek distance as a means of finding patterns in the chaos of everyday life, or as a means of procuring the isolation which Klara Sax sees as necessary to re-discovering a life force that has been crowded behind billboards and trashbins. Of all the novel's characters, however, none so obviously foregrounds the absence of a true boundary between self and culture as Richard, an awkward, socially inept supermarket cashier who also turns out to be the Texas Highway Killer, a serial murderer who shoots random motorists on the Interstate. When we first meet him, he is driving to the house of Bud Walling, a man who is as close to a friend as Richard gets, and DeLillo immediately alerts the reader to an aspect of Richard's personality that seems off-kilter: "He drove out to Bud's place through old fields ... You left the high school a quarter of a mile behind ... and you powered your car into the wind ... and you drove into a white sky feeling useless and dumb" (262-3). The white sky, which invites juxtaposition to the sands of the desert throughout the novel, is something threatening and devoid of life for Richard. For him,

the life force that Klara rediscovers from such similar natural voids is nowhere to be found.

If Klara and her work represent an ambitious attempt to break the self from culture, to extract herself from what Hayles terms the "Cosmic Web," then Richard represents just the opposite. His is a life intent on merging the self with culture. We are told of Richard, "he had to take his feelings outside himself so's to escape his isolation ... [Bud] would never understand how Richard had to take everything outside, share it with others, become part of the history of others, because this was the only way to escape, to get out from under the pissant details of who he was" (266). Richard attempts to remove himself from society's pressures, or at least separate his physical self from his own conception of himself, by merging completely with culture — that is, by aligning his own self, the system which constitutes "Richard," with the larger system of culture. In doing so, he ironically believes he can procure the maximum distance possible from everyday existence. By becoming the Texas Highway Killer, he exerts maximum influence upon culture, while at the same time dissolving "Richard" as he presently exists into as much of a void as possible. Should Richard the cashier cease to exist, Richard himself would obtain the security that arises out of isolation from society, the sense of security which emerges out of breaking away from responsibility and social ties. Indeed, Richard's ties are significant, as he must tend to his invalid father and, at the same time, bear the verbal abuse of his sharp-tongued mother. Merging with culture is vital to him because he wishes to lose his sense of self rather than, as Klara does, wish to regain or rediscover it. Consequently, suffusing himself into the complex system of culture is the only option. While the boundary between self and culture is chaotic and dynamic, however, it is not non-existent. Richard can no more completely

dissolve his sense of self into the infinite network that constitutes American culture than Klara can entirely remove herself from it.

Drawing upon the theory of fractals once again provides a lucid analogy which, while highlighting the difference between the positions of Klara and Richard, also foregrounds their similarities. Indeed, if human consciousness or cognition is a microcosm of culture, sharing the same ideology and values, then it is possible to metaphorically view consciousness as a fractal form akin to culture. The notion of scale as it is used in chaos theory is directly applicable as well. Analysing the work of scientist Robert Shaw, both Hayles and James Gleick foreground the "uncertainty principle" in mathematics that was conceptualised by Shaw. This principle "guarantees that fluctuations always exist on the particle level [and so] there will always be enough microscopic uncertainty to initiate macroscopic chaos" (Bound 160). This is clearly evident analogically in the character of Richard, an unexceptional individual who has an impact on culture, living through it in fact: "He came alive in [it]. He lived in their histories, [...] lived with the victims, lived on, merged, twinned, quadrupled, continued into double figures" (271). Richard's existence, his consciousness, seeks total alignment with the complex system of culture, and, to a degree, he is granted it. For one media moment, the immeasurable and vast scale of culture focuses in on Richard, who represents one human fractal pattern out of an infinite number inscribed within the larger system. Yet, because complex systems are dynamic, culture shifts almost instantaneously, annexing the Texas Highway Killer, deviating in scale and emphasis onto another person or event, another pattern. Richard's moment ends and a copycat killer takes his place, something "he did not like to think about ... but found it was lately, more and more,

a taunting presence in his mind" (272). Once again, the intimacy with culture that Richard initially sought to bring about between his everyday existence and society begins to loosen into something of a distancing from culture. Even at his workplace, he is moved from the "glass booth," where he sits "batching personal checks and redeemed coupons" (266) and does not have direct contact with customers, to the checkout counter, where he is "subject to the casual abuse of passing strangers in the world" (267).

Between the two extremes represented by Richard and Klara, one finds the majority of the novel's characters seeking some distance from culture, like Klara, and, at the same time, some way, like Richard, to connect with the life force this culture harbours, however muddled this life force may be. They want to feel a sense of belonging or connection to culture, but do not want to be implicated in its destruction. During a television interview, the Texas Highway Killer tells the news anchorwoman of a live broadcast that "'you want to get as close to the situation as humanly possible without bringing the two vehicles into contact'" (217), a fitting metaphor. Ironically, the medium of television is once again foregrounded, this time, however, advocating connection with culture as opposed to the isolation from culture that Klara originally seeks.

The overall attractiveness of seeking an overt and tangible connection with the cultural sphere thus operates in a tension with an inherent desire to maintain a sense of self and protect one's identity from annexation by this sphere. The byproducts of contemporary American culture — disease, poverty, illiteracy, alienation — are the result of what Tom LeClair contends in The Art of Excess is the "size and scale of contemporary experience" (6). Many of DeLillo's characters in Underworld, like the author himself, seem apprehensive

about completely trusting a culture that produces epidemics such as HIV and street violence. They regard it as a system run amok, a system growing infinitely large and uncontrollable, and one with which they must maintain only a safe, distanced contact.

One of the key images of this need for safe contact, or simultaneous distancing from and connection with culture, is "Condomology," a shop in "a neat clean minimal" whose patrons, largely college students, are "gently unkempt" (109). Like the condoms for sale in the shop, there is a plastic, almost sterile texture to the scene. Here, condoms are part of a "new frontier" (109), as Brian Glassic tells Nick upon their first visit to the store. "I can see a satellite city growing out from this one shop," Brian says, "a thousand buildings, this is my vision, sort of spoked around the condom outlet. Like some medieval town with the castle smack at the center" (109). The condom is, of course, highly symbolic of safe contact. It embodies the tension which plagues Brian himself; Brian holds Nick as an enemy on the one hand, and Marian Shay as an ally on the other, and so the condom represents both the desire for contact with Nick's wife and the need Brian has to distance himself from Nick. The condom symbolises the unconscious need many of the novel's characters have for contact with Klara's life force or "human murmur," but also the need to create some distance between culture and the self. As Lenny Bruce declares during a stage performance at Mister Kelly's, a bar in Chicago, while manipulating a condom on stage, "I just realized. This is what the twentieth century feels like" (584).

It is important to emphasize the unconsciousness of this desire because it becomes for the novel's central characters yet another unnoteworthy element of everyday existence. Nick Shay provides evidence of this. His view of America is typical and can be contrasted with

interesting results against that of Klara Sax. Nick does not recognise culture as fractal and all-encompassing. His perspective is similar to that of one who observes a baseball from a great distance and sees only a dot, concluding that the object has no dimension. He sees history as "a single narrative sweep, not ten thousand wisps of disinformation" (82). "I believed we could know what was happening to us" (82), Nick tells us, indicating an obliviousness to what Louis Althusser deems "ideology." Althusser writes in "Ideology and Ideological State Apparatuses," "all ideology is *centred* ... and interpellates around it the infinity of individuals into subjects in a double mirror-connexion such that it *subjects* the subjects to the Subject, while giving them in the Subject in which each subject can contemplate its own image ... the *guarantee* that this really concerns them" (168). Unlike what Nick believes in, Althusser does not recognise any possibility for an individual to fully "know" what is "happening" to him or her. Diane Macdonell explains that "our consciousness is constructed under the form of an imaginary subjection. In the apparatuses of ideology, in their day-to-day practices, we become particular individuals acting in the beliefs *given us to think*" (38, emphasis added). We come to know who we are by recognising ourselves in the mirror of what ideology tells us we are as though it were our natural perception of reality. Thus, we have no independent perception outside the ideological to posit as a counter-ideology unless we destroy our sense of self. This lends credence to what Althusser notes is the impossibility of escaping ideology, since "one of the effects of ideology is the practical *denegation* of the ideological character of ideology by ideology" (163-4). In other words, "ideologies are systems of meanings that install everybody in imaginary relations to the real relations in which they live" (Macdonell 27).

Ideology covers its traces. Culture, itself an ideological formation, is a system from which a subject can never fully extract him- or herself. As such, a truly objective view of culture is never possible. As Hayles writes, "a strict separation between subject and object is not possible and, ... accordingly, there are inherent limits on how complete our knowledge ... can be" (Cosmic 18).

Nick does not consciously assert that he thinks he is independent of the culture that defines him; yet, as the novel progresses, the fact that his complacency is shaken suggests that he believes such a separation is possible. After meeting with Klara in the desert, he stands beside his car and rubs suntan lotion over his arms and face and pauses to "read the label again" (84). He thinks:

I'd been reading the label all morning. The label said the protection factor was thirty, not fifteen. I knew this subject well. I'd read up on this subject, seen the research studies ... And I knew with total certainty that a protection factor of fifteen was the highest level of sunblock scientifically possible. Now they were selling me a thirty.

And it made me think of something strange ... [a story about Dr. Edward Teller, who] feared the immediate effects of [an atomic] blast at his viewing site [in the desert] ... and how he decided it might be helpful to apply suntan lotion to his face and hands. (84)

Nick begins to find his own knowledge inadequate and more frequently undermined, which generates in him a suspicion that, as Eagleton outlines in Literary Theory, "as far as society is concerned, [he] as an individual [is] utterly dispensable" (172). Culture seems indifferent to Nick's position within it. This is in keeping with the view of culture as fractal; that is, when considered on a grand scale, Nick does not seem to fit into the system's pattern at all — he does not seem to exist. Yet, by analogy, as one zooms in on Mandelbrot's coastline, even the smallest details become visible. And, as the character of Richard shows, even the

smallest fluctuations at a microcosmic level affect the whole. Thus, as Nick's perspective of America and his place within it is gradually uprooted, he learns to partially see what it is that constitutes his own perception of cultural order; he learns to focus on the level or scale of culture with which he is directly involved. He realizes that in focusing on the larger scope, his career of waste management, he has been distracted from the activities which have been going on right under his nose, namely his wife Marian's affair with Brian Glassic. When Nick turns his attention back to the system he is involved with on a more perceivable level, he proves most effective at procuring happiness, and after facing off with Brian, tells us, "Marian and I are closer now, more intimate than we've ever been. The serrate edges have dulled away" (803).

At the same time, Sister Edgar, a nun who assists homeless children on the streets of New York, has feared culture for so long and in such an unconscious manner that her focus is also blurred. Like Nick, her attempt to secure a distance from culture, while at the same time purporting to retain contact with it, proves to be damaging. Distance is ultimately an illusion, for the individual is intimately involved with culture. After all, chaos theory concedes that macrosystems are affected by microsystems.

Sister Edgar cannot possibly perceive the life force that Klara Sax searches for because she does not recognise herself as influencing culture. Instead, she views herself in relation to chaos, feeling a need to clear away the excess which culture thrives upon. The death of Esmerelda, a young homeless girl whom Edgar had been attempting to locate, pushes Edgar into terrible despair whereby she "sees the human heart exposed like a pig's muscle on a slab" (817). Yet, after joining an immense gathering of mourners on the street in mass prayer



for the little girl (whose story is featured on CNN),

She feels the words before she sees the object. She feels the words although no one has spoken them. This is how a crowd brings things to single consciousness. Then she sees it, an ordinary commuter train ... moving smoothly toward the drawbridge ... A dozen women clutch their heads, they whoop and sob, a spirit, a godsbreath passing through the crowd.

*Esmerelda.*

*Esmerelda. (821)*

The collective sight of Esmerelda's image on the commuter train, whether real or not, proves to be for Sister Edgar a discovery of that "human murmur" she lost faith in after the death of the little girl. The collective consciousness of the crowd produces for one brief moment the symbolic representation of humanity in the image of Esmerelda; cognitive systems align and the result appears to be miraculous. Sister Edgar finally recognises her own participation in generating this collective image of the dead girl, and is forced into an awareness of her own connection to the life force which permeates culture. The "serenity of immense design" (817), a lyrical reference to the "life force," which dissipated in Edgar after the girl's death returns when she metaphorically smells "the incense of her experience" (824) and the mystical life force surfaces through chaos.

Sister Edgar becomes aware that, prior to this moment, her life had amounted to a virtually unconscious existence. Her habit of donning latex gloves before venturing into the street as a means of "keeping a distance" (243) echoes the safe contact symbolised by the condom. It finally reveals her as truly being "sinfully complicit with some process she only half understood, the force in the world, the array of systems that displaces religious faith with paranoia" (241). Likewise, Nick comes to value the Thomson baseball which he purchases

from Marvin Lundy because it makes him conscious of the tension resulting from an inherent desire to connect the self with, and distance the self from, culture. He repeatedly picks it up, looks at it, squeezes it hard, and puts it back on his shelf (809). There is "an agreeable animal tension," he thinks, "between the hard leather object and the sort of clawed hand, veins stretching with the effort" which seems to connect "many things" (131). This tension is valuable, the pull between offense and defense or, respectively, the urge to align one's consciousness with the larger system of culture and the need to refrain from doing so. Ultimately, it is conscious awareness of this tension that, out of the system's chaos, produces meaning in the form of a life force.

This tension resides within the boundary between competing systems. Hubbard's mathematical investigation of a differential equation provides evidence of a "pull" between three possible solutions that produces elements of all three solutions within the boundaries between these solutions. In other words, these boundaries are not true boundaries at all, but are rather zones that are intensely chaotic and infinitely deep. Changing the equation's variables merely alters the scale upon which these zones can be examined, just as adjusting the lens of a microscope allows an observer to perceive various scales and depths of an object. In Underworld, the tension between defense and offense produces both order and chaos. Sister Edgar's situation in the novel gives an indication of complete cultural chaos, whereas, in relation to Sister Edgar's reality, Nick's reality appears immensely ordered. Yet, we find that his suburban life is also in chaos, troubled as it is by an extramarital affair. Again, the significance of the scale used to perceive things surfaces. In the cases of Sister Edgar and Nick, instances of both order and chaos are clearly present. This is a significant

conclusion of chaos theory (Boon 65). It also explains the apparent discrepancy which arises between Sister Edgar's final revelation of the life force that emerges from the chaos of culture, and Nick Shay's comments after a similar revelation:

I long for the days of disorder. I want them back, the days when I was alive on the earth, rippling in the quick of my skin, heedless and real ... a danger to others and a distant mystery to myself. (810)

For Nick, an unconscious existence is horrifying. He wants to get out of the ordered life his status and position in culture prescribes, and wants a return to the consciousness of the chaos which results from the tension between defense and offense. Consciousness is, after all, the only way through which to reach the life force which Sister Edgar taps into in the novel's conclusion.

The relationship between offense and defense, which represent respectively a pull towards and away from culture, demands investigation in Underworld, a novel which is spun around two central motifs: baseball and the Cold War. Photographs of Thomson, the hitter who wins the '51 World Series for the Giants, and Branca, the losing pitcher for the Dodgers, standing side by side, repeatedly turn up in the novel with various popular figures standing between them, among them Jimmy Carter, Richard Nixon, and Ronald Reagan. The photograph suggests a tension between, and interdependence of, defense and offense, winner and loser, that is inherent in American culture and which is repeatedly played out.

Baseball itself provides an invaluable analogy for an examination of culture through chaos theory. Indeed, its very excitement, the "obscure danger" (20) which young Cotter Martin feels during the opening scenes of the novel in attendance at the '51 World Series, originates in the struggle between defense and offense played out on the field. As such, the actual game

represents a manifestation akin to the consciousness which both Nick and Sister Edgar develop as the novel concludes — a consciousness of the "intimate wish to be connected" (45) and a simultaneous pulling away from this, an inherent need to retain individuality and "save the voice" (54), which ballgame announcer Russ Hodges is repeatedly advised to do. Particularly interesting is the crowd's reaction to this tension and the rhythm that seems to flow through the game being played out before their very eyes:

The crowd, the constant noise, the breath and hum, a basso rumble building now and then, the genderness of what they share in their experience of the game, how a man will scratch his wrist or shape a line of swearwords ... They are waiting to be carried on the sound of rally chant and rhythmic handclap ... It is the thing that will make something happen. (19)

The ballgame represents a space wherein chaos exists in tension with order. The game itself is chaos, but chaos controlled by nine innings, a limited playing field, and the decisions of an umpire. This tension and its resulting unpredictability have its foundation in the zone that borders determinate systems. It is a tension present in chaotic physical systems ranging from weather conditions, which evolve out of heat fluctuations, to fish populations, which are determined by a pull between such variables as growth rate and food supply (Gleick 70). The struggle between defense and offense also parallels that between the solutions to Hubbard's investigation of Newton's Method; it is an innate struggle, a completely natural one which produces a rhythm, often irregular as is apparent in the crowd's reaction to the unpredictability of the ballgame.

The collective consciousness of the crowd also plays a significant role in developing this analogy. The Giants' victory proves to be an affirmation of the influence of culture and its dissemination into everyone and everything. Like the vision of Esmerelda which Sister Edgar

and the mourners see, the '51 World Series has a protective and binding power because, in aligning so many consciousnesses at once with the larger system of culture, order seems to triumph. The tension between defense and offense seems to resolve in favour of the latter, whereby the crowd seems unified. The chaos of the ballgame ends with a winning team and the rules of play close down around the unpredictability of the game. As Cotter is told, "That's the thing about baseball ... You do what they did before you. That's the connection you make" (31). Similarly, this notion of confirmed order and the resulting sense of security it brings with it casts light on Nick's opposing view of the ballgame as being "about Branca making the pitch. It's all about losing" (97). After all, he desires chaos, the collapse of structure, for he believes that only in chaos is it possible to discover the life force for which Klara Sax searches. Ultimately, the resolution of the ballgame confirms this to some degree; order does not gain a permanent victory, for the tension between it and chaos that is inherent and unconscious in culture cannot be reconciled. Thus it is that Cotter, running home after the game, "feels the little bringdown of fading light that he has felt a thousand times before" (58).

Nick, however, also desires the homerun baseball for another reason. "It's about the mystery of bad luck," he says, "the mystery of loss" (97). The ball symbolises the significance of the homerun hit for Branca, the game's loser, who is forced to live with a single moment for the rest of his life, "forever plodding across the outfield grass on [his] way to the clubhouse" (97). The consequences of a single action are shown to be immense, something which is emphasised by chaos theory. Gleick effectively summarises this notion of "sensitive dependence":

In daily life, the Lorenzian quality of sensitive dependence on initial conditions lurks everywhere. A man leaves the house in the morning thirty seconds late, a flowerpot misses his head by a few millimeters, and then he is run over by a truck. Or, less dramatically, he misses a bus that runs every ten minutes — his connection to a train that runs every hour. Small perturbations in one's daily trajectory can have large consequences. A batter facing a pitched ball knows that approximately the same swing will not give approximately the same result, baseball being a game of inches. (67)

Chaos exists because of sensitive dependence, even though patterns or order may be discerned amid chaos. Nick appreciates the loss associated with the homerun baseball because he recognises somewhat the lasting impression chaos has even on a ballgame, a fact which culture, in its attempt to order life, repeatedly ignores.

The novel's other key system, the Cold War, operates on a similar premise. In fact, a nuclear detonation by the Soviet Union is played out through the character of J. Edgar Hoover in the background of the World Series game at the novel's outset. The interdependence of chaos and order is largely introduced in this scene. Hoover realizes that "there is that side of him, that part of him that depends on the strength of the enemy" (28). Similarly, later in the novel, baseball aficionado Marvin Lundy tells Brian Glassic, "You need the leaders of both sides to keep the Cold War going" (170) and that "every privilege in your life and every thought in your mind depends on the ability of the two great powers to hang a threat over the planet" (182). The Cold War, like baseball, foregrounds the paradoxical tension between culture and the self, offense and defense. It implicates all Americans in a deadly dialogue whereby culture threatens to destroy the country in a nuclear mushroom cloud; in doing so, culture ironically produces a fear in the individual that only a withdrawal from this culture can alleviate. In the absence of a consciousness of this tension,

the aspect of American culture represented by "Condomology" assumes control, namely virtually unconscious existence, assumes control. An enemy is needed to subvert such an unconscious existence, to foreground conflict and chaos, and, thus, in Nick's instance, to foreground the life force. Like baseball, the image of the Cold War centres on the tension between offense and defense — the struggle between aligning the self with culture or distancing the self from it. Marvin unsurprisingly comments, then, that "'when they make an atomic bomb ... they make the radioactive core the exact same size as a baseball'" (172).

Consciousness is also significant because, throughout Underworld, characters repeatedly try to come to terms with their own notions of reality and those of the culture around them. These notions change, however, as characters undergo shifts in perspective, and these shifts in turn are prompted largely by the very tension which surrounds the interaction between defense and offense. As Marvin notes, "'certain events have a quality of unconscious fear'" (171); the thrill of baseball arises out of a markedly safe and restrained version of the fear of annexation by a consuming and expanding culture, while the fear of the Cold War emerges out of a tension *between* cultures. In both instances, fear appears to arise from a friction between systems, whether internal, as in the self versus the culture of which one is a part, or external, as in the clash between cultures. For characters such as Nick and Marian Shay, unconscious everyday existence does not appear to be reality precisely because in it there appears to be no tension between systems. Their daily routines are so firmly established that tension seems, at best, to be a marginalised factor in their lives. The Shays do not communicate effectively because admitting tension, acknowledging their affairs, threatens the unstable order that constitutes their reality. Indeed, Nick thinks, "there's a self-conscious

space, a sense of formal play that is a sort of arrested panic ... but it's not that you're pretending to be someone else. You're pretending to be exactly who you are" (103). This "arrested panic" results in unconscious existence by suppressing or prohibiting tension. The self appears to be in a stasis with culture, although culture is dynamic, and the individual accepts, as Althusser notes, the illusion put forth by ideology that "what seems to take place outside ideology ... in reality takes place in ideology" (163). Hence, ideology promotes a conscious engagement with illusions, while consigning to the unconscious the subject's relations to the real conditions of production.

Hayles uses the analogy of a "constantly turning kaleidoscope whose shifting patterns arise from the continuing, mutual interaction of all its parts" (Cosmic 20) to convey the impossibility of truly objective observation and study in any facet of culture:

No matter where we stand we are within the kaleidoscope, turning with it, so that what we see depends on where we stand ... Moreover, there will always be one place we can never see at all — the spot we are standing on. (Cosmic 20)

Hayles's kaleidoscope metaphor accurately conveys the presence of self-similarity and patterns in culture; however, it cannot account for tensions within culture. In other words, the kaleidoscope is a constantly shifting object, effecting and affected by changes within itself, but the scale of these changes is not taken into account. This is of immense importance in Underworld, just as scale is vital to understanding links between the macro- and microcosmic levels of fractals in chaos theory.

In the novel, when specific points are reached, the magnitude of change in the perspective of a character varies directly with the intensity of the sensation of vulnerability he or she



experiences. This sense of vulnerability arises out of this tension between systems. The more vulnerable a character suddenly feels, the greater the chance he or she will experience a major shift in perspective. This theme emerges in the novel's very first scene through the symbolism of the baseball game:

The difference comes when the ball is hit. Then nothing is the same. The men are moving, coming out of their crouches ... There are drag coefficients. There are trailing vertices. There are things that apply unrepeatably ... the narrative that lives in the spaces of the official play-by-play.

And the crowd is also in this lost space, the crowd made over in that one-thousandth of a second when the bat and baseball are in contact. (27)

Because the tension between defense and offense is foregrounded to a large degree in baseball, the slightest shift in the relationship between them — a stolen base, a third out, a foul ball — can dramatically alter the crowd's interaction with the game. Similarly, when Marian and Nick Shay take a hot air balloon ride, Nick thinks to himself, "Everything we saw was ominous and shining, tense with the beauty of *things that are normally unseen*" (126, emphasis added). Looking down upon Klara's painted aircraft, Marian and Nick undergo a shift in perspective whereby they become conscious of their environment. Their own cognitive ordering of culture, their own ways of seeing everyday life, are suddenly and briefly brought out of complete alignment with culture. Marian's reaction to the appearance of the aircraft on the desert beneath them is quite telling — "Like my god Nick, how could this be here without my knowing?" (125). For an instant, their perspectives are altered in a way akin to an adjustment of the scale of a telescope whereby the coastline of Britain becomes more or less detailed. The hot air balloon ride, by figuratively holding Nick and Marian's perspectives of culture up to the mirror and pushing these perspectives into the

forefront of their consciousnesses, foregrounds the lack of boundary between self and culture. After all, although the Shays may be inextricable from their culture, this does not preclude the possibility of their becoming conscious of their link to culture. Likewise, the fact that both Nick and Marian seem dispensable when compared to the broader scope of culture does not mean that culture operates without their input. Just as Sister Edgar responds to the image of Esmerelda on the commuter train, Nick and Marian come to recognise the importance of their own roles in constituting their culture.

This sudden recognition of complicity during the balloon ride is unnerving, as is evident in both Marian's realisation that "I can never look at a painting the same way again" (126) and Nick's awareness of the sudden existence of a "tension of [their] pressed bodies" (125). Consciousness of the fact that one's perspective of the world is not all-encompassing thus spawns feelings of vulnerability. Those elements of culture that have been ordered cognitively in an individual through routine and daily existence are suddenly forced to re-order. In the instance of Marian and Nick Shay, the hot air balloon ride breaks the perspective of everyday existence; the ride shatters the arrangement of those cultural elements that defined this original perspective and made it unconscious. In this respect, from this new vantage point, psychological chaos emerges as previously held perspectives dissipate. Unable to comprehend these strange sensations, Nick thinks that Klara's art project has "lost its flow;" "unpainted intervals" of the aircraft begin to reveal themselves (125). Nick's cognitive pattern is no longer the same. In the very "one-thousandth of a second" (27) in which a bat hits a baseball, Nick mentally registers this new view of Klara's art. His cognitive arrangement of cultural elements alters, just as the arrangement of self-similar

elements of a fractal shape alter as the depth of perspective used to view it changes. He thus becomes involved in a tension whereby his new perspective, his new cognitive pattern, does not correspond to that which his social position in culture originally produced in him through routine. Marvin Lundy concisely expresses this new sensation to Brian Glassic: "You used to have the same dimensions as the observable universe. Now you're a lost speck" (170).

Interestingly, ideology, as described by Althusser, indirectly posits that culture is repeatedly the victor in the self/culture struggle previously discussed. After all, if the individual believes the identity attributed to him or her by ideology is, in fact, genuine — that is, his or her identity has been self-created rather than ideologically imposed — then he or she subsequently has no need or is, at least, unconscious of the need to revolt against culture. In Underworld, the latter seems to be true. The repeated reference to the "human murmur" and the dominant motivation to locate a life force amid everyday existence suggests that the need is there. It *is* unconscious for the most part. When Marvin Lundy realises that tension between systems is what "makes reality come true" (177), we get a clear indication that survival does depend upon this tension. The tension between self and culture is absolutely essential, as it is between all other systems.

In this respect, the dialogue between Louis T. Bakey and Charles Wainwright, Jr., another character who briefly comes into contact with the Thomson baseball, is quite telling. Bakey and Wainwright navigate the B-52 that Klara later repaints in the desert, and which sports the image of Long Tall Sally on its nose, "the blond girl in the flouncy skirt painted on a forward fuselage ... the nose art, the pinup, the ordinary life and lucky sign that animated the work" (125). Louis takes offense at this depiction, stating that the figure of Long Tall Sally

actually originates from a Little Richard song; he tells Charles, "[she] ain't gonna be seen in no car in no drive-in movie doing a little necking with a youth like yourself ... Because she black and she bad" (609). One image, one cultural element — Long Tall Sally — manifests itself differently in Louis and Charles. Their conversation reveals that culture does not manifest itself identically in each individual, and as this is the case, the individual must operate in tension with culture. After all, if one of the aims of ideology is to make its presence felt as little as possible, then consciousness of such different cultural manifestations draws attention to what seems to be a distance between consciousness and culture.

The life force symbolically represented by the image of Long Tall Sally is hidden within both the chaos and order of culture. Difficult to discern in a sea of information, any feeling of its presence is repeatedly suppressed. This is clearly apparent in the unarticulated but nevertheless potent fears of many of the novel's characters, fears which arise out of both an intuitive sense that there is no boundary between self and culture and a sense that the self can have a tremendous impact upon culture. Nick Shay's son, Jeff, proves to be an interesting character in that, like the Texas Highway Killer, he is conscious of his effect on culture; but, unlike him, wishes to retain his distance from it. Nick tells us:

My son used to believe that he could look at a plane in flight and make it explode in midair by simply thinking it. He believed, at thirteen, that the border between himself and the world was thin and porous enough to allow him to affect the course of events. ... All he had to do was wish the fiery image into his mind and the plane would ignite and shatter. His sister used to tell him, Go ahead, blow it up ... and it scared him to hear someone talk this way and it scared her too because she wasn't completely convinced he could not do it. ... But Jeff got older and ... lost the paradoxical gift for being separate and alone and yet intimately connected, mind-wired to distant things. (88-89)

DeLillo comments to DeCurtis that, "I think we feel, perhaps superstitiously, that children have a direct route to, have direct contact to the kind of natural truth that eludes us as adults ... There is something they know but can't tell us. Or there is something they remember which we've forgotten" (64). This sentiment is clearly captured in the preceding quotation. Jeff represents a kind of childish sincerity in his fear of the power of consciousness. He does not need to test his connection to the rest of the world, as the Texas Highway Killer does, to know it exists.

Jeff adopts a remarkably distanced perception of reality. Rather than becoming unconscious or unaffected by reality through routine as Nick and Marian do, Jeff grows up to isolate himself in his bedroom, taking jobs "on and off," and waiting "on tables in a food court somewhere" (806). His computer becomes his focal point for discerning reality — his low-paying jobs provide only minimal sustenance. The reality of his life outside of his bedroom is unimportant to him because he is conscious that it is only a partial reality, only a partial and minimal view of what life truly is. His computer, however, provides the whole picture. Nick reveals that Jeff "visits [web] sites but does not post ... He adds components and functions and sits before a spreading mass of compatible hardware" (808). The internet provides another of the novel's key metaphors, a sprawling, endless web of information which, like culture, appears entirely chaotic. In this sense, the internet is also fractal in form; like the Koch snowflake or Mandelbrot's coastline, it appears to be irregular and yet finite, a contained space that is endlessly chaotic when, in fact, it is an example of "infinite possibility in finite space" (Boon 65). However, order is undoubtedly present within the internet in such forms as web sites, e-mail, and list servers. Order emerged out of chaos, and

he is clearly aware of this.

For Jeff, the human murmur originates in the fluctuation between order and chaos. Significantly, “he visits a website devoted to miracles. There are many reports ... of people flocking to uranium mines in order to cure themselves. They come from Europe, Canada, and Australia, on crutches and in wheelchairs ... Jeff ... smirks shyly, either because he thinks it’s funny or because he thinks it’s funny and believes it” (806). The truth of these reports proves to be a moot point, for it is the life force behind them that is ultimately significant. Jeff smiles because he *knows* that the internet postings about miracles in Montana are indicative of this, and the internet and culture themselves are merely chaotic melting pots in which the only truth that matters is the human murmur that lies behind their existence. The life force suffuses into everything, and although cultural elements may constantly re-order themselves, as apparent through Hayles’s metaphor of the cultural kaleidoscope, this “murmur” remains a constant. Regardless of the manifestations of these elements, whether they be miracles in Montana or Baker’s interpretation of Long Tall Sally, the life force is their foundation.

In the novel’s conclusion, DeLillo writes of the spiritual unification that surfaces as “a fantasy in cyberspace and a way of seeing the other side and a settling of differences that have less to do with gender than with difference itself, all argument, all conflict programmed out” (826). Jeff is witness to this, for he is ever-vigilant in his consciousness of reality. Chaos and order prove, in the novel’s conclusion, to be one and the same. Just as the boundary between self and culture proves non-existent, so too is that between order and disorder. Chaos and order are not binary opposites as Western culture would have us believe; they are

instead “intimately linked in a *pas de deux*, in concert” (Boon 65).

Jeff is an important character in that he reveals the impossibility of ever fully knowing culture or reality, and so indirectly conveys to the reader the importance of multiple realities and infinite perceptions. DeLillo describes many of the perspectives of everyday life held by his characters as “cosmetic perception” (158); that is, characters such as the Shays live largely without shifting their perspectives of the world, and so have only a “cosmetic” view of life. This term will be used throughout this analysis to denote the unconscious existence which characterises the lives of so many of the novel’s characters. Just prior to meeting Brian for sex, Marian walks over to the long mirror in her friend’s bedroom and edges “her hip against the surface of the glass, feeling some small coiled chill of body and object” (253). She tests her connection with culture, her perspective of reality. We read, “She never looked at herself so closely at home” (254), precisely because her home is the environment which creates her perspective of reality. In the absence of this environment, as with the hot air balloon ride, a new perception is necessarily created. Because such large shifts in perception are so rare for Marian, her conscious thoughts begin to determine her reality and experiences rather than vice versa. She tells Nick, “I’m having that sort of thing where I know I won’t sleep. It’s the knowing that does it. It’s not the tired. Because I’m actually very tired” (127). Later in the novel, while “slicing a lemon, she understood that the knife would slip and she would cut herself and she did” (387). Thus, Underworld emphasises shifts in perception as a means of better gaining a comprehension of one’s own reality, and of acquiring a degree of control over one’s perspective of this reality. This degree of control comes at the cost of a tension with culture as previously mentioned. Thus, Marian has an affair because it is a

shift of a large enough magnitude to allow her to rediscover the human murmur that has long been hidden from her. It is a “dare she had to take, a way into some essential streak of self” (256).

Nick’s brother Matt undergoes a similar crisis of “cosmetic perception.” Much of the novel focuses on the relationship between the two brothers, in a manner that proves analogous to the connection between baseball players Thomson and Branca. Nick, as a child, steps into the role of offense, teasing his younger brother and swiping his chess pieces from the board. Matt must act defensively, and, like Branca, “could not take the losing. It was too awful. ... His brother bopped him on the head and that made him madder” (715). Theirs is a relationship based on conflict, and largely on the tension between defense and offense. When Nick decides to take his mother Rosemary out of New York City and back to Arizona to live with his family, Matt immediately objects — “She likes it here, Nick,” Matt says. “It’s her life, it’s what she’s used to. She has her church, her stores, all the familiar things” (197). Yet, when Matt is isolated from Nick, the importance of this conflict to Matt as a distraction from everyday loneliness is suddenly foregrounded. We are told, “he was a grown man in his mother’s house, afraid of noises in the hall” (221).

Matt lives in a state of “cosmetic perception” akin to that of his brother, and, like Nick, searches for a way of regaining a sense of reality. He attempts to separate “himself from the science he did in the 1970s” (199), during which time he worked at an underground nuclear research facility nicknamed “the Pocket.” There, he felt surrounded by “a network of things and people. Not people but figures — things and figures and levels of knowledge that he was completely helpless to enter” (421). In the absence of the tension between himself and his



brother, his reality becomes seemingly mundane or unconscious. Matt's perception of reality becomes static when the tension between defense and offense dissipates. Reality becomes monotonous and seemingly "un"real because the life force which he originally discovered in taking up the game of chess as a boy becomes inconspicuous. To counter this, he buys "huge ruby grapes that did not have the seeds bred out of them" (219); and he scours a frying pan, trying to get at the reality beneath the surface, until his mother warns him, "You'll wear it out" (218). Matt also attempts to learn the name of every bird that he sees during his trip across the desert with girlfriend Janet as a means of penetrating the terrible feeling he has of being only a dot, "an object that had no properties except location" (464).

Matt's "cosmetic perception" is evidence of a link between chaos theory and postmodern culture. Hayles explains that one branch of chaos theory postulates that chaos, or "the void," is the ultimate "space of creation" (Chaos and Order 14). That is, order and self-similarity emerge out of the chaos that appears to constitute complex systems. This notion "has deep affinities with the postmodern idea of a constructed reality" (14), or the postmodern conception of reality as being something which is constructed by humans to give the appearance of order in a genuinely chaotic world. And, as postmodernism contends, "reality is subject to constant revision, deconstruction, and reconstruction" (14). Chaos theory holds that neither order nor chaos is a dominant characteristic of reality; rather, they operate in tandem. Reality is merely the result of fluctuations that occur between them. This is clearly evident in Underworld, "in which disorder and order, negation and creation, come together in a fruitful dialectic" (14).

Characters such as Nick and Marian come to discover that this constant revision of

perspectives of reality is the only way to effectively distance themselves from the illusions which culture presents. As Sisters Edgar and Gracie hand out food and crisscross the slums of New York City, they watch as a bus pulls up:

A tour bus in carnival colors with a sign in the slot above the windshield reading *South Bronx Surreal* ... About thirty Europeans with slung cameras stepped shyly onto the sidewalk in front of the boarded shops and closed factories and they gazed across the street at the derelict tenement in the middle distance. (247)

When Gracie becomes livid at the appearance of the bus, shouting, “Brussels is surreal. Milan is surreal. This is real. The Bronx is real” (247), an interesting conclusion can be drawn. What is real is solely what characterises the environment with which one is familiar. Yet, as Underworld points out, one is never fully familiar with one’s own environment. Just as adjusting the lens of a telescope reveals new information about an object, new details, so too can an individual’s reality be re-interpreted by a shift in perspective. The word reality thus has no foundation. In Postmodern Theory, Steven Best and Douglas Kellner point out that “in the postmodern world the boundary between image or simulation and reality implodes, and with it the very experience and ground of ‘the real’ disappears” (119). The word “reality” contains no referent, as is revealed by the scenario involving the *South Bronx Surreal* tour bus. Interestingly, the “carnival colors” of the bus appear to be a way for the tour to keep open a gap between the “realities” of the South Bronx and the Europeans; yet, if anything, the bright colours prove more of a connection between the two. The neighbourhood frequented by Sisters Edgar and Gracie is notable for the Wall, “a lone standing structure, a derelict tenement ... where Ismael Munoz and his crew of graffiti writers spray-painted a memorial angel every time a child died in the neighborhood. Angels

in blue and pink covered roughly half the high slab” (239). The pink and blue angels seem absurdly out of place, just as the tour bus does. However, both hint at an underlying interconnectedness that exists independent of any definition of reality. In The Wake of Imagination, Richard Kearney suggests that “we are at an impasse where the very rapport between *imagination* and *reality* seems not only inverted but subverted altogether. We cannot be sure which is which” (3). This is particularly evident in this scene, where the worlds imagined by Sister Gracie and the Europeans come into tension with one another.

As the scene continues, we read of school children passing by a subway fire who are “barely interested — they heard shootings all the time out their windows at night, death interchangeable on the street and TV” (248-9). The South Bronx is a culture which is constructed around horrific visions of “a prostitute whose silicone breasts had leaked” (246), “a man who’d cut his eyeball out of its socket because it contained a satanic symbol” (247), and “cannibalized cars ... with dead bodies wrapped in shower curtains” (241). The customary reality of Sisters Gracie and Edgar is as numbing as that within which the Shays exist. The realities of the South Bronx and the suburbs of Phoenix would seem to be antithetical; however, in psychological terms, the inhabitants of both worlds attain a level of unconsciousness towards their respective environments that is virtually identical. Again, it is not so much the reality that affects the individual as his or her interpretation or perspective of that reality. Only when such perspectives break apart is it possible for the individual to become conscious of the difference between his or her perspectives and the reality itself.

Perceiving one realm as reality requires that everything outside that realm be perceived as either unreality or surreality. In this way, what an individual perceives as reality is equally

suggestive of what lies outside this perception. Similarly, whatever culture conceives of as valuable is simultaneously telling of what it conceives of as waste. “In the ... interplay between presence and absence,” writes Hayles, “meaning derives as much from what is not said as from what is said” (Bound 62). And just as the life force can only be experienced through a shift in perspectives of reality, a tension of sorts, so too can it be experienced in the flux between what culture deems valuable and what it regards as waste.

There is an important connection between waste and this life force in Underworld, as symbolised in Marvin Lundy’s trip to Russia:

Marvin’s bowel movements seemed to change, gradually, in grim stages, as he and [wife] Eleanor moved east through Europe. The smell grew worse, deeper, it acquired a kind of density, it ripened and aged, and he began to dread the moment after breakfast every day when it came time for him to haul himself to the toilet. (309)

As he travels east, waste becomes an increasing problem; that is, as systems collide and the border between them becomes less and less defined, waste begins to surface as a topic that is intertwined with the issue of secrets in the novel. Waste is described by DeLillo as “intense and deeply personal,” seeming “to say something awful about the bearer” (310). Marvin recalls that as he got closer to Russia, “his BMs [began] turning against him, turning violent in a way” (310). Waste is something that is to be suppressed and ignored — something to be marginalised — and yet, as Marvin discovers, it cannot be suppressed or contained. It is a grotesque secret fighting to reveal itself, and it most effectively does so in the border wherein systems interconnect. As Marvin moves further away from his own environment into that of the enemy, waste begins to overwhelm him, as it does other characters in the novel, most notably Cotter’s father, who hitches a ride in a friend’s car

which is packed floor to ceiling with trash.

Waste is presented as something threatening because it is something which, like the desert, cannot be annihilated. This symbolism is established quickly in the novel through an analogy between it and the atom bomb:

They didn't even know what to call the early bomb. ... And Oppenheimer said, It is merde. ... J. Robert Oppenheimer. It is merde. He meant something that eludes naming is automatically relegated, he is saying, to the status of shit. You can't name it. It's too big or evil or outside your experience. It's also shit because it's garbage, it's waste material. (76-77)

Waste is threatening in its very indestructibility, and because “everyone agreed together not to notice” it (388), it “eludes naming.” The power of waste derives from its total marginalisation. This is apparent in Nick’s perspective of waste as “a religious thing. We entomb contaminated waste with a sense of reverence and dread. It is necessary to respect what we discard” (88). Waste is “the best-kept secret in the world” (281). It is explained to Nick during a tour of a newly engineered landfill that “cities rose on garbage ... Garbage always got layered over or pushed to the edges. ... But it had its own momentum. It pushed back” (287). Civilisation and waste are involved in a defense/offense contention, and so another thematic connection within the novel becomes lucid. Just as there must be a losing baseball team for every game that declares a winner, just as there must be a Branca for every Thomson, so must there be waste from progress and civilisation. Emphasis is necessarily placed here upon the word *from*, for waste and civilisation are inextricable, just as order and chaos prove to be.

Waste, then, is undeniably a weapon of sorts. Hayles establishes a strong connection between the sense of vulnerability and intuitive fear that individuals experience and the

culture which is constructed out of this fear. “The awareness that our entire social context can be annihilated by weapons that we will not even see,” she states, “is no doubt one reason why contexts in general seem to us precarious, capable of instantaneous mutation or extinction” (Bound 271). This is a central tenet of postmodernism, which regards culture as an interwoven series of social constructions rather than as simply the “natural facts of life” (Bound 265). This “disappearance of a stable, universal context [that] *is the context* for postmodern culture” (Bound 272) is entirely obvious in Underworld, in which characters have difficulty perceiving *any* context as reality. The issue of waste, however, even more so posits such an absence of context and the complete interconnectedness of varying systems. Big Sims tells us, “All waste defers to shit. All waste aspires to the condition of shit” (302). Regardless of whether the context is the suburbs of Arizona or the alleyways of the South Bronx, everything defers to waste, and so it is that waste ironically reveals a great deal about the ideological “strange attractor” of American culture in Underworld.

Strange attractors play a significant role in chaos theory. The term was coined by David Ruelle and Floris Takens to denote “any point of a system’s cycle that seems to attract the system to it” (Chaos and Order 8). Edward Lorenz, who coined the term “Butterfly Effect,” discovered the first strange attractor by mapping a “stripped-down system” (Gleick 135) onto a special co-ordinate grid known as a phase space grid. This grid is constructed, for example, by plotting the position of an object on one axis and its velocity on another. According to Hayles, to construct a phase space grid, “we choose a single point in the system’s path to observe” (Chaos and Order 9). Hayles provides for an example an experiment involving a “double planar pendulum” (8), which is constructed by fastening “a second pendulum to the

swinging end of the first pendulum so that the structure becomes double-jointed, as it were” (9). Once this double planar pendulum begins oscillating, its angular position and angular momentum are mapped on a grid each time the two pendulums become fall into vertical alignment. “In effect, these data amount to taking a snapshot of the system every time it is in the specified configuration” (9). When the phase space of a regular pendulum is mapped, its strange attractor is readily obvious; as the pendulum slows down, it sways less and less from the vertical position, and when it stops altogether, it reaches its midway point, its strange attractor. When Lorenz mapped a system with three variables on a grid, the result was “a double spiral, like a pair of butterfly wings interwoven with infinite dexterity” (Gleick 139). Even a complex system appeared to have a strange attractor. “The attractor was stable, low-dimensional, and nonperiodic. It could never intersect itself;” its resulting “loops and spirals were infinitely deep, never quite joining, never intersecting” (Gleick 140). Yet, these phase space points “do not wander indiscriminately but *stay within a confined region*” (Chaos and Order 9, emphasis added). When a single pendulum’s oscillation cycle is mapped, there are certain points which exist outside the system’s range — the pendulum will not, for example, exceed the length of its tether in the distance from its base. In a chaotic system, points which start out “very close to one another” will, as the system continues, “diverge unpredictably” (9). The strange attractor of such a system is the pattern which the system’s points appear to make; but, upon closer examination, these patterns, like two snowflakes, are never exactly the same, just as the elements which constitute different levels of a fractal shape are never arranged identically.

In Underworld, American culture is attracted to its own ideology. If culture is a concept

analogous to fractal shapes, whereby the individual represents a component of the larger “web” of culture, then ideology is necessarily what confines culture. Just as the double planar pendulum has a strange attractor of its own which, when graphed in phase space, proves to limit the patterns of oscillation of the double-jointed pendulum, so too does ideology limit the patterns that culture may produce. However, by examining waste, it becomes possible to determine what is unwanted and discarded by any complex system, culture being no exception. Waste exposes the values that constitute an ideology and, as such, at least partially reveals the limits of this ideology — the functions of ideology as a strange attractor.

Hence, waste reveals a great deal about American culture precisely because it is waste — it is shunned, suppressed, and ignored, yet it originates within the very culture that comes to reject it. When Big Sims tells Nick during a waste management convention, “This is what you and I. And all of us here. Fundamentally deal with. Over and above. Or under and below” (302), the implication is that waste is the defining characteristic of American culture. It is an inextricable from culture as defense is from offense; it is the “best kept secret in the world,” and, as Marvin Lundy tells his wife Eleanor, “the biggest secrets are staring us right in the face and we don’t see a thing. ... The bigger the object, the easier it is to hide it” (316). In Underworld, waste is not the biggest secret to the reader; it is constantly rearing its head in alleyways and automobiles, bedrooms and backyards, pushing in from the outside. Yet, it is through both conscious and unconscious efforts, the book’s characters manage to ignore it. It never fully penetrates the collective consciousness because it eludes naming and is “outside your experience” (77). It cannot be fully comprehended because it is not part of the cultural consciousness, the ideology of a culture, except in a marginal way. American culture



does not assimilate waste into its schematic, and, consequently, waste pushes back on culture. It has “its own momentum” (287) and represents a realm which this culture cannot take into account. In this sense, waste serves a function in Underworld akin to the Arizona desert — it is something impenetrable, yet unavoidable, and so attains a degree of power over culture. Unlike the desert, however, waste is an everyday product of culture. It is the best-kept secret in the world because it plays a role that is utterly interwoven with daily existence.

In Underworld, waste literally turns society inside out. The bull’s-eye logo of Lucky Strikes cigarettes, regarded by Nick as a cultural icon, constantly surfaces in the hands of a multitude of people, but then is discarded in trashbins when the packet is emptied. Similarly, the image of Long Tall Sally is originally painted on a B-52 as an omen of good luck — a proclamation of human ingenuity. But it, too, is discarded when the plane rusts out. Thus, for every mark of human progress, there is a mark of human naiveté, an inability to recognise the potential of waste. During the showing of an Eisenstein film, Klara realizes that “all Eisenstein wants you to see [...] are the contradictions of being ... and how forces will clash and fasten, compelling the swerve from evenness that marks a thing lastingly” (444). Waste is confining because it proves that an act has a lasting impact, regardless of how small or unintentional. It restricts the culture that creates it by somewhat attacking the ideological foundation of that culture, just as the Soviet regime threatened American capitalism during the Cold War.

Waste, then, serves as the novel’s key link between the life force and a culture of materialism. Underworld draws attention to that which is normally suppressed by American

culture as a means of revealing that only shifts in perception can truly penetrate the unconscious haze which so many thrive within. And with such shifts in perspective comes a way to tap into a life force that emerges out of the clash between systems. The next chapter will incorporate systems theory as a means of analysing the ideological architecture of contemporary American culture, in addition to analysing the problems emerging from this architecture.

**Chapter Two**  
*The Archipelago of Chaos*

We're forced to bed  
but we're free to dream  
(The Tragically Hip, "Giftshop")

Suppose an island breaks through the surface of the water,  
then another and another, until the sea is dotted with islands.  
Each has its own ecology, terrain, and morphology. One can  
recognize these distinctions and at the same time wonder whether  
they are all part of an emerging mountain range, connected  
both through substrata they share and through the larger forces  
that brought them into being. ... *an archipelago of chaos.*  
(Bound 3, emphasis added)

Hayles's notion of the "archipelago of chaos" reveals a theme that underlies both chaos theory and DeLillo's Underworld: even the most different concepts have an interconnected "substrata." Chaos theory thrives upon paradox, particularly the paradox of order emerging out of disorder. DeLillo's novel also repeatedly incorporates paradox, particularly in the form of its characters. Most notable among them are a press agent who attempts to placate his fear of loneliness by blasting music and driving everyone away (391) and Moonman 157, who summarises his difficult youth by thinking, "The doors went ding dong before banging shut" (435). The novel thus serves well an examination of culture, especially in light of the binaries upon which American culture thrives. The relationships between subculture and culture, waste and product, and noise and signal are far more complex than would seem. The concepts which culture sets in opposition to one another actually prove, in DeLillo's novel, to inhere within one another, like the different islands of Hayles's "archipelago." Both information theory and systems theory prove useful in explicating such paradoxes.

According to Tom LeClair in The Art of Excess, Austrian biologist Ludwig von Bertalanffy is primarily responsible for naming systems theory (6). This discourse asserts that "processes of open systems are 'equifinal': end results cannot be determined or predicted from initial conditions" (8), an assertion that is also characteristic of chaos theory, which recognises the impossibility of ever truly knowing such "initial conditions." By drawing this fundamental parallel between systems theory and chaos theory, it becomes possible to recognise further points of likeness between the two schools of thought. Doing so allows for a more complete investigation of culture as a system that is remarkably similar to those physical systems which form the basis for study in chaos theory. Von Bertalanffy created systems theory in an attempt to "enable workers in both the natural and human sciences to see isomorphisms in their work" (LeClair 9). Like chaos theory, systems theory is largely concerned with patterns and the isolation of characteristics that are commonplace to systems which are otherwise quite different.

Systems theory places particular emphasis on the "self-organization" of biological systems, notably the human body. The body's ability to adapt to internal and external perturbations, ranging from bacterial infections to aging, is a remarkable example of how "living, open systems are goal-seeking, self-organizing, and self-correcting, tending toward 'homeostasis'" (LeClair 8). The self-organisation of systems proves to be another parallel between systems theory and chaos theory. Von Bertalanffy's own conception of the human body as "networks of messages and energy, as well as heat machines" (9) further solidifies the connection between living and non-living systems.

Indeed, just as the human body adapts to changes within its structure, so do other non-living systems maintain a degree of order within their structures by adapting to perturbations. One of the first appearances in chaos theory of the principle of self-organisation arose out of an investigation of the nature of the Great Red Spot of Jupiter. This Red Spot is, perhaps, the defining physical feature of the planet, whose atmosphere is largely made up of “powerful winds and colorful eddies” (Gleick 54). Scientists wondered how a hurricane-like atmosphere, which constantly shifts and produces horizontal stripes, could simultaneously produce a virtually static, anti-cyclonic red windstorm. Through computer programming and imaging, it was deduced that the Spot is actually a “self-organizing system, created and regulated by the same nonlinear twists that create the unpredictable turmoil around it. It is stable chaos” (Gleick 55). It is thus easy to recognise how the notion of self-organisation is significant to chaos theory. It accounts for the way in which systems remain stable even as perturbations affect them from within. It must be stated that self-organisation is only possible in complex systems, those systems which cannot be anatomised because they operate on multiple levels; they “are not separable into parts but must be considered as wholes” (LeClair 8). These systems are the basis for study in chaos theory.

It is important to note the distinction here between the two branches of chaos theory, the first of which focuses “on the spontaneous emergence of self-organization from chaos” (Bound 9). It is this branch that will serve as the focal point for this chapter, concentrating on “systems far from equilibrium, where entropy production is high” (9). In other words, this branch of chaos theory is concerned with how a system adjusts to minimise entropy and reduce the impact of perturbations on that system. The concept of

entropy will be examined further once a more solid connection has been established between culture and the notion of self-organisation. The second branch of chaos theory “emphasizes the hidden order than exists *within* chaotic systems” (Bound 9), and more effectively links up with discussions in the previous chapter concerned with penetrating “cosmetic perception,” or the banality of everyday life. While this will also be a significant insight here, the focus will shift towards information theory, which aligns itself more closely with the first branch of chaos theory. After all, von Bertalanffy’s perspective of living systems as “networks of messages and energy” (LeClair 9) invites the application of information theory to most discussions of complex systems.

It is necessary, then, to re-introduce a definition of culture prior to discussing culture as a self-organising system. Jay Clayton says that cultural studies uses the term to denote “a whole range of phenomena once relegated to other domains: ‘low’ or ‘popular culture,’ the media, advertising, information technology, fashion, ritual, academic disciplines, public symbols, lifestyles, everyday practices, and more” (8). In The Pleasures of Babel, a text which focuses on American literature and contemporary literary theory, Clayton defines culture as encompassing “the entire expressive dimension of communal life” (8). Likewise, in Subculture: The Meaning of Style, by Dick Hebdige, the term culture takes on anthropological overtones as opposed to “a standard of aesthetic excellence” (6). Hebdige attributes this broad definition of culture, incorporating everything from comic strips to rock music, to critic Raymond Williams, who proposed “an altogether broader formulation of the relationships between culture and society” (Hebdige 7). In Culture, Williams sees the aim of cultural studies to be the “illustration

and clarification of the ‘informing spirit [of a culture]’ ... in relation with other institutions and activities, the central interests and values of a ‘people’ ... [as well as] exploration from the known or discoverable character of a general social order to the specific forms taken by its cultural manifestations” (12). Clayton further recognises the seamlessness between contemporary definitions of culture and society, noting that “social institutions such as those that make and administer the law should be seen as only part of a larger normative order, an order constituted in important ways by cultural forces” (15). Culture is thus both an expression of communal values and perspectives, and a restricting and ordering force. Films and books, sports and computers convey the beliefs of a culture.

At the same time, though, “the realm of culture is congruent with the realm of material production. There is no division, no marginalizing split, between intellectual activity and the everyday business of life” (Clayton 28). Economics is intertwined with the definition of culture precisely because, in the postmodern world, information is the primary commodity of exchange. The American economy is fuelled by the knowledge and information industries and, as Clayton indicates, “when a professional working in a knowledge industry participates in cultural activities, this participation directly affects the material with which the professional works “(28). Consequently, when someone who works with information — be it an academic, an artist, or an advertising agent — influences the culture in which he or she works, the medium with which he or she works is affected. As Porush states, “every instrument [or medium] is partly the embodiment of a theory about how to ‘read’ [a culture’s] text” (67). This is certainly in keeping with

Hayles's conception of culture as an ever-shifting kaleidoscope. Even as a professional works with information, the way in which this work is carried out shifts. This, in turn, alters material production, as new informational mediums arise and old ones fade away. Information determines the marketplace, and the marketplace shapes culture. Thus, just as culture expresses information, it also determines what information can be expressed. Just as it expresses communal values, culture determines what those values are. In this way, culture is a force of order as much as it is an expression of life. This conception is in keeping with Althusser's notion of ideology, discussed in the previous chapter. Paradoxically, culture both promotes a broad range of expression, producing everything from comic books to technology, and acts as a confining force, pressuring its members into adhering to the values which are expressed through such media. It is a system which appears to be merely the product of society when, in fact, it simultaneously controls and produces it.

When Underworld is examined from this perspective, culture appears to be immensely self-organizing. Indeed, evidence has already been presented to support this, evidence arising out of the Texas Highway Killer's obvious impact upon the entire American cultural sphere. Hayles's kaleidoscope metaphor is once again useful; while a shift in a kaleidoscope produces a new shape, specific patterns and symmetries also constitute this new shape. Culture, as has been shown, is similarly fractal, and so a slight shift causes the cultural system to readjust. New patterns evolve, and the system re-organizes itself.

The aim of Klara Sax's art project involving the repainting of aircraft in the desert is deeply symbolic of the self-organizing nature of the system of culture. Her desert art is meant to represent a system, a culture, in itself, surrounded by nothing but sand and sky.



It is supposed to serve a skeletal or a primitive purpose, foregrounding the function of American culture and its basic evolution. As Klara tells a reporter, “We use whatever devices we can find. We don’t have a roof over our heads, a hangar or factory. We don’t have the scaffolding, the platforms they have in assembly halls” (68). Like American culture itself, Klara’s desert art evolves solely out of the people working and the materials with which they work. Klara claims that the desert is “unconducive ... to industry and progress” (71), yet this is not true. All around her, people are trying to “relay messages” (72) and the artwork itself is certainly intended as a message, as information. The industry that constitutes Klara’s project in the desert is information, and, as has been shown, this is a commodity that characterises American culture. The gap which Klara wants to believe exists between her art and culture in fact does not, an irony that is also clear in the fact that Klara grants a television interview, thereby linking the isolated desert project to culture. This is significant, for establishing this link makes it easier to understand how the self-organisation characteristic of Klara’s art project is analogous to that characteristic of American culture at large.

Klara comments of her art that “It’s a work in progress ... changing by the day and minute” (75). Both American culture and Klara’s desert project defy stasis because they restructure themselves even as “perturbations ... threaten to destabilize” them (Paulson 40). “This is impossible work,” Klara says, “Working outside in the heat, dust, and wind ... We’re not looking for precision. We spray it on, grit and all” (69). The grit, the unexpected perturbation that affects the system, is absorbed and becomes part of the system, affecting it at different levels. She calls it “a landscape painting in which we use

the landscape itself" (70), intimating a deep connection between environment — both human-made and natural — and culture.

The desert symbolises in the novel a landscape which cannot be entirely absorbed by culture, despite "the detonations we set off ... [and] the sites where debris is buried" (71). The desert appears to serve as the foundation for a binary between what is cultural and what is natural. This binary is shown to be an illusion, however, for the novel's key image of waste, which literally transforms the landscape. After his visit with Marvin Lundy, Brian Glassic ends up on a dead-end highway, where he stops and looks around:

He got out of the car and climbed an earthen bank. The wind was stiff enough to make his eyes go moist and he looked across a narrow body of water to a terraced elevation on the other side. It was reddish brown, flat-topped, monumental, sunset burning in the heights ... But it was real and it was man-made, swept by wheeling gulls, and he knew it could be only one thing — the Fresh Kills landfill on Staten Island. (183-4)

The distinction between culture and nature is tenuous at best. Culture clearly affects the behaviour of its members and, consequently, their environment. As Clayton states, "Our practises, our interventions at the particular places where we live or work, our effect on the messages that traverse us will help to determine the kind of world we inhabit" (30).

The boundary between art and environment, culture and nature, is eroded by Klara, and so the grit inherent in nature significantly affects the art, while the art itself affects one's perception of the landscape of which it is a part. By acknowledging this relationship, Klara reveals something in her work which American culture seems intent on covering up — namely, that culture is a self-organising system, insofar as it is interconnected with a nature or landscape that exists, indifferent towards human perceptions of it. Nature will always throw grit into the system. As culture penetrates the

landscape, it self-organises so as to create in its members a perception of this landscape that is conducive to the survival of culture. In other words, culture creates in itself a method by which to use the landscape to propagate itself. Trees are harvested, coal is burned, and culture expands. A method is even developed to deal with that landscape which cannot be penetrated: the desert becomes ground for nuclear testing, and, as Klara points out with regard to waste, “everyone agreed together not to notice” (388).

Thus the connection between culture and cosmetic perception resurfaces. The self-organising ability of the cultural system depends upon its own invisibility; that is, the expansion of culture depends upon the illusion of an absence of external forces. Only when the landscape is shown to be limited and unrenowable is the economic foundation of culture threatened. A happy consumer is one left oblivious to the source of a product. Ironically, this obliviousness creates in many of the novel’s characters a sense of cosmetic perception. The connection between culture’s secretiveness towards its self-organising ability and its induced state of cosmetic perception is thus established. Were culture to recognise its own ability to self-organise, it could better break the cosmetic perception that defines it. This would, however, threaten its consumer-oriented foundation. This boundless cultural expansion, culture’s self-organising tendency, seems all the more ominous given the impact of the Texas Highway Killer in the novel. DeLillo himself comments in an interview with Anthony DeCurtis that contemporary violence is “a kind of sardonic response to the promise of consumer fulfillment in America” (DeCurtis 57). While the statement itself may seem effusive, “consumer fulfillment” is of immense importance in Underworld, a novel that is greatly concerned with advertising, materialism, and the media.

In the novel, DeLillo shifts emphasis onto this recognition of self-organization, for it is this characteristic of culture that is frightening in its capabilities. Klara reveals that "Many things that were anchored to the balance of power ... seem to be undone, unstuck. Things have no limits now" (76). Contemporary culture manifests an insatiable aggression, an almost neurotic impulse to assert its power. In the absence of a cultural enemy of equal or similar destructive potential, notably the Soviets during the Cold War, there appears to be no major external force to counteract the self-organizing tendency of American culture. In addition, the "grit" or troublesome elements within its own system, the "underworld" which lurks beneath its billboards and suburban neighbourhoods grows in proportion to the culture of which it is a part. This is a subculture, a set of values which oppose the prevailing culture or at least foregrounds those aspects of the mainstream which it judges as weaknesses.

Hebdige states that a subculture is a group which challenges the hegemony of the dominant culture indirectly, "in style" (17). Hegemony is "a situation in which a provisional alliance of certain social groups can exert 'total social authority' over other subordinate groups ... by 'winning and shaping consent so that the power of the dominant classes appears both legitimate and natural'" (16). It is "an ideological space which does not seem at all 'ideological'" (16). A subculture challenges the hegemony at the level of the sign. Signifiers are "'stolen' by subordinate groups and made to carry 'secret' meanings" (18). These "secret meanings" resists the dominant culture, and so, as Hebdige argues, it is in the style adopted by a subculture that this resistance is embodied. This emphasis is important for it reveals that "all aspects of culture possess a semiotic value" (13); all "aspects" are signifiers of some sort, a notion I will return to in Chapter Three.

DeLillo's novel is brimming with examples of subculture; indeed, the novel's prologue alone provides multiple examples. The opening image of young Cotter Martin, a black youth, sneaking into the stadium for the '51 World Series, suggests a lifestyle that opposes the values of the mainstream. Likewise, at the moment Thomson hits the home run that wins the game, Jackie Gleason bends over in his seat and vomits; this provides a contrast to the jubilation of the crowd, and suggests an undercurrent that opposes the American cultural sphere. Gleason himself is a cultural icon, both a product and producer of American culture, and his vomiting is an act that is equally cathartic as the crowd's excitement. However, Gleason's vomiting serves a carnivalesque function, "an antidote not only to a particular dominant meaning but also, more profoundly, to a particular *form* of meaning" (Glazener 113). The scene is immensely ironic: the abstract ideals embodied by the game of baseball and celebrated as the Giants win the pennant are subverted by someone who is conspicuously complicit in the propagation of these ideals. Gleason's counteracts the idealistic meaning projected by the crowd onto the game with a bodily function. Vomiting, too, is a reaction to excess and indulgence, a fitting and subversive response to the elation of the spectators. DeLillo uses the scene to undermine the perception that Gleason is merely another face in the crowd. The vomiting distracts him from the game — "he has barely the wit to consider what the shouting's about" (47), and so Gleason becomes an outsider for an instant, having entirely missed the winning hit. He becomes deflated, a grotesque image amidst a sea of exuberance.

Both culture and its underworld prove inextricable, however. The first line of the novel is quite revealing in this respect: "He speaks in your voice, American, and there's a

shine in his eye that's halfway hopeful" (11). The narrator is speaking here of young Cotter, hinting that the boy does not entirely fit into the set of values esteemed by the culture of which he is a part. This line, too, is ironic given that Cotter belongs to a generation prior to the Civil Rights Movement. His voice would hardly have been considered typically "American." Again, as with Gleason, DeLillo appears to be both exemplifying American culture while, at the same time, celebrating its underworld or subculture. Cotter clearly belongs to this subculture. Conceding the ironic tone of the novel's opening and shifting the context in which we interpret the first sentence provides evidence, however, of the connection between culture and subculture. Cotter is still a product of the dominant culture; he too partakes in its hegemony, he too speaks "American." In this respect, Cotter represents both culture and its underworld.

At the same time, J. Edgar Hoover's meditations provide a poetic, if somewhat paranoid, articulation of the all-encompassing nature of culture:

All these people formed by language and climate and popular songs and breakfast foods and the jokes they tell and the cars they drive have never had anything so much in common as much as this, that they are sitting in the furrow of destruction. (28)

Hoover is well aware of the underworld and its power, as is later revealed through his anxiety over allowing people to scrounge through his garbage. As culture continually evolves and expands, it uses its self-organizing ability to disseminate its communal beliefs; at the same time, however, there exist perturbations within this system that threaten those illusions that this self-organization thrives upon. The graffiti sprayed by Moonman 157 on New York's subway cars, the emblem of Lucky Strike cigarettes, the image of Long Tall Sally, the jet contrails that zigzag across the sky, and, most

significantly, waste, all point to the life force discussed in the previous chapter. These otherwise trivial details constitute the underworld of the novel because they serve as symbols through which characters gain a meaning they otherwise would not through everyday items, thereby penetrating culture's cosmetic perception. These details expose illusions perpetrated by the larger realm of culture; they expose culture's ability to self-organize by reminding characters like Nick and Sister Edgar of their involvement within this self-organization.

Nick's experience in a correctional institute in 1957, like Klara's art, proves useful analogically to this discussion. Nick thinks, "I didn't want sweetheart treatment. I was here to do time, one and a half to three, and all I wanted from the system was method and regularity" (503). Nick's unstructured life as a teenager in New York City culminates in his arrest after he shoots George the Waiter, an event described as "a kind of history taking place, [there] in their own remote and common streets" (781). It is an event that finally cuts "him down to size" (727), an act of self-destruction. In this way, the moment is analogous to atomic bomb experimentation by America, an act of aggression that, if left unhindered, could prove self-destructive. Nick's teenage life, his "Who's better than me?" (680) attitude, is comparable to the attitude of both the culture and subculture of which he is a part. This attitude is egocentric, evolving because in the aftermath of the Cold War, culture remains unchallenged. Consequently, American culture fixates on its own power. Rosemary recognizes this fixation in her own neighbourhood, thinking, "The Italians. They sat on the stoop with paper fans and orangeades. They made their world. They said, Who's better than me?" (207). Culture's ability to make its own reality stems from its self-organizing ability. The Cold War, a tension between cultures, provides

cultural structure — it forces a struggle against an external force, and creates an aura of "method and regularity," the atmosphere Nick seeks from the correctional facility. Matt's realization that "when you alter a single minor component, the system adapts at once" (465) describes the advantage of cultural self-organization.

Nick's teenage years also appear to be a revolt against the order reinforced by culture, most likely because of his association with a belligerent and lurid group of people. The New York street on which he lives as a young man is part of the cultural underworld. Its economic foundation is built upon crime; its laws are unspoken and do not necessarily follow those of the larger society. Like every culture, however, these rules are strictly enforced. Father Paulus lectures Albert Bronzini on the subject over coffee:

The game is location, situation and memory. And a need to win.  
The psychology is in the player, not the game. He must enjoy the  
company of danger. He must have a killer instinct. He must be  
proudful, arrogant, aggressive, contemptuous and dominating.  
Willful in the extreme. (674)

Paulus describes the game of chess on which Bronzini coaches Matt Shay; but he is also describing the attitude that constitutes Nick's neighbourhood. Nick's sexual escapade, car thefts, and fistfights are thus not a direct, intended revolt against the dominant culture of America so much as they are acts of survival and obedience to the unwritten rules which govern his underworld. Such rules may have indeed arisen in opposition to the values which characterize the dominant culture; however, with time, these rules generated a subculture of their own, and one which has been somewhat appropriated by the dominant culture. This is evident in Nick himself. After his experience in the correctional facility, Nick distances himself from his old neighbourhood and eventually becomes a waste



manager, living in the suburbs of Arizona. He assumes a place in the dominant culture, and ideas that he arrived at during his youth in New York City take on new meanings:

I like to tell my wife. I say to my wife. I tell her not to give up on me. I tell her there's an Italian word, or a Latin word, that explains everything ...

She says, What does this explain? And she answers, Nothing.

The word that explains nothing in this case is *lotananza* ... I use the word, as I interpret it, hard-edged and fine-grained, it's the perfected distance of the gangster, the syndicate mobster. (275)

Throughout the book, Nick, in his older years, launches into gangster imitations. He tells us, "in my office in the bronze tower I made gangster threats that were comically effective ... a scraped-raw voice faithful to the genre" (104). Nick has adopted the elements of the culture of his youth as they have been appropriated by the dominant culture. This dominant culture has self-organized to incorporate its own underworld, and, in the process, the meanings of specific elements has shifted.

It is necessary to again note DeLillo's own connection between violence and consumerism, the predominant characteristic of the post-Cold War economy. Truly, contemporary American culture is one that is based not on money, but on desire. Throughout Underworld, characters focus their desires on specific products or commodities without any genuine insight into why they want them. During a phonecall with Nick Shay, Marvin Lundy says, "You call me out of nowhere ... And you want to do a deal. But you don't know why," to which Nick replies, "That's right" (191), soon after buying the infamous baseball for no conscious reason. Likewise, a scene set at the Deming home in 1957 is characterized not by the relationships family members have with one another but with the products that define their environment: husband Rick's two-tone Ford Fairlane convertible, son Eric's condoms, and wife Erica's fruit juicer and Jell-

O moulds. As Rick explores the kitchen, we are told, "The bright colors, the product names and logos, the array of familiar shapes ... the general sense of benevolent gleam, of eyeball surprise, the sense of a tiny holiday taking place on the shelves and in the slots, a world unspoiled and ever renewable. But there was something else as well, faintly unnerving" (517-8). This is a culture of desire, in which product consumption takes on almost religious overtones, a recurrent theme in DeLillo's work. Thus, as one advertising executive claims, "whoever controls your eyeballs runs the world" (530).

The tension between culture and its underworld creates within the system an overwhelming sense of paranoia. Those who fall outside the economy of desire and consumption due to poverty, religious affiliations, such as Sister Edgar, or choice of lifestyle, such as Moonman 157, become marginalised. Walking around the bare streets of his neighbourhood, Bronzini comments that

In a culture of guard dogs there are always a few that fall from grace and end up haunting the streets. The trick is to skirt the animal without publishing your fear. *Festina lente*. Make haste slowly. (235)

As Bronzini states, those who are marginalised by the economy of desire "end up haunting the streets" (235). They become waste from the perspective of culture, and so are not acknowledged. Yet, like waste, which has "its own momentum" and pushes back (287), so do the marginalised members of society. These people continue to function on desire, as their upbringing in this culture has taught them to; however, fulfillment becomes even less likely. The result is violence, which culture, the larger "normative order" (Clayton 15), counteracts through its own self-organization. Matt's girlfriend Janet lives in a neighbourhood that is representative of this, for it is described as "the kind of

heartless boulevard you find in parts of town where the architecture is guarded and tense and it always feels like curfew" (566). America becomes a "culture of guard dogs" (235), a factor echoed in the architecture of its urban centres.

With this self-organization against the underworld and the marginalised comes a more tenuous connection between the individual and the sense of order projected by culture. In other words, in order for culture to sideline the marginalised and protect its members, it keeps the gap between underworld and culture open. To propagate its own economic foundation, culture instills unconscious fear in its citizens — the fear that anyone who cannot or does not participate in the economy of desire will be relegated to the status of waste. Janet runs home daily after work, "a stretch of four desolate blocks" (565) and only after she reaches her apartment does her heart stop racing. She does not fear culture; she fears because of culture, and what she fears is being socially discarded. The men who lurk around her symbolize both a paranoia that originates in the tension between culture and underworld which is inspired by culture itself, and a fear of the world these men inhabit, a subculture which threatens Janet's lifestyle. In the gap between culture and underworld, it is quite apparent that both chaos and order reside, and the tension between the two, visible on her daily route, is what makes Janet's heart pound.

One of the most interesting scenes in Underworld involves a blackout across New York City and much of the Northeast in 1965. Nick thinks to himself, "The power grid gone. What did it mean? The whole linked system down" (634). In his article, "Walking in the city," Michel de Certeau describes what he calls "walking rhetorics" by articulating a meditative and fictional walk through city streets. His journey leads him to contemplate

the function of streets, which "hierarchize and semantically order the surface of the city" (158). He further comments that street names and numbers "slowly lose, like worn coins, the value engraved on them, but their ability to signify outlives [their] first definition" (158). In Underworld, this widening gap between language and meaning is fruitfully explored, and will be examined more closely in the following chapter. It is worth noting for now, however, that "these words ... become liberated spaces that can be occupied" (159). De Certeau also states:

People are put in motion by the remaining relics of meaning, and sometimes by their waste products, the inverted remainders of great ambitions. Things that amount to nothing, or almost nothing, symbolize and orient walkers' steps. (159)

In other words, while specific markers on the geography of a city may lose their original meanings with time, the potential contained within these markers to reflect meaning does not change. People traverse the city, attaching their own meanings to those markers or locations in which they find value. In many ways, this impulse resembles the impulse discussed in the previous chapter to connect the self with the realm of celebrity — a kind of vicarious impulse that allows the individual to retain a sense of individualism as well as a sense of connection with the all-encompassing cultural sphere. With the "system down," as Nick tells us, culture too comes to a halt. After all, culture is both the expression and reinforcement of a society's normative order. It is founded upon a communal set of values, a "meaning" that is never entirely intelligible to its members. Yet, when the means used to reinforce communal values — law, economy, and cultural media such as computers — cannot function, the underworld seeps up through the system's crevices. Any meanings continually re-inscribed by the self-organization and

expansion of culture become loosened from the media that convey them. Culture can no longer dominate, and so the underworld takes hold.

A shift of perception is brought about as a result. This is first expressed in disbelief. In the bar in which Nick is having a drink at the time of the outage, a customer repeatedly asks, "Is that the lights?" (621), looking for confirmation that what he is experiencing is true. From there, the customers venture onto the streets to see "the silhouetted towers of midtown" (623). Nick notices that "people were coming out of shops and apartments, the locksmith and grocery and check-cashing place, and they stood around and *talked*" (622-3, emphasis added). This is in direct contrast with the lack of communication between New Yorkers prior to the blackout that Bronzini highlights for us. While looking in a store window, a young man standing next to him becomes angry, yelling, "You seen me looking. Means you gotta look?" (188). Albert realizes that New Yorkers fear any "medium mad intent on conversation" (189). With the blackout comes a dissipation of this fear; the gap between culture and underworld, order and disorder, is momentarily closed. Strangers, unified by one event, begin to speak to one another, their paranoia forgotten, albeit only briefly. "And the enormity of the night," Nick thinks. "You could feel the night expanding" (636). Culture stops expanding, and as a result nature and the landscape become more prominent in the city. Nick savours this moment, a breakdown in shockless and banal daily life. He decides not to call Marian from his hotel room because he "would not give in, watching the night come down" (637). He relishes the loneliness that the system's breakdown creates in him, the silence, both visual and auditory, that is so very rare.

Prior to examining cultural meaning or information, the concept of entropy will be explained more fully. The question arises as to whether or not culture is an open system. According to LeClair, open systems do not subscribe to the "thermodynamic model of closed systems and increasing entropy" (8). A system is classified as open if it operates upon "circular causality" and interacts with other systems (8). Thus, if we are to consider culture as an open system, as the use of circular causality in Underworld suggests is true, it becomes difficult to account for cosmetic perception or cultural noise in terms of entropy. According to thermodynamics, entropy is possible only in closed systems. This apparent discrepancy is settled when a distinction between thermodynamics and information theory is made. The second law of thermodynamics states that "in a closed system entropy always tends to increase" (Bound 38), entropy here defined as energy "given up as unusable, randomized movement of molecules" (Porush 47). David Porush, in The Soft Machine, uses the analogy of billiards, a local closed system:

If one pool ball strikes another, it transfers a good portion, but not all, of its energy to the second. Some of its energy is given up in the contact and to the felt surface of the table in the form of friction. No matter what its initial energy, in time the system of balls will come to rest. (47)

In terms of thermodynamics, entropy is the progressive loss of energy, and maximum entropy occurs when a system is in complete disorder.

"To think of entropy as a statistical measure of disorder," writes Hayles, "allows its extension to systems that have nothing to do with heat engines" (Bound 41). As James Gleick points out, entropy is intertwined with chaos theory because strange attractors, as discussed in the previous chapter, serve "as efficient mixers. They created unpredictability. They raised entropy" (258). With the perception of entropy as disorder

comes the notion that "chaos [is] the creation of information" (Gleick 260). Thus, increasing entropy means increasing information, a connection established by researcher Claude Shannon, and one that became a fundamental notion in information theory.

While we may regard American culture as an open system, a system in which it is impossible to retrace the circular chain of causality that defines it, we may also investigate it in terms of informational entropy. This metaphor is valid given that, according to Hayles, "the relation is problematic — that is [...] similarity and difference are both perceived to be present" (Bound 32). The difference between the scientific origins of the word "entropy," and its less contextualised use in information theory, has already been outlined. The similarity between the two will become obvious, however, as the term is used to interpret American culture in Underworld.

In The Crying of Lot 49, Thomas Pynchon incorporates entropy both literally and thematically, drawing parallels between it and culture. Entropy literally appears in the form of a device constructed by John Nefastis to investigate the concept theoretically, based on Maxwell's Demon, an idea developed by James Clerk Maxwell. Metaphorically, entropy blankets the entire novel, a work that situates its central character, Oedipa Maas, in a plot which goes nowhere and which may not even be a plot at all. Pynchon describes Oedipa's first trip into San Narciso in a manner that remarkably resembles that of DeLillo:

She looked down a slope, needing to squint for the sunlight, onto a vast sprawl of houses which had grown up all together, like a well-tended crop, from the dull brown earth; and she thought of the time she'd ... seen her first printed circuit. The ordered swirl of houses and streets, from this high angle, sprang at her now with the same unexpected ... clarity as the circuit

card had ... there were to both outward patterns a hieroglyphic sense of concealed meaning, of an intent to communicate. (24)

A similar sentiment is expressed in what Nick Shay tells us, trying to make sense of his memory of killing George the Waiter: "I retain the moment. I've tried to break it down, see it clearly in its component parts. But there are so many whirling motives and underlying possibilities and so whats and why nots" (299). In both texts, a character is faced with the intuitive feeling of something underlying what is merely visible. In Underworld, the life force proves to underlie a great deal of visual and auditory noise, while in The Crying of Lot 49, signifiers simply lie beneath other signifiers. In both cases, however, the culture of which these characters are a part proves entropic.

In Underworld, a sense of sameness prevails in the cosmetic perception that characterizes the lives of the Shays. The plastic, cluttered environment which surrounds them is "systematically linked in some self-referring relationship that had a kind of neurotic tightness" (183). Out of this "neurotic tightness" comes the looming paranoia that causes Janet to run home afraid after work each day. Such "self-referring" cultural sameness appears to move towards a kind of homeostasis, just as the houses Oedipa sees coming over the hill into San Narciso appear as if they "had grown up all together" (24), looking like carbon copies of one another. In Underworld, this sense of repetition and sameness is quickly established in the opening ballgame. "You do what they did before you," Cotter is told. "That's the connection you make" (31).

Like DeLillo's novel, The Crying of Lot 49 reveals entropy to be a concept that is also intertwined with culture because of its effect on culture's economic foundation. Oedipa clearly represents one who is immersed in her culture, so much so she is provoked by it to



make sense of it. At one point, she agrees with a lawyer named Metzger to take off one piece of clothing in exchange for every answer he gives to her questions. To prepare for this, she "skipped into the bathroom ... quickly undressed and began putting on as much as she could of the clothing she'd brought with her" (Pynchon 36), after which she can barely move and inadvertently knocks a can of hairspray onto the floor, causing it to break and jet lethally around the room. The attitude towards consumerism here is quite apparent; Oedipa "becomes a grotesque image of an insanely eclectic culture which 'over-dresses' itself with bits and pieces of fabrics and fabrications taken from anywhere, and at the same time she reveals a poignant vulnerability" (Tanner 58). The deadly spray can threatens Oedipa, who is herself virtually defenseless beneath the layers of clothing. The culture presented in The Crying of Lot 49 is one whose increasing entropy and overwhelming noise is inextricable from its consumerism. Oedipa figuratively takes part in an endless shopping spree, donning as many clothes as she can in order to fend off the lawyer. She consumes to avoid being consumed. This paradox is analogical to culture itself, which has the propensity to promote a positive sense of belonging while, at the same time, censoring non-conformity. Culture creates a psychological impulse to participate in the marketplace of desire, and also provides the means of satisfying this while marginalising those whom cannot or will not participate. Oedipa takes part in the marketplace of desire out of feelings of vulnerability that are both induced by Metzger and, like DeLillo's Janet, culturally induced. Janet unconsciously fears being discarded and marginalised from her lifestyle; similarly, Oedipa dresses up not because she likes how she looks in the clothing but because she fears the possibility of having her clothing stripped from her.

In Underworld, cultural entropy is undeniably the result of what, in his article, "Children of Godard and Coca-Cola: Cinema and Consumerism in Don DeLillo's Early Fiction," Mark Osteen, labels the "commodification of consciousness" (440), a term which resembles the notion of a marketplace of desire. Osteen uses the phrase to denote the way in which consumer desire is ultimately the currency of contemporary culture, for its manipulation affects which products will be favored by consumers, and which will be immediately relegated to the status of waste. In such a culture, image plays a key role. DeLillo's novel carefully draws the distinction between product and image. The novel's narrative structure revolves largely around an object that lucidly expresses this distinction, the home run baseball. As the ball moves from character to character, we get a sense of the infinite number of ways in which it acts as a symbol or image for these characters. For Charles Wainwright, Jr., the baseball represents "a trust, a gift, a peace offering, a form of desperate love" (611) from his father. For Marvin Lundy, it is a subconscious connection to his wife Eleanor, a reminder of her touch (192). For these characters, the baseball is merely an image, and one that loses its effect with time. Osteen notes the "'power of the image' to shape human subjectivity and to blur the differences between reality and representations" (440). Desire prompts DeLillo's characters to buy the image they believe will satiate this desire, not the product. In other words, these characters derive pleasure not from the product itself, but from the sign value of the product — what they think the product represents.

Yet, as Hayles's metaphor of the cultural kaleidoscope reveals, the meaning of an image is amorphous; as culture shifts, so do the meanings attached to the images of that

culture. As a consequence, consumers are destined never to fulfill the desires induced in them by their culture, and products are inevitably reduced to waste. Klara Sax is haunted by the image of Mick Jagger's mouth, "the corporate logo of the Western world," and tells her friend, "I think everything that everybody's eaten in the last ten years has gone into that mouth" (382). Consumer desire produces waste exponentially, objects whose images have been drained of significance and meaning. In The Crying of Lot 49, Pynchon is likewise sensitive "to the suggestive human traces and residues ... to be found in the 'used,' the rejected, the abandoned refuse and waste of a culture" (Tanner 61). For DeLillo, the "commodification of consciousness" leads to a cultural entropy which distorts human perception.

With this trend towards cultural sameness, however, comes increasing diversity and variety, increasing disorder. This is ultimately the paradox of cultural entropy. A key symbol of this paradox in the novel is Watts Towers, a building constructed by an immigrant with "whatever objects he could forage and scrounge" (492). This architectural wonder is described by Klara as "an amusement park, a temple complex and she didn't know what else. A Delhi bazaar and Italian street feast maybe" (492). The building represents order and structure out of chaos. It is also symbolic, in cultural terms, of an interweaving of a wide variety of localized cultures. Like the ubiquitous appearance of McDonalds' restaurants around the world, Watts Towers is a manifestation of the complete interconnection of cultures, and symbolizes the global presence of cultures that remained localized prior to the Cold War. In this sense, it speaks of a kind of entropy, the infiltration of one culture into another to the point of a commonplace global culture wherein a McDonalds competes with an Indian restaurant for consumer attention. With

this increasing entropy comes an increasing variety, so much so that one of the anxieties within contemporary culture is, as Hayles writes, "that too much information, piling up at too fast a rate, can lead to increasing disorder rather than order" (Bound 49). As a result, "what we fear most immediately is not that the universe will run down" as the second law of thermodynamics holds, "but that the information will pile up until it overwhelms our ability to understand it" (49).

It is this idea that makes way for postmodernism. According to cultural historian Bernard Rosenberg, as the world "gets urbanized and industrialized, as the birth rate declines and the population soars, a certain sameness develops everywhere. [A] universal mass culture ... unites a resident of Johannesburg with his neighbors in San Juan, Hong Kong, Moscow, Paris, Bogota, Sydney and New York" (4). With increasing cultural entropy and the piling-up of information comes the recognition of the interconnectedness of culture. What is of particular interest in *Underworld* is the way in which this concept is intertwined with information and language. In Part 3, entitled, "The Cloud of Unknowing," Nick attempts to formulate a way of rekindling within himself a kind of spirituality. Speaking to a woman he is having an affair with, he says:

This is what I respected about God. He keeps his secret. And I tried to approach God through his secret, his unknowability. Maybe we can know God through love or prayer or through visions or through LSD but we can't know him through the intellect ... And we try to develop a naked intent that fixes us to the idea of God. ... And finally I came upon a phrase that seemed alive with naked intent. ... And I repeated it, repeated it, repeated it. *Todo y nada*. (295-7)

Because everything within the system of culture is interconnected, it is impossible to truly isolate any particular element of it. Consequently, to accept one element is to accept every one. In fractal terms, as discussed in the previous chapter, this is also true — to

pinpoint any specific level or area of a fractal shape is to indirectly pinpoint the entire shape. For Nick, *todo y nada* (all-and-nothing) becomes a way of identifying the interconnectedness of the system. It is thus no surprise that he associates the phrase with sex, "the one secret we have that approximates an exalted state and that we share" (297). Sex is a form of communication that resists entropy, and like sex, *todo y nada* is a felt, tangible point of connection. It is the antithesis of the paranoia which characterizes the lives of Janet and Bronzini, a paranoia which results from a cultural interconnectedness that is not tangible, depending as it does on language and knowledge. Such paranoia also arises out of the discrepancy between culture and underworld, a discrepancy which seems to be closed off with Nick's phrase, particularly if culture is regarded as *todo* and its subculture as *nada* (or vice versa). *Todo y nada*, most importantly, conveys the "hungry pulse that resembled a gust of being" (300).

It is noteworthy, however, that Nick chooses the phrase "all-and-nothing." The "and" proves significant because of its connection with the novel's theme of interdependence. "All" defines "nothing" just as black defines white; these are qualities that inhere within one another. Similarly, order resides within chaos. At the boundary between the two, "life blossoms" (Gleick 198). The phrase "all-and-nothing" thus proves important in light of the paradox of entropy — an increase in sameness means an increase in variety. As cultures become more global, the resulting global culture becomes more diversified. In Underworld, "all-and-nothing" escapes the entropy of language and the exponential pile-up of information by foregrounding the life force that thrives behind paradox.

In order to more fully discuss the effects of entropy upon information I will clarify specific concepts as they relate to information theory. William Paulson defines information as "a measure of a quantity of possibilities out of which a single actual message is selected; it is, in other words, a measure of the uncertainty of a receiver that will be resolved by the reception of a given message" (39). Information is a set of signals, "the value of [which] is directly proportional to its statistical improbability and is inversely proportional to its intelligibility" (LeClair 10). Katherine Hayles provides an example which lucidly explains the concept:

... suppose that I ask you to guess the missing letter in "ax—."  
 It is of course *e*, the most probable letter in an English text. ...  
 In "axe," the letter *e* carries so little information that "ax" is an alternate spelling. Suppose, by contrast, that I ask you to guess the word "a—e." You might make several guesses ... "ace," "ale," "ape," "are," "ate." When you find out that the expected letter is *x*, you will gain more information than you did when you learned that the final letter was *e*. (Bound 52-3)

Thus, "maximum information is conveyed when there is a mixture of order and surprise, when the message is partly anticipated and partly surprising" (Bound 53). Noise, then, can be defined as that information which is not intended by the sender. This creates quantitative problems, however. Porush here uses the example of "a cryptographer in an intelligence agency [sending] to his agent in the field a page from *Othello* filled with what appear to be stray marks, underlined words, and indecipherable scribbles on top of the actual text itself" (66). For an avid Shakespeare reader, the marks covering the page are mere noise, interfering with the signal, the text itself. For the agent, however, the text is noise, while the marks scribbled over it are the intended signal. Thus, "one [person's] information is another's noise" (66).

Context becomes essential in determining which details of a mass of information are noise and which are the intended signal. This appears to pose a problem in analyzing culture in terms of information theory. "Contemporary Americans," writes Hayles, "live within the context of no context [because ...] our lives are split between an enormous grid of two hundred million people and the intimate family circle gathered around the TV set" (Bound 272). In other words, individual consciousness is split between "two very different communities of discourse [that] try to pretend that they share the same context" (Bound 272). These two communities are inextricable, however, affecting one another in an infinite number of ways. If the relationship between context, imagination, and reality "seems not only inverted but subverted altogether" (Kearney 3), then this split in consciousness is virtually irrelevant. After all, the discourses of these "two very different communities" are not random but are founded and constructed upon ideological structures that pervade all American communities. It is these structures, apparent in the metaphor of the fractal, that are ultimately the significant focal point for examination here. As a result, information theory is directly applicable as a means of scrutinizing cultural fractal patterns as opposed to specific discourses. As will be shown, in Underworld, context is easily determined, in terms of information theory, based upon the reactions of characters to specific events or conditions.

Television is used in the novel to convey the way in which information becomes noise in the same "one-thousandth of a second when [a] bat and [a] baseball are in contact" (27). When one of the Highway Killer's murders is caught on videotape and aired on television, the intensity of the image causes its viewers to feel something new, "the realness beneath the layers of cosmetic perception" (158). The murder is signal; it

expresses a fear in Nick that "this is the risk of existing" (159). The video is "instructional" (159) in that, as Hayles defines information, it is "partly anticipated and partly surprising" (Bound 53). Indeed, the medium through which this particular signal is carried conveys such anticipation; the very nature of television is to show "that every subject is potentially charged" (DeLillo 155). We are told that "the world is lurking in the camera" (156), and in contemporary life, the exhibitionistic and voyeuristic tendencies of television are clearly visible. Television is anticipation and surprise, and so through it, "serial murder has found its medium" (159).

Once Nick learns from what he sees, once the signal is received, the video becomes noise. As time passes, the feeling that culture is shifting which Nick originally got from watching the video fades. We are told, "They were showing the videotape again but Nick wasn't watching. ... He looked at the TV screen, where the tape was nearing the point where the driver waves ... and he waited for room service to knock on the door" (208-9). The signal is lost to noise and redundancy. The videotape, the information, becomes cultural waste.

Since television serves so well to elucidate information theory in relation to culture, the medium of advertising is even moreso fit for such a discussion. In Part 5 of the novel, a fragment of advertising executive Charles Wainwright's life is presented. Sitting in his "sunlit corner office" (528), he speaks to a friend on the telephone about his own theories of advertising. The scene is significant, casting a dubious, even hostile shadow on the world of marketing. Death and advertising are interconnected in a frightening way: Wainwright recalls how, each morning in the New York Times, "the obits and the ad column tended to appear on facing pages" (527); Madison Avenue is shortened to the



more slogan-like "Mad Ave" (528); ad execs are described as "creative minds with [...] sublimated forms of destruction" (529) and we are given a description of Wainwright's "Bomb Your Lawn" campaign. Perhaps the most insidious of Wainwright's comments, though, is "What a thrill it is to spend time" (528), particularly in light of one of the running jokes in the office: "What is death? ... Nature's way of telling you to slow down" (527). By suggesting his own complicity in "spending" time, a pun on wasting time that effectively connects waste with consumerism, Wainwright foregrounds the destructive urge or death instinct which lies behind advertising. This connection can be explained in different ways. From an economic point-of-view, advertising clearly perpetuates the "commodification of consciousness" which is responsible for the endless pile-up of product waste. From a more cultural perspective, however, advertising merely produces more noise in an already noisy society, thereby burying signals even further.

If these signals signify the life force that underlies much of the novel, as Nick Shay and Sister Edgar's eventual penetration of their cosmetic perception suggests, then the medium of advertising is fertile ground for exploring the link between consumerism, information theory, and the life force. Wainwright is clearly adept at the manipulation of information; we are told, "Charlie talked to Omaha and deciphered his secretary's mouthed message at the same time" (532). His awareness that "whoever controls your eyeballs runs the world" (530) reveals a basic goal of advertising, namely to cause consumers to (mis)perceive noise as signal. In other words, a successful ad instills in the consumer a desire to purchase a product; this desire arises out of a message that the consumer interprets as significant, as appealing, because it presupposes to supply something that is needed. Effective ads locate a psychological desire and create an image

which best purports to satisfy that desire. If this desire is construed, ultimately, as the life force sought by so many of the novel's characters, it becomes clear how advertising bridges consumerism and the life force.

Wainwright supplies two examples in particular of campaigns which are successful: the Equinox Oil campaign in which a TV ad is created featuring a race between a black car filled with regular gas and a white one filled with Equinox; and a Minute Maid account. The former campaign is successful because of its overtones of destruction. The black car is associated with the U.S.S.R. while the white car represents America, and so the commercial's success is founded upon the looming Cold War. The orange juice account, however, features deliberately provocative images — "You have to show the pulp. You show the juice splashing in the glass. You show the froth on a perky housewife's upper lip, like the hint of a blowjob before breakfast" (531). Wainwright clearly thinks of advertising in a sexual as well as a destructive way. In discussing current research on causes of "excitations of the inner eye" in terms of product packaging, he says, "These are orgasms, basically, of the eye, the brain and the nervous system" (532). The Equinox Oil and Minute Maid campaigns successfully create a signal out of what would otherwise be noise, and they do so through death and sex. These two issues are the most prevalent in Underworld, so much so that their very mentionings elicit tension in the novel's characters. And, as discussed in the previous chapter, it is out of tension, in the boundary between chaos and order, that the life force surfaces. By incorporating a psychological desire for tension that is, in fact, a desire for the life force, these ads effectively masquerade as signal, capturing the attention of consumers.

In Underworld, advertising, television, and video show analogically the way in which consciousness operates in relation to information and entropy. Klara visits a studio in New York in the summer of 1974 in which "TV sets were arranged in stacks everywhere ... and other sets were parked individually on TV tables with copies of TV Guide and there were sets [of ...] every size screen from the smallest imported eyeball to the great proscenium face of the household god" (488). The event itself is a "screening of a bootleg copy" of the Zapruder film. The film's premiere elicits "ohh"s from the crowd, "the same release of breath" from everyone (488); however, as it continuously replays, "people got up and walked around. ... A man and a woman stood in a closet ... remotely making out" (494-5). As with the Texas Highway Killer video, signal here appears to give way to noise after successive replays of the film. People turn their attention away from the monitors because they no longer receive a signal or message from the monotonous replaying of the film. Additionally, the couple "making out" foregrounds sex once again as a tangible signal, of sorts — a way of reducing cosmetic perception — and one which, like the concept of death, embodies the tension wherein the life force resides.

But as Klara reveals, the assassination of JFK is "a death that seemed to rise from the streamy debris of the deep mind, it came from some night of the mind, there was some trick of film emulsion that showed the ghost of consciousness" (496). A connection between consciousness and the film itself is thus established. In fact, the film's display is deeply symbolic of this connection — "different phases of the sequence showed on different screens and the spectator's eye could jump from Zapruder 239 back to 185, and down to the headshot, and over to the opening frames" (495). The film is rendered

artistically just as it might appear in consciousness. Earlier in the novel, Nick provides some insight into this:

Then I went into the living room and looked at the peach sienna sofa. It was a new piece, a thing to look at and absorb, a thing the room would incorporate over time. (117)

Once "absorbed" by consciousness, an object or event loses its dimensions and becomes part of a cognitive pattern, just as an event can become part of culture after being absorbed by it. Nick anticipates the inevitable day when the new sofa will exist outside of conscious thought and become the waste of consciousness, existing only in relation to everything around it, part of a fractal environment. This is what is represented by the replayed Zapruder film. The simultaneous display of each frame of film seems to remove the event from space and time. From a holistic perspective, the television sets seem to absorb their own images. That is, the film becomes absorbed and seemingly unconscious since it is not possible to look at the entire wall of sets and focus on each image. The images become marginalised and, instead, the medium is foregrounded. Thus, Klara's thoughts slide from the assassination to the nature of film itself, just as Nick's thoughts will eventually move from focusing on the sofa to the room in which it is found.

This provides interesting evidence of noise arising out of signal, but also of signal arising out of noise. The Zapruder film is originally a message or signal, but as it replays itself, it becomes noise. The arrangement of the TV sets, however, then becomes a source of signal itself, one which would not have been discovered had the film played but once. As Klara becomes slightly numbed to the images of the film, we are told, "she'd thought to wonder" (496); as a result, the frame becomes the focus rather than the picture within

it. As William Paulson writes, "variety that was noise in one context *can* but does not necessarily become information in a new or reorganized context" (41).

The Zapruder film carries with it a flow of meanings — each time it replays, it is "carrying all the delirium that floated through the age [the sixties]" (496). What this evinces is the interaction between systems, between the individual and culture. A cultural moment is absorbed by one's consciousness which, in turn, reflects this moment onto an object or external body; thus, the importance placed upon the home run baseball that wins the '51 World Series. The baseball coveted by Marvin Lundy and Charles Wainwright is, at first, noise to Wainwright's son. It is not until Wainwright, Jr. loses the ball that he appreciates it. The baseball is, in essence, waste, but waste that reflects various signals depending upon the individual holding it.

The flow of meanings carried by the Zapruder film does not maintain itself, however. As the crowd begins to thin, Klara notices that "all the sets were showing slow motion now, ... and the footage took on a sense of elegy, running ever slower, running down" (496). The film becomes an object of informational entropy, detached from the lives of the crowd. The meaning carried by the film becomes self-reflexive. Through its continuous replay, the film comes to represent itself as an empty vessel, causing Klara to speculate on its connection with the nature of consciousness. In this way, it resists the reflection of information that characterises the home run baseball. The Zapruder film draws attention to itself as waste; it destroys its own ability to project information by its own repetition, its own foregrounding of this very dissipation. Consequently, it is an apt symbol of "the sort of death plot that runs in the mind" (496), as waste and the A-bomb

are shown to be throughout the novel. It is interesting, however, that even in its rejection of meaning, the film continues to carry with it a sense of "delirium" (496), as Klara indicates. Thus, even behind noise there exists a degree of signal.

The connection between waste and information is one that is vital to understanding the cultural milieu of Underworld. LeClair states that "overload results when the rate of information ... becomes too high for the receiver to process, to sort and integrate within his operative categories" (14). The characters of this novel are repeatedly buried beneath such an overload, both figuratively, in the sense that they assume an almost unconscious existence, and literally, in that they find themselves surrounded by waste. The notion of overload is also intertwined with the concept of feedback in chaos theory. "Feedback can get out of hand," writes Gleick, "as it does when sound from a loudspeaker feeds back through a microphone and is rapidly amplified to an unbearable shriek. Or feedback can produce stability, as a thermostat does in regulating the temperature of a house" (61-2). The latter instance certainly prevails throughout Underworld; however, behind the mundane routines which characterizes the lives of Nick and Klara lies the threat of an "unbearable shriek" — an atomic boom.

In Underworld, feedback produces an immense amount of confusion and paranoia beneath the surface of cosmetic perception. At the same time, it is apparent that these very emotions perpetuate feedback and motivate the search for signal that many of the novel's characters embark upon. Prior to the Black and White Ball in New York, J. Edgar Hoover feels an "uninvited lapsing into states of acute confusion" (556), aware as he is that the evening's party will be an abundance of "personage and flair and stylish wit"

(557). A connection is immediately established between the party's guests or "master spirits" and impregnable realm of secret information, as Hoover's aide, Clyde Tolson, sorts through FBI reports while Hoover himself meditates on the "living icons" attending that evening's fete (557). We are told at the beginning of the novel of Hoover's awareness of the presence of secrets he cannot fathom: "There is the secret of the bomb and there are the secrets that the bomb inspires, things even the Director cannot guess — a man whose own sequestered heart holds every festering secret in the Western world" (51). Yet, Hoover's thoughts of encountering the party's guests are clearly intimidating. "Whatever Edgar's own claim to rank and notoriety," we are told, "he found himself subject to anal flutters when chatting with a genuine celeb" (557). Indeed, the Ball is symbolic of secrets so large and incomprehensible only the feelings of insecurity that they inspire offer proof of their existence. Just as the contrast between black and white — the interdependence of, and friction between, the two colours — is used throughout the novel to indicate a hidden life force or gargantuan secret, so too is the Black and White Ball representative of such secrets.

It is thus no surprise that the Ball is a masquerade. Surrounding the Plaza is a group of protesters, an obvious threat to the secrets that flow throughout the party. Even Hoover is fazed by this threat. "Did you hear what she said?" he says to Clyde, who sternly replies, "Straighten your mask" (569). When the mask is dropped, control over these secrets is threatened. Beneath the mask, however, information takes on the appearance of noise; it essentially becomes coded. Thus, as Hoover makes his way into the ballroom, he hears a sound he has never heard in "decades in the Bureau" — "a subdued roar, a sort of rumble-

buzz ... the enticement of a life defined by its remoteness from the daily drudge of world complaint" (569-70). It is the noise generated by those who, because of their proximity to information, feel the need to mask their secrets. It is the noise of those who hold "sensitive and critical positions" (571).

Ultimately, noise and signal prove to be entirely interdependent, one person's noise being another's signal. Culture and subculture, waste and product, prove similarly paradoxical, interconnected in a way that deconstructs their binary oppositions. As Klara says while looking at New York's Twin Towers, "I think of it as one, not two ... Even though there are clearly two towers. It's a single entity" (372). Such deconstruction leads into a discussion of the relationship between language and meaning. In the final chapter, discourse theory will be incorporated into an analysis of the way in which meaning has apparently deflated in contemporary culture with the increasing onslaught of information.



**Chapter Three**  
*The Implosion of Meaning*

The senselessest babble, could we ken it, might disclose  
a dark message, or prayer.  
(Barth 115)

Remember what the doormouse said  
Feed your head  
Feed your head  
(Jefferson Airplane, "White Rabbit")

The structure of Underworld, a combination of postmodern technique and ideas associated with modernism, poses interesting problems for any theoretical approach to the novel. The novel offers for us a fragmented and non-chronological narrative, a series of interconnected scenarios that often subvert one another, and a framework which demands that contemporary cultural views of order and chaos be challenged. At the same time, however, concerned as it is with the mysteries of consciousness, the novel moves gradually towards a mystical and all-encompassing sense of spirituality, a human life force. It is a book entirely removed from nihilism, instead placing the interconnectedness of contemporary life at its core. Chaos theory proves most valuable at analyzing this interconnectedness and revealing how such an unusual modern/postmodern literary device can be so effective. By valuing the order and patterns that arise out of chaos, chaos theory provides an alternative to the order/disorder binaries so well established in contemporary culture. Similarly, DeLillo's book provides a literary alternative, conveying the sense of chaos which characterizes American culture, while at the same time allowing patterns to emerge that lend credence to an underlying mysticism of consciousness.

In terms of theoretical literary approaches, both postmodern theory and discourse theory offer useful avenues through which to investigate Underworld. Discourse theory,

most notably the work of Althusser and Foucault, is based upon a more materialistic and concrete framework, and suggests that humanist approaches are insignificant and even illusory. However, postmodernism suggests that these frameworks themselves merely promote the illusion “that reality is ordered according to laws that the human intelligence can grasp” (Best and Kellner 9). According to “the postmodern world-view,” “reality is unordered and ultimately unknowable” (9). Since both theoretical frameworks concentrate a great deal on language, albeit from entirely different points of view, the question arises as to which would best aid in an examination of language in DeLillo's novel. Because so much of Underworld is concerned with consumerism and its ill effects, and, notably, the links between the marketplace, language, and images, discourse theory allows for a more thorough discussion of patterns within the chaos of the novel. Postmodern theory is useful, however, in foregrounding connections between DeLillo's style and the issue of language within the novel

Prior to examining specific examples in the text, it is useful to outline those aspects of discourse theory which are most beneficial here. One element of this theoretical approach that will be prevalent in this discussion is the focus upon desire. This focus is characteristic of structuralism, a theoretical approach which informs much of Althusser's work. Before examining desire as it relates to discourse theory, then, a brief acknowledgement of central structuralist concerns is due. The structuralist school broadly incorporates, among others, the work of Claude Levi-Strauss, who focuses on mythology and anthropological phenomena; Jacques Lacan, who figures dominantly in psychoanalytical criticism; and, of course, Louis Althusser, whose approach is largely Marxist. Roland Barthes provides a useful definition of the goal of structuralist criticism:

"The aim of all structuralist activity ... is to reconstitute an object, and, by this process, to make known the rules of functioning, or 'functions,' of this object. The structure is therefore effectively a *simulacrum* of the object which ... brings out something that remained invisible, or, if you like, unintelligible in the natural object" (Best and Kellner 18). Structuralism is also characterized by its view of language as constituting the human subject through its relation with that subject. Accordingly, subjectivity is "a social and linguistic construct" (19) rather than the source of language. Meaning is not "the creation of the transparent intentions of an autonomous subject" (19). Instead, as Steven Best and Douglas Kellner explain in Postmodern Theory, "the *parole*, or particular uses of language by individual subjects, [is] determined by *langue*, the system of language itself" (19). Yet, as Lacan himself indicates, language itself is a response to desire, whether this desire is psychosexually induced as Lacan posits or, as Althusser claims, ideologically induced. The key point to remember, then, is that "desire itself is a language that all men and women speak" (Clayton 61).

The relationship between desire and ideology will be of chief concern here, and so a definition of ideology must first be re-introduced. In his essay, "Ideology and Ideological State Apparatuses (Notes towards an Investigation)," Althusser refers to Ideological State Apparatuses such as education, religion, and the family, through which a ruling class disseminates its ideology, thereby reproducing the conditions necessary for that class to propagate its power over other classes. Althusser suggests that ISAs (Ideological State Apparatuses) are diverse in their own functions and ideologies, but "what unifies their diversity is precisely this functioning [ideology], insofar as the ideology by which they function is always in fact unified, despite its diversity and its contradictions, *beneath the*

*ruling ideology*, which is the ideology of the 'ruling class'" (139). In simpler terms, the various ideologies of specific ISAs are subordinate to a larger ideology, that of the bourgeoisie. Althusser adopts the Marxist definition of ideology, stating that it is a "system of the ideas and representations which dominate the mind of a man or a social group" (149).

Althusser's structuralist approach meets up with the issue of desire in the work of Leo Bersani, who "sees desire as establishing a crucial link between social and literary structures" (Clayton 62). In The Forms of Violence: Narrative in Assyrian Art and Modern Culture, Bersani argues that desire is "always on the move ... [an] unending process of displacements and substitutions" (66). According to him desire is "determined by a lack that lies at its origin, the absence of any possible object of satisfaction ... it is inherently insatiable, condemned to a restless search for an absent object" (Clayton 62-3). Because Bersani's work focuses more on forms of narrative than culture, his criticism will not be further incorporated here. Nonetheless, his theoretical essays reveal desire to be a concept of great significance to structuralism, and his views on desire provide useful insight into this discussion.

More significant here are the effects of ideology on the individual, for it is through the individual that I will undertake an analysis of language in DeLillo's novel. Diane Macdonell explains in Theories of Discourse that Althusser recognizes consciousness as "constructed under the form of an imaginary subjection. In the apparatuses of ideology, in their day-to-day practices, we become particular individuals acting in the beliefs given us to think" (38). Thus, consciousness does not exist prior to ideology; instead, consciousness and ideology are interdependent, instilling in us our very thoughts and the

language used to carry out these thoughts. "We are not the free centres of initiative humanism supposes" (39); instead, "ideology installs each of us in an imaginary relation to real relations" (37). As Althusser states, "*All ideology hails or interpellates concrete individuals as concrete subjects*" (162). In other words, we are who we are not because of "free will," but because ideology tells us who we are. We are not subjects until we become influenced by ideology. Eagleton explains that ideology "is the very medium in which I 'live out' my relation to society" (172).

Macdonell cites this as the most significant aspect of Althusser's essay, emphasizing as it does "that our consciousness is constructed" (39). However, she also notes problematic limitations of Althusser's approach. His notion of a ruling ideology "stops short ... in positing only a single mechanism of recognition, or of identification [on the part of the subject] in all ideology" (39). In claiming that we become subjects solely because ideology assigns us an identity, Althusser's essay "can make us blind to what ... is ... most material: contradiction, and thereby struggle" (39). Ideologies emerge antagonistically, not as the result of collective consciousnesses. "An ideology ... does not exist without some opposing ideology" (Macdonell 35). Thus, as Macdonell concludes, "if ideologies simply effected identifications, then resistance at this level ... could be only the outcome of a differing identification, as if ruling and ruled ideologies existed separately rather as two football teams exist separately before a match" (40). The Althusserian approach cannot account for both one person's submission to the identity ideologically attributed to him and another person's rejection of this identity.

Despite this limitation, the notion of ideology is an extremely valuable one, explicating as it does a great deal about the role of language in culture and, in particular,

the relation between ideology and desire. Lacan outlines this role from a structuralist and psychoanalytical perspective; in Literary Theory, Terry Eagleton states, "All desire springs from a lack, which [the subject] strives continually to fill. Human language works by such lack: the absence of the real objects which signs designate, the fact that words have meaning only by virtue of the absence and exclusion of others" (167). The very presence of language indicates an underlying absence; when the subject speaks, he or she is indirectly acknowledging that he or she desires something. Similarly, the presence of ideology indirectly indicates a struggle over power and, correspondingly, a struggle to satisfy one's desires. The desires of the ruling class are inherent in the ruling ideology, and new ideologies surface over dissatisfaction and the inability of subordinate classes to satiate their desires.

Using this as the definition of desire paves the way for a corresponding definition of language. The concept of language as it is used in contemporary literary theory has its roots in Saussurean linguistics, although the term "language" eventually became detached from Saussure's theories with the rise of post-structuralism. Saussure "held that a language, such as French, was homogenous; that is, within it, all spoke the same language; and that a common code, or general system of sounds and meanings, underlay the mass of spoken and written utterances" (Macdonell 8-9). In the postmodern context, however, language is regarded as anything but homogenous; emphasis is instead placed on language as metaphor. Hayles remarks that "a completely unique object, if such a thing were imaginable, could not be described. Lacking metaphoric connections, it would remain inexpressible" (Bound 31). Postmodern texts such as John Barth's Lost in the Funhouse and Donald Barthelme's Overnight to Many Distant Cities focus on this point.

Such texts foreground language as a system of relations, a system with no specific origin or limitations. Saussure also recognized language as a system of relations, arguing that "within any language, possibilities for meaning are not determined by anything positive ... [but rather] by their negative relations to each other, as if 'yellow' is 'not red'" (Macdonell 9-10). However, Diane Macdonell notes the contradictions that underlie structural linguistics. The Saussurean school of thought "did not consider the structure of a language to be evident in reality as something which any one speaker might possess" (10), therefore rejecting the "dominant humanist" notion of the ability of an individual to express "immediate human experience" (11). In other words, structuralism recognized general structures and asserted that all human utterances are expressions, to some degree, of these general structures; similarly, Althusser posits that a dominant ideology holds true in any culture, and that the diverse ideologies subordinate to the ruling class are unified by this dominant ideology. The problem with such a structuralist stance is that in recognizing such communal structures, Saussurean linguistics "supposed that everything social was homogenous and held in common by everyone" (Macdonell 11). Thus, "differences and conflicts between discourses" are ignored (11), just as the antagonistic role of ideologies is not explicitly addressed by Althusserian theory.

The relationship between structuralism and theoretical approaches to the study of culture is also somewhat problematic. In "Ethics and Cultural Studies," Jennifer and Laurie Anne Whitt suggest that structuralism offers "the radical proposition that individuals (and individual experiences) are 'effects' rather than intrinsically valuable entities whose moral standing must be recognized and respected" (580). Additionally, structuralism "reduces individuals to a purely instrumental status, from which they can

never escape. ... insofar as subjects merely reproduce [ideology], there is no way we can directly assess them" (581). In this respect, structuralism brings investigations of culture "toward totality" (581), that is to a totalising view of culture and the individual's participation in it. Hayles herself acknowledges this totality through her metaphor of the cultural kaleidoscope, a metaphor which suggests that no matter where we stand in the ever-shifting kaleidoscope, "we cannot describe the totality of the dance" since "what we see depends on where we stand" (Cosmic 20). Ideology works the same way; we can never see it because we live it. However, Hayles's metaphor proves theoretically different from structuralism on one key point: structuralism purports to anatomize society largely through materialism, thereby fixing the fluid, dynamic nature of culture. Structuralism stops the "kaleidoscope" of culture "in our imaginations, calling each slice-of-time configuration a 'pattern.' But by stopping the kaleidoscope [we lose] the dynamic essence ... for the static 'patterns' never in fact existed as discrete entities" (Cosmic 20). Postmodern theory and postmodern notions of culture reject notions of origins and the anatomization of culture, just as they argue "for the disappearance of the signified in relation to the signifier" (Slack and Whitt 582). Postmodern theory recognizes a world "where the 'unreal,' 'hyperreal,' or 'surface' is all that is (and therefore all that *matters*). There is no originary power in either the individual or the structure. Indeed, there really is no structure in the structuralist sense, merely fragments that may or may not be drawn into an ephemeral configuration. There is only power within discourse" (582). The challenge, then, is ultimately to mediate between the notion of ideology, given its structuralist and Marxist context, and postmodern views of culture as "ephemerally configured."



In Underworld, such a mediation is clearly provided through the integration and even hybridization of postmodern techniques with modern notions of human consciousness. The conception of culture as "ephemerally configured" is lucid throughout the novel; the bizarre juxtaposition of a waste management convention, for example, with a party for swingers, or the appearance of the South Bronx Surreal tour bus amid New York's dilapidated tenements point to DeLillo's use of an imaginative style that produces in the reader a sense of culture as randomly configured. Yet, politics, economics, power, and desire lurk beneath this chaotic surface. The challenge to the reader is to recognize the order amid the chaos, the underlying interconnections. Interestingly, this is also the challenge for the discipline of cultural studies, intent as it is upon incorporating "the significance of sliding signifiers and disappearing signifieds without asserting that meaning no longer exists, without giving up a politics" (Slack and Whitt 583). In fact, the connection between structuralism and postmodernism which underlies Underworld is best illuminated by one of the central tenets of cultural studies, involving the recognition of "what structuralism has taught us to appreciate — difference — and what postmodernism has taught us to recognize — the effectivity of surfaces" (583). It is theoretically possible and, given a text as rife with potential as Underworld, advisable to incorporate both the Althusserian notion of ideology and structuralist views of language alongside postmodern views of "meaning" and "reality." Given DeLillo's own style, this combination is both effective and justified.

Throughout Underworld, characters are bombarded with what, in terms of information theory, is deemed noise: the repeatedly aired video of the Texas Highway Killer murder, the ramblings of "the man who preaches" (140) in Cotter's neighbourhood, even the anti-

industrial propaganda spilling from Marian's radio (598). Similarly, we as readers face a barrage of noise. What are we to make of the convoluted bedroom conversation between Nick and Marian, or the fragments of riots in Mississippi that appear out of nowhere and seem to have little effect on the narrative of the story? DeLillo's style forces us to question why certain information seems meaningful to us, while other information is, at best, mere distraction. In the novel itself, the search for a new mysticism, for what Bergson denotes the "*élan vital*," is a journey that takes place through information — that is, the novel's characters seek the life force by muddling through, and mediating between, noise and signal. Underworld demands that we interpret information differently. The question is not of what produces so much of the waste that litters the novel, but of why certain information is regarded as waste, while other information is seen as valuable. The image of Long Tall Sally, the Lucky Strikes logo, the randomly scribbled graffiti, and, most predominantly, the homerun baseball signify a multitude of meanings at various points throughout the book. All of these factors combine to suggest both a key notion in postmodern theory — that nothing has meaning until we give it meaning — and a less nihilistic proposition, that difference and the act of generating meaning itself signify a hidden cultural and human life force.

Clearly, the baseball, the image of Long Tall Sally, and virtually every other object, image, gesture, and word in the novel can be regarded as signifiers, connected in an endless chain of signification. The meaning attached to a signifier — what is signified by the signifier — whether it is a bottle of Coca-Cola or an Eisenstein film, depends upon the person responding to the signifier. The subject-position of the individual thus becomes important. In terms of chaos theory, we have already seen how a subject's

consciousness can be conceived of in fractal terms as a microcosm of the culture of which he or she is a part. A similar notion is conveyed through Althusser's definition of ideology. Macdonell states that "individuals exist as 'subjects' because they are subjected, held to and dependent on something of an imaginary identity" (101). Ideology is the process whereby this imaginary identity is created.

The question then arises as to the medium through which ideology constructs identity — discourse. Macdonell writes that "discourse is one of ideology's specified forms" (45); "a 'discourse,' as a particular area of language use, may be identified by the institutions to which it relates and by the position from which it comes and which it marks out for the speaker" (2-3). It is also important to note that a discourse, like ideology, can exist only antagonistically; that is, "it may be understood as a standpoint taken up by the discourse through the relation to another, ultimately an opposing, discourse" (3). A subject's identity is hence constructed not through a particular discourse, but through the friction between various discourses. Big Sims and Nick both live a discourse of waste management, which incorporates a language and view of society specific to such a discourse. Big Sims explains, "You know, it's funny, I took this job four years ago ... From the first day I find that everything I see is garbage ... the job follows me. The subject follows me" (283). Yet, their identities are also the products of other, differing discourses. During a conversation about the homerun baseball, Nick's nostalgic appreciation for Branca and the ball angers Big Sims, who views the ball from a racial perspective, suggesting that Branca merely represents "white"ness. "You can survive and endure and prosper if they let you," he says. "But you have to be white before they let you" (98). The men resemble one another in the discourse of their profession, but are

radically divided by differing racial discourses. And just as identities are constructed out of the various discourses of ideologies, so too do "words change their meaning from one discourse to another" (Macdonell 45). For this reason, one person's noise can be another's signal. An example of this can be found in Nick and Marian's convoluted bedroom conversation in Part 1 of the novel. Nick tells his wife, "I almost bought some shoes in Italy. I almost bought some shoes in Italy" (130). The reader is instantly struck by the statement's redundancy; yet, we do not share the discourse of the Shays. Quite possibly, the statement's repetition serves as signal to Marian, a gesture, of sorts, carrying with it some information. What is noise to us as readers may, in fact, be signal in the context of another discourse.

Given that ideology and its discourses determine identity, the issue of desire can be integrated into the discussion to give a more complete sense of the nature of language in Underworld. As Lacan posits, language indicates lack; speech is an illusory way of getting what we desire. It would seem, then, that signifiers ultimately signify desire. This is not the case, however — the very existence of noise and waste suggests the presence of signifiers that signify the absence of desire. Waste also indicates an ideological connection to desire. Standing near the Staten Island Fresh Kills landfill, Brian Glassic ponders how "the mountain [of trash] was here, unconcealed, but no one saw it or thought about it," and, after watching a flock of seagulls take to the air, how the birds are "all facing the same way ... joined in consciousness" (185-6). The majority of the populace are ideologically "joined in consciousness" in unconsciously refusing to acknowledge waste. Thus, what is to be valued or desired is dictated in large part by ideologies. What is considered signal is often ideologically determined.

An interesting connection can then be established between language and the marketplace, both being systems of signs which operate on desire. Part 1 of the novel opens with Nick's thoughts as he drives his Lexus across the desert on his way to meet Klara. He thinks, "This is a car assembled in a work area ... [a] system [that] flows forever onward, automated to priestly nuance ... Hollow bodies coming in endless sequence" (63). The image is one of overwhelming reproduction, and suggests, for Nick, a lack of meaning towards his own vehicle. Nick's initial culturally-influenced desire for the Lexus as a status symbol, a symbol of wealth and prestige, vanished once he came into its possession. Once he obtained the Lexus, he no longer desired it — desire, after all, comes into play only in something's absence. When the car is present, desire and, correspondingly, meaning shift from the Lexus to another sign. Thus, the vehicle becomes almost a symbol of waste to Nick, representing the infinite propagation of the marketplace. The Lexus becomes noise to Nick; however, it remains signal for the reader. We desire to comprehend what is symbolized by the image of the vehicle rolling endlessly down the assembly line. Nick's noise becomes, for the reader, signal. The Lexus becomes a symbol of consumer desire — it is something that is meaningful only in its absence. The image of endless production serves to illustrate desire as "inherently insatiable, condemned to a restless search for an absent object" (Clayton 63). Because desire arises out of absence, the reproduction of the Lexus — its increasing *presence* — suggests a reproduction of noise.

The same is true of words. A subject speaks to indicate desire, however unconsciously, and even though that desire may be as basic as communication, the desire to be social. Conversely, a word becomes signal only if the subject desires to hear or read

it. It is thus possible for words, like discarded packs of Lucky Strikes, to be a waste, of sorts; again, Nick and Marian's bedroom conversation provides evidence of this:

"Take the twelve-hour antihistamines. The four-hour make you drowsy."  
 "What's wrong with drowsy? Remind me we need bulbs for the pantry."  
 "Just tell me his name. The heavyset kid is the one whose father, right?"  
 "And had to be subdued by four or five cops." (130)

The words themselves continue to signify something, even to the baffled reader who has difficulty following the conversation. No signifier is free of signification — even the landfill of Staten Island has meaning. However, this conversation is confusing to the reader. We are left oblivious to the situation of the "heavyset kid"'s father. While we understand the words, we are given insufficient information to understand their context. A signal is absent or, at least, inconspicuous. Nonetheless, the scene as a whole remains meaningful to us precisely because we desire to understand what the Shays are talking about. Because the reader and the Shays participate in differing discourses, different desires prevail. Even if we try to fathom Nick and Marian, we can never fully do so. Such is the power of discourse.

The scene is analogical to one later in the novel, when, during his teenage years, Nick and his friends steal a '46 Chevy. The theft is an act of impulse, committed not for economic or despoiling reasons. As such, it is initially for the teenagers a sign removed from desire, a car that has no meaning because its absence or loss would be inconsequential. For the car's owner, the Chevy would undoubtedly signify desire, however, a major economic loss. The vehicle would thus have immense meaning for him. For the boys, the Chevy is waste — until, that is, they develop "a responsible sense of ownership" (686) and begin to experiment sexually in it, worrying about "the traction on the mat" in the backseat, being worn down by "the grinding of their feet" (687). The

Chevy assumes a meaning for the young men as its possession begins to matter, as they begin to fear losing it. It is no longer mere waste. Thus, one sign — the Chevy — takes on a multitude of meanings. The same is true of the Shays' bedroom conversation. The conversation is meaningful to the reader since we desire to understand it; this meaning, however, is far different from the meaning the Shays themselves find in their discussion.

In Simulacra and Simulation, postmodern theorist Jean Baudrillard posits that "we live in a world where there is more and more information and less and less meaning" (79). Baudrillard questions why the surplus of information that characterizes contemporary culture simultaneously produces a negation of meaning. The possibility surfaces that information and meaning are not, in fact, related. Bell Laboratories' researcher Claude Shannon, a founder of information theory, was concerned solely with improving the quality of a signal through communication channels. He was uninterested in that "part of the redundancy in ordinary language [that] lies in its meaning, and [which] is hard to quantify, depending as it does on people's shared knowledge of their language and the world" (Gleick 256). Strictly adhering to information as it could be quantified, Shannon's work attempted to separate language from meaning. William Paulson, however, builds upon Shannon's discoveries and asserts the importance of meaning in information theory. As Paulson defines it, information is "a measure of the uncertainty of a receiver that will be resolved by the reception of a given message" (39). Since the receiver is of key importance, what he or she knows and understands is likewise significant. Baudrillard, too, asserts a relationship between information and meaning. Shannon's views of information would suggest that there is "no significant relation between the inflation of information and the deflation of meaning" (Baudrillard 79). Baudrillard states, however:

Everywhere information is thought to produce an accelerated circulation of meaning, a plus value of meaning homologous to the economic one that results from the accelerated rotation of capital. Information is thought to create communication, and even if the waste is enormous, a general consensus would have it that nevertheless, as a whole, there be an excess of meaning ... We are all complicitous in this myth. (80)

Again, a connection is established between the marketplace of desire and language. Like the marketplace, language is a self-organizing system. Structuralism holds that a gap exists between signified and signifier, and, as discourse theory reveals, signifiers easily change signifieds according to the discourse in which these signifieds are used. Context is essential. Yet this gap between signified and signifier is inconspicuous; that is, the effectiveness of a language depends up on the suppression of this gap. After all, desire resides within this gap, and since a system of language is used to perpetuate an ideology, consciousness of this gap would defeat the nature of language. Were the desire inherent in language to become self-conscious through a recognition of the gap between signifier and signified, then the futility of language in satisfying desire would likewise surface. Ideology and language would fail. Yet, as Althusser suggests, this is an impossibility. Language consistently masks its own shortcomings, largely by self-organizing.

The self-organizing nature of culture was discussed in the previous chapter; something similar holds true for language. "In language ... there are cracks, gaps, or weak zones which prevent it from being perfectly clear for the speaking subjects and which make for difficulties in communication" (Madison 123). Nick, for example, is unable to express why he wants to buy the homerun baseball; we, as readers, are unable to fully comprehend the Shays' bedroom conversation. Consequently, "a language always extends itself towards greater meaningfulness" (123). Language is a shifting, dynamic system, a view in keeping with the structuralist emphasis upon the antagonistic relationships



between discourses. Language repeatedly re-organizes itself, perhaps in response to the very connection pointed out by Baudrillard between information and the economy. The notion that increasing information produces an increase in meaning is a myth of contemporary culture, and one related to desire. Because neither products in the marketplace nor language can fully provide the gratification they promise, both reproduce at an alarming rate. Language thus interferes with itself; it creates noise out of itself. Its own "errors and uncertainties multiply" (Gleick 80) and it is problematised in a process akin to the "Butterfly Effect." Meaning, or signal, becomes more and more segregated from language. During his bedroom conversation with Marian, Nick observes that his wife is looking at a magazine, "turning pages with a crispness that might have seemed short-tempered to someone who didn't know her habits" (127). Furthermore, "she had a way of sounding grim when she was actually showing satisfaction, showing completion" (129-30). While Marian's gestures certainly signify something to Nick, they signify the opposite of what we, as readers and subjects of differing discourses, would interpret them as signifying. Because signifiers do not entirely correspond to specific signifieds, it is difficult to locate a signal amidst them — it is difficult to find meaning. Frustration is often the result.

Nick recalls how, as a teenager, he once roamed a city zoo "on an impulse," "angry about something but it was something else, not the car [the '46 Chevy] or the girlfriend" (705). His anger, felt but evading articulation, prompts him to recall a kid named Martin Mannion who once

climbed into the buffalo enclosure and stood there waving his jacket at the buffalo, the bison, and the huge nappy animal from a five-cent piece just looked at him indifferent and Martin Mannion got so mad he took out his dick and peed. (705)

DeLillo juxtaposes a scene against this one that directly parallels Nick's frustration at not being able to fully express himself, as well as his frustration at not receiving a satisfactory response to what he wants to express. Nick and a friend discuss with growing anger another youth to whom they attribute an air of pompousness because the young man could not explain why he changed his name:

"Call me Alan, he says."

"Call me Alan."

"I says, What's Alan? He says to me, That's my name."

"That's my name."

"I look at him. I says to him, How could that be your name? You already got a name."

"What happened to Alfonse?"

...

"I says, Who are you?"

"He's king shit, that's who he is." (705-6)

In Marian's instance, the language of the body, her gestures, are as easily misconstrued as her conversation is with Nick. While this does not manifest itself negatively in her bedroom conversation with her husband, her affair with Brian is a culmination of her frustrations, just as Martin Mannion's urination in the zoo proves to be. We learn that Marian "liked having sex with Brian because she could handle him, turn him, get him to match her mood" (255). Sex is a way for her to satiate an intuitive impulse she is unable to articulate, a method of satisfying desire that does not incorporate words. This is clearly apparent when "she started to tell him something but then thought no. They fell together, folded toward each other, and then she leaned back, arching" (257). Language merely compounds frustration while at the same time pretending to placate it.

Such frustration is a key factor in Underworld. DeLillo himself notes that it often results in violence stemming from the "promise of consumer fulfillment in America"

(DeCurtis 57). This promise is also ideologically present in language and, consequently, information. Baudrillard suggests that this promise, or cultural "myth," is "the alpha and omega of our modernity, without which the credibility of our social organization would collapse. Well, *the fact is that it is collapsing*" (80). He also notes that "information devours its own content" (80); that is, "information dissolves meaning and dissolves the social, in a sort of nebulous state dedicated not to a surplus of innovation, but, on the contrary, to total entropy" (81).

Baudrillard's conception of information as losing meaning as it itself reproduces thus links together culture and the individual in a way that recalls chaos theory's emphasis upon the importance of scale. He writes, "the media are producers not of socialization, but of exactly the opposite, of the implosion of the social in the masses. And this is only the macroscopic extension of the *implosion of meaning* at the microscopic level of the sign" (81). In other words, the gap between signifier and signified that proves frustrating is, ultimately, a source of perturbations. Chaos theory holds that "just as turbulence transmits energy from large scales downward through chains of vortices to the dissipating small scales of viscosity, so information is transmitted back from the small scales to the large" (Gleick 261). That is, small fluctuations at one level can result in larger fluctuations at a different level of a system. This is also indicated by Baudrillard — as we attempt to increase socialization and meaning in our lives, the problematic gap between signifier and signified causes a loss of meaning and, correspondingly, "the implosion of the social." This only seems catastrophic, however, because of the existence of an ideological myth that claims an increase in information means "an accelerated circulation

of meaning" (80). Baudrillard states that this implied catastrophe exists only "in light of the idealism that dominates our whole view of information" (83).

Regardless, the larger concern presented by both Baudrillard's conception of language and culture as utterly interconnected, and chaos theory's notion of micro- and macroscales, is one of resolution. Language is a method by which an individual establishes connections, or exposes the interconnections, between signifiers. This revealing of interconnections serves as a form of resolution akin to adjusting the lens of a telescope, and is immensely important in Underworld. Tending to his invalid mother, Albert Bronzini thinks to himself:

Tangerine. How he'd stood in the market this afternoon peeling the loose-skinned fruit and eating the sweet sections ... and how the scent seemed to breathe some essence, but why, of Morocco. And now he knew, incontrovertibly. Tangerine, Tanger, Tangier. The port from which the fruit was first shipped to Europe.

He felt better now, thank-you. (683)

Bronzini's visible relief upon comprehending why a tangerine at the supermarket made him think of Morocco reveals his intent to both discover and, given his age, retain points of connection in his mind, as well as a self-reflexive questioning of the nature of his own impulse to find such connections. Less self-conscious yet just as revealing is the bedroom conversation between Nick and Marian early in the novel. Marian asks,

"What's the name of that stuff I wanted to tell your mother to use?"

"Wait a second. I know."

"It's on the tip of my tongue," she said.

"Wait a second. I know."

"You know the stuff I mean."

"The sleep stuff or the indigestion?"

"It's on the tip of my tongue."

"Wait a second. Wait a second. I know." (130-1)

The frustration inherent in the inability to recall a word later manifests itself in Nick later in the scene in a distressing physical reaction. Language and, more specifically, the word, are tangible points of connection for both consciousness and culture. The fear of not being able to recall a specific word or phrase is a fear that has its basis in the gap between language and meaning; forgetting a word opens up this gap, allowing desire to surface, and making the inability to satisfy this desire conscious. The absence of a particular word is frightening in that it represents the loss of a specific entryway into the web of signification. Bronzini and Nick are aware of this. Bronzini picks up and begins reading a newspaper after "some force compelled him to walk into the pastry shop not only on time but about two and a half minutes early" (668). The article describes the Soviet test of a nuclear weapon, and Bronzini becomes aware of "the sense of reaching feebly for a language that might correspond to the visible mass in the air" (668). Similarly, just after hitting Brian in the face for his involvement in the extramarital affair, Nick realizes that there is a "message that hums in the air. Not the words, the personal histories, the moral advantage or disadvantage. ... It's the force of the body. It's which body crushes the other" (797). Language becomes detached from both men as they come to ascertain its weaknesses, even though they themselves cannot escape the fear of losing language as a tool for consciously manipulating points of interconnectedness.

DeLillo's novel repeatedly stresses the importance of resolution to human consciousness. Marvin Lundy provides some of the best examples of this impulse. Again, the baseball serves as a central analogy in Underworld; Marvin's obsessive attempt to search out the history of the homerun ball is a clear example of the desire to connect as many things as possible. His narrative of the baseball is virtually endless, a web of

sprawling information that is without any stable point of reference save the ball itself. Following Brian Glassic's arrival, "for the next three hours Marvin talked about his search for the baseball. He forgot some names and mangled others. He lost whole cities, placing them in the wrong time zones. He described how he followed false leads into remote places" (174-5). Like Oedipa's quest to discover the meaning of the post horn in The Crying of Lot 49, Marvin's quest is endless; he tells Nick prior to selling the ball, "I don't have the lineage all the way" (192). Yet, every piece of gathered information is a visible point of connection, satisfying to Marvin in the same way that "Tangier" is a satisfying word to Bronzini, completing as it does a chain of thought. Gathering such information proves to be a form of resolution. This is a cultural phenomenon in that, in terms of entropy, as high-speed communications affect the distribution of information, local cultures become more similar while, globally, culture becomes more diverse and varied, just as human consciousness becomes increasingly similar across international boundaries. This increasing diversity is the result of interaction between pieces of information — in terms of language, words from different cultures take on new definitions as a consequence of changes in context. Marvin Lundy's obsession provides a useful analogy for this dissemination of information in the form of his examination of photographs:

Marvin's wife and child came home and went away again. The house had become a booby hatch of looming images. The isolated grimace, the hair that juts from the mole on the old man's chin. Every image teeming with crystalized dots. A photograph is a universe of dots. The grain, the halide, the little silver things clumped in the emulsion. Once you get inside a dot, you gain access to hidden information, you slide inside the smallest event. (177)

Marvin continuously zooms in on different portions of various photos, adopting different resolutions in an endless attempt to find information that is not hidden but rather inconspicuous. Resolution, however, never supplies the exact information he is looking for; we are told that "Marvin could not find a way, for all his mastery of the dots, to rotate the heads of the people on the ramp so he could see the face of the individual in question" (177).

Remarkably similar is Nick's quest to learn as many words and names for objects as possible. He is told by a priest at the correctional facility:

Aquinas said only intense actions will strengthen a habit. Not mere repetition. Intensity makes for moral accomplishment. An intense and persevering will ... Tell me I'm babbling. I'll respect you for it. (539)

The priest undermines his own advice unintentionally, however, by teaching Nick to name the parts of his shoes. "You didn't see the thing [the flap under the lace] because you don't know how to look. And you don't know how to look because you don't know the names" (540). The Father advises Nick to explore the language, to learn the names of things so as to expose their secrets. Daniel Aaron writes in "How to Read Don DeLillo," "words are open sesame to secret caves" (316). They can be used to "restructure reality" (316) or, more accurately, expose a different aspect of this reality, a different series of interconnections.

In Underworld, however, as Sister Edgar is aware, "the questions turn inward forever" (238). Words lead to more words, information to more information, as Baudrillard explains: "Rather than producing meaning, [information] exhausts itself in the staging of meaning" (80). Edgar's appreciation for acronyms provides yet another example: "Edgar knew what all the letters stood for. AZidoThymidine. Human Immunodeficiency Virus.

Acquired Immune Deficiency Syndrome. Komitet Gosudarstvennoi Bezopastnosti. Yes, the KGB was part of the multiplying swarm" (243). Like the endless grainy dots of Lundy's photographs, Edgar's acronyms reproduce as she gains more and more information. And yet, Lundy and Edgar, like the youthful Nick, believe resolution will provide answers, will perhaps explain or soothe the incomprehensible culture they live within, a system whose components, when zoomed in upon, merely reveal more components. The mysteries of culture can be no more fully explained by language than can be the mysteries of consciousness. Ironically, the priest realizes this even while advising Nick to learn the parts of his shoe. A paradox is thus established between the impulse to expose points of connection and the clear futility of doing so — a futility echoed in Nick's own instructions to his children, lectures of names for obscure objects such as a "hawser" and "saddle" (102).

Chaos theory is here useful to explaining this paradox. Mathematician Mitchell Feigenbaum discovered, through an examination of nonlinear functions, "that systems go from ordered to chaotic states [following] a characteristic pattern of period doubling" (Bound 152). Through a series of recursive mathematical techniques, during which the "output of one calculation" was used "as input for the next" (153), Feigenbaum concluded that "despite the different operations performed by different nonlinear functions — despite the different ... steps they used — their iterated paths approached chaos at the same rate and showed the same characteristic pattern" (153). In other words, regardless of the mathematical formula used (provided it was nonlinear) and the data entered into this formula, chaos emerged in the case of each trial at the same rate. Hayles provides a useful analogy:



Imagine two paintings, each showing an open door through which is revealed another open door, through which is another and another ... One way to think about the doors in these two paintings is to focus on the particularities of the repeated forms. Suppose the doors of the first painting are ornately carved rectangles, whereas the second painting shows doors that are unadorned arches. If we attend only to shapes, the paintings may seem very different. But suppose we focus instead on the recursive repetition... (154)

Thus, if we look at the doors in terms of pattern, in relation to one another rather than individually, an order emerges out of what is otherwise chaos.

In Underworld, it is this relation that is significant — the silences and differences between words rather than the words themselves. Feigenbaum himself is quoted as saying, "In the end, to understand you have to change gears. You have to reassemble how you conceive of important things that are going on" (Gleick 185). Baudrillard also recognizes the importance of doing this. As information increases and meaning deflates, the medium, as McLuhan formulates, becomes the message (81). As shown through the example of the Zapruder film in the previous chapter, "all contents of meaning are absorbed in the ... dominant form of the medium" (81-2); the replaying Zapruder film loses its meaning, its signal, and the film itself becomes signal. According to Baudrillard, this implosion of meaning results in "the absorption of one pole into another, the short-circuiting between poles of every differential system of meaning, the erasure of distinct terms and oppositions" (83) — the very result which DeLillo himself constructs in the final moments of the novel, in which Sister Edgar and J. Edgar Hoover become unified in cyberspace. A universality develops and is embraced in the novel's concluding message. Written in the second-person and thus linking up effectively with the opening tone and style of the epilogue, the narrator tells us:

And you can glance out the window for a moment, distracted by the

sound of small kids playing a made-up game in a neighbor's yard, ...  
 and they speak in your voice ... and you try to imagine the word on the  
 [computer] screen becoming a thing in the world, taking all its meanings,  
 its sense of serenities and contentments out into the streets somehow ...  
 a word extending itself ever outward ... (827)

The word displayed on the computer screen is "peace," and two seemingly opposing ideas are thus presented surrounding this word. The word itself is acknowledged as empty, as simply a "sequence of pulses," merely making us "pensive" (827). At the same time, though, the "longing" triggered by the word, the desire provoked by it, represents a trend of universality. The narrator acknowledges the idealism associated with the word "peace," pointing out that it is nothing but "a fantasy in cyberspace" (826). Still, "everything is connected in the end" (826), and the promise of this realization is of the life force characterized by Bergson. While shattering notions of the transparency of language, DeLillo uses this technique as a means of opening up a universality that is inexpressible and intuitive — a true mystery of consciousness.

The notion of universality is seemingly problematic in terms of both chaos theory and postmodernism, and again DeLillo's integration of postmodern techniques and modern thought becomes important. Hayles notes that "chaos theory has in effect opened up, or more precisely brought into view, a third territory that lies between order and disorder" (Bound 15). It simultaneously "implies that Newtonian mechanism" is limiting, in addition to attempting to "tame the unruliness of turbulence by bringing it within the scope of mathematical modeling and scientific theory" (15). In this way, chaos theory "is profoundly unlike most poststructuralist literary theories, especially deconstruction" (15). Like chaos theory, DeLillo's novel deconstructs binaries by showing how elements of such binaries actually inhere within one another, something which postmodernism

likewise posits, albeit by undermining the foundations of both elements of a given binary. Yet, Underworld uses this technique to convey through its own ambiguities the importance or, at least, presence of a universality from which postmodernism cringes. DeLillo himself has stated, "I think we've all come to feel that what's been missing over these past twenty-five years is a sense of manageable reality ... We seem much more aware of elements like randomness and ambiguity and chaos since then" (DeCurtis 48). The cultural self-consciousness surfacing in contemporary life, as indicated in Underworld, does not however preclude the existence of patterns. These patterns, although largely undiscernible, are ultimately significant.

DeLillo also suggests, in conversation with DeCurtis, that "strictly in theory, art is one of the consolation prizes we receive for having lived in a difficult and sometimes chaotic world. We seek patterns in art that elude us in natural experience" (66). Daniel Aaron notes the presence of this impulse in DeLillo's fiction, in which the author uses words "to reorder disorder and 'to know himself through language'" (316). Both Klara and artist Acey Greene exhibit similar artistic intentions in the novel: Klara explains her nickname, "The Baglady," by commenting that she "took junk and saved it for art. Which sounds nobler than it was. It was just a way of looking at something more carefully" (393). Klara also observes of Acey's work:

these pictures were modern in one sense only, that the subjects seemed photographed, overtly posing or caught unaware ... here's a man with lidded eyes and a watch cap and one of those bloated polyester jackets and a gun with banana clip — you see how Acey belies the photographic surface by making the whole picture float ineffably on the arc of the cartridge clip. (390)

The essence of the work of Acey and Klara emerges out of details; they artistically render the type of resolution spoken of by Marvin Lundy. DeLillo, too, can be seen in this light,

defamiliarising trivialities in a way that causes us to question the nature of consciousness and its interconnection with culture. Chaos theory holds that what we see depends upon the scale from which we see it. Feigenbaum reflects this in his comment that "in a way, art is a theory about the way the world looks to human beings. It's abundantly obvious that one doesn't know the world around us in detail. What artists have accomplished is realizing that there's only a small amount of stuff that's important, and then seeing what it was" (Gleick 186). Art is a theory of resolution, a reaction to an onslaught of seemingly chaotic data. Bronzini thinks at one point, "This is the only art I've mastered, Father — walking these streets and letting the senses collect what is routinely here" (672). DeLillo's technique is remarkably similar.

It is fair to recognize the novel itself as an extension of consciousness, one that reacts to the informational noise and waste that characterize contemporary culture. DeLillo himself picks up on this point:

The book fits the hand, it fits the individual. The way you hold a book and turn the pages, hand and eye, the rote motions of raking gravel on a hot country road, the marks on the page, the way one page is like the next but also totally different, the lives in books, the hills going green, old rolling hills that made you feel you were becoming someone else. (511)

Tom LeClair notes that authors of "novels of excess," such as Pynchon's Gravity's Rainbow and Robert Coover's The Public Burning, "have two strategies to counter the homogeneity of mass-produced and institutionally controlled information. One strategy is to collect to excess and thus use against the dominant culture its own information. The other strategy is to burrow into specialized and alternative sources for information that escapes and undermines the dominant culture's legitimation" (16). Underworld is a clear example of the former strategy, although its exploration of waste and its foregrounding of

the explosive power inherent within it serves a subversive function. Recognizing the novel as an extension of human consciousness is a useful way of drawing attention to the irony underlying "novels of excess." Baudrillard notes, "From Marx to McLuhan, the same functionalist vision of machines and language: these are relays, extensions, media mediators of nature ideally destined to become the organic body of [humankind]" (111). Hence, both the novel and the body are mere mediums, mere waste when considered in isolation from the meaning given to them by human consciousness. Underworld attempts to defamiliarise waste in order to focus upon its ominous and threatening potential, yet the novel itself can also be regarded as waste — a collection of noise modified and arranged by DeLillo. Similarly, the novel attempts to find pattern in consciousness, to present an artistic version of human experience, yet it, too, is a product of consciousness. Both of these arguments lend credence to Hayles's suggestion that escaping culture is impossible; the system is just too dense and intertwined, as both Hayles and DeLillo show.

Much of the literary criticism arising from the perspective of the sciences has focused on the novel as a system itself; in many ways, a microcosm of the larger culture out of which it is produced. LeClair expounds upon the novel in terms of information theory, suggesting that "we can ... think of each word in a novel as a 'bit' of information. Words used to ... render known settings, to name familiar concepts, to create an easily processed syntax ... and to perform all the other tasks of redundancy will have low information value. Multiple characters, ... exactitude and opacity of language ... and new systems of form are some of the ways the novelist can push the novel toward high information" (14). DeLillo's style, whereby the reader follows the narrative of a homerun baseball through

the decades, in addition to his simultaneous delight in and suspicion of language, exemplifies a high information value. This is surprising given the fragmented and open-ended nature of the plot; in fact, Klara's thoughts on the Eisenstein film she watches also accurately describe Underworld: "The plot was hard to follow. There was no plot. Just loneliness, barrenness" (430). LeClair further notes that "novels of excess" often incorporate overload, which occurs when "the rate of information ... becomes too high for the receiver to process, to sort and integrate within his operative categories" (14). This is undoubtedly the case in Underworld, in which patterns do not readily become evident until a second or third reading of the novel. Matt thinks to himself, "The power of an event can flow from its unresolvable heart, all the cruel and elusive elements that don't add up, and it makes you do odd things, and tell stories to yourself, and build believable worlds" (454-5). DeLillo's novel is a series of "cruel and elusive elements" juxtaposed in an emotionally startling way; the Texas Highway Killer, the affairs of both Nick and Marian, atomic testing, and race riots are interspersed with family vacations, comedy acts, and numerous incidents of altruism. This "overload" demands that the reader search for patterns to "build believable worlds." LeClair states, "In a novel, overload ... can stop the reading, cause scanning, or produce a reorientation to the novel's information. Eliciting this last response is the *art* of excess" (15).

William Paulson also provides an explication of the novel in terms of information theory. Like LeClair, he posits that "noise both within and outside the text can lead to the emergence of new levels of meaning neither predictable from linguistic and genre conventions nor subject to authorial mastery" (43). The poetic, artistic organization of a text "demands of its reader that she [or he] create new codes, that she [or he] semanticize

elements normally unsemanticized" (43). Underworld is a prime example of such a text. It is waste that demands the reader adopt a specific method for finding order amid disorder, signal amid noise. Paulson writes that "the specific relations between elements of a text are to some degree unique to that text and so cannot have been learned anywhere else" (48). Waste forces us "to develop the logic and rigor that would lead to systematic investigations of reality, to science, art, music, mathematics" (Underworld 287). So, too, does the "novel of excess." "Stories about places are makeshift things," suggests DeCerteau. "They are composed with the world's debris" (160). It is the arrangement of this "debris" that ultimately proves significant.

## Conclusion

People weren't saying *Oh Wow* anymore. They were saying *No way* instead and [Klara] wondered if there was something she might learn from this. (382)

The loss of wonder and corresponding cynicism that Klara believes characterizes contemporary American culture can be attributed to the dissolution of a clear distinction between reality and surreality. As global communications have become more high-speed and pervasive in all facets of daily life, it has ironically become more difficult to retain the meaning or signal these communications were thought to convey. Contemporary culture is assailed by noise, by unwanted information that frequently attempts to pose as meaning or signal. The original intent to captivate people with the surreal in movies and television has morphed into a struggle to recapture a sense of reality. This sense of reality has become tenuous as noise increasingly plagues contemporary life, and the surreal has become an everyday fixture in virtually all media. Consequently, the media itself has fallen beneath suspicion — we can no longer believe that what it communicates is real. Contemporary culture has evolved towards the phenomenon of “No way;” reality itself has lost its footing and become a completely subjective construction. Consequently, an approach for interpreting both literature and other disciplines, notably the sciences, which incorporates this view of reality must self-reflexively question its own central tenets. Chaos theory proves an extraordinarily valuable technique through which to do so.

Throughout Underworld, characters question why the environments they live in and the routines they have adopted to cope with these environments seem to be so numbing and mundane. The Shays are caught up in a suffocating life of secrecy, infidelity, and



miscommunication; Klara Sax has difficulty comprehending her own art, and appears oblivious to the ironies and contradictions which constitute her project in the Arizona desert; Sister Edgar bemoans the miserable lives of those who live in the South Bronx, discouraged by her own apparent inability to have any larger effect on the community; Albert Bronzini feels himself becoming distanced from the lives of those around him, and retreats into his own thoughts as a means of coping; and J. Edgar Hoover becomes increasingly paranoid, aware as he is of the massive secrets surrounding him, secrets he cannot hope to fathom. In the instances of most of these characters, a nostalgia exists for a sense of purpose or meaning that they believe characterized their lives at an earlier period. This nostalgia leads them to look for ways of penetrating the "cosmetic perception" which defines their realities.

The emphasis placed on perspective and the relativity of scientific measurement by chaos theory is a useful avenue to pursue the subject of reality in literature. As Boon points out, "what we see is a matter of what we examine" (73). Correspondingly, what we experience determines our reality. That which exists outside of our experience, outside of our reality, appears surreal, causing us to whisper, "No way." Both chaos theory and Underworld suggest that while a holistic view of culture or the world is impossible to attain, shifting perspective proves essential to understanding our own perspectives better. It is not until Nick Shay begins to see his culture differently, largely in terms of waste, that he comes to see his own reality in a new light and can address his wife's affair with Brian Glassic. Likewise, it is only when Sister Edgar meets up with Esmerelda, a little girl who captures Edgar's attention for an undisclosed reason, that Edgar comes to fathom her own reality and philanthropic role more lucidly. Shifting perspective proves the best

solution to penetrating "cosmetic perception," to restoring the life force sought by so many of the novel's characters.

Shifting perspective proves an act of tension, an antagonistic undertaking which parallels the novel's overarching presence of the Cold War. The clashing ideologies of the United States and the Soviet Union seem to bring about a more intense quality of living, an anxious waiting for the atomic boom to destroy America. This main structure of the novel serves to illuminate the more microscopic examples of tension, such as that which characterizes the relationship between brothers Nick and Matt. These incidents foreground the friction between discourses, and the enhanced, anxious sensations that accompany them. Chaos theory posits that it is in the zone between systems, where complex systems interlock, that "life blossoms." It is in moments of tension that the life force appears to emerge, and the characters in Underworld appear to retrieve a sense of purpose they thought had completely dissipated.

As Hayles's metaphor of the "archipelago of chaos" suggests, it is the interdependence of these clashing systems that is worthy of investigation in chaos theory. Just as order arises out of chaos, so too do culture and subculture prove complementary and inextricable. The same is true of waste and product, and, as evident throughout DeLillo's novel, defense and offense, symbolized by Thomson and Branca. Shifting perspectives towards the culture of which one is a part proves in the novel to be the best way of seeing one's own reality more clearly, so too does the novel suggest that shifting perspectives reveals the underlying unity of binaries. As well, shifting perspective exposes the value which American culture places on specific elements of these binaries: winner as opposed to loser, and product as opposed to waste. The apparent randomness of these values, the

elusive nature of meaning and language, is thus foregrounded, both in terms of Underworld and chaos theory.

By examining the slippery relationship between signifiers and signifieds, between language and meaning, it becomes possible to account for what DeLillo deems "cosmetic perception." The surplus of information in contemporary society merely proves a macroscopic extension of what is happening at the level of the sign: a signifier can elicit a wide range of signifieds, a fact proven by the multiple meanings that can emerge from one sign that traverses entirely different discourses and contexts. Consequently, information is ephemeral. One person's information proves to be another's noise. Culture uses information as an illusory means of satisfying the desire it itself propagates in terms of the marketplace and consumerism. Throughout DeLillo's novel, cars, clothing, drugs, computers, movies, and television promise to satiate the desires of characters, when in fact they merely compound the waste that buries the life force actually sought by these characters. As the impulse to restore such a life force strengthens, culture responds by producing innumerable empty promises, immense waste, which merely makes this restoration more difficult.

Ironically, it is the presence of such waste that proves to change the perspectives of many of the book's characters. Everything may defer to waste — an epigram Big Sims and Nick hold to be true — but this merely underlies the interconnectedness of American culture and the negative connotations it places upon waste. Waste ultimately proves the best way of highlighting the interconnectedness of contemporary culture, and this, in turn, proves the most effective way of foregrounding the human life force. After all, if the

products give way to waste, then waste, in turn, must give way to something, just as chaos gives way to order.

The challenge, then, is to find this "something" — that which penetrates the cynicism of everyday existence in a culture intent on the proliferation of information. This "human murmur" may elude articulation, be it of a spiritual, psychological, or carnal nature, yet this in itself proves beneficial. After all, as both Underworld and chaos theory posit, it is out of the struggle between perspectives that new ways of looking at the world are born. Amid the contemporary barrage of cultural noise, it has become essential to continually revise our views of human experience. After all, it is not in the perspective that the human murmur resides but rather in the revision of perspectives. While contemporary culture may make this search for a life force a necessity, it fortunately also provides space for such flexibility, and it is perhaps this realization that penetrates the dominant cynicism of American culture. As Marian Shay discovers, "It looked as if something had happened in the night to change the rules of what is thinkable" (599). Chaos theory celebrates this very change.

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