THE LITERARY CANON AS A DYNAMIC SYSTEM
OF CHAOS AND COMPLEXITY THEORY

By

MARTIN THOMAS MEADOWS
Bachelor of Science
Oklahoma State University
Stillwater, Oklahoma
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THE LITERARY CANON AS A DYNAMIC SYSTEM
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Thesis Approved:

Hongu Wang
Thesis Adviser

Pamela U. Brown

Barbara J. Walker

A. Gordon Emslie
Dean of the Graduate College
PREFACE

This theoretical study explores the structure of the literary canon as a system rather than an object and applies the concepts of chaos and complexity theory as a description of the system. Three facets contributing to the canonization of literature; aesthetics, culture, and history are explored and selected concepts of chaos and complexity are used to describe the three facets. The concepts include sensitive dependency, self-similarity, recursion, scale independence, multiplicity, and fractal images. The interactions among the three facets are then described as fitting under the structure of chaos and complexity.

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Chapter One

The Literary Canon and Chaos and Complexity Theory

Problematic Concerns of the Literary Canon

Debates rage over the makeup of the literary canon. Although there exists a wide-ranging number of arguments regarding the nature of the canon, the conflict comes to two distinctly opposing sides. One side views the authors and works making up canon as a narrow and unrepresentative collection (see Hubble, 1972; Kaplan & Rose, 1990; Guillory, 1993; Reed, 1996; Said, 2001). The opposing side perceives the modern canon as apt and proper in its current form with possibly only slight modifications needed (see Bloom, 1987; Cheney, 1987; Hirsch, 1987; Bloom, 1994; Link & Frye, 2003). This spectrum of arguments along with sources such as published lists of “Best Books” help in the creation of an image of the literary canon as a concrete, printed list of works and authors controlled by an anonymous, mysterious guardian. These debates over the literary canon assume this perception as a starting point for discourse even as they argue over who belongs on the list and who does not. Contributors from all sides of the debate focus upon the negative and positive benefits of inclusionary or exclusionary practices, but apparently accept the basic structure of the canon as patently obvious.

While this perception of a list has existed for sometime, the literary critic Harold Bloom and his tome *The Western Canon* (1994) helped to firmly fix this perception as a valid, and in fact, the only proper perception of the canon. He argues, that literature
“breaks into the canon only by aesthetic strength, which is constituted primarily of an amalgam; mastery of figurative language, originality, cognitive power, knowledge, exuberance of diction” (p. 29). Breaking into the canon creates an image of location, of place and to achieve this place has very specific requirements, according to Bloom. For him, the belles-letters exists as the sole basis for evaluating literature and the quality of literature appears unaffected by and unconnected with culture and history. For Bloom, a literary work secures value as a great work entirely from within the work itself, which leaves the reader’s main effort to discover that value through a careful examination of the work. Thus, the canon is a construct of the best writing that exists and subjecting the canon to influence from politics or cultural whimsies destroys its only real purpose.

Arguments by other critics attempt to expand the concept of the modern literary canon beyond and away from this position of aesthetics as a sole determiner of literary significance by arguing that the function of literature and the role of the reader must be acknowledged to adequately represent the literary world. The major thrust of these arguments focuses on developing reasons for opening up the canon that they see as closed by the efforts of critics such as Bloom. For example, John Guillery (1993) argues, “there can be no general theory of canon formation that would predict or account for the canonization of any particular work, without specifying first the unique historical conditions of that work’s production and reception” (p. 85). Carey Kaplan and Ellen Conan Rose (1990) believe the canon’s exclusiveness has separated itself from the common reader and that an opening of the English academy will enable an opening of the canon.
However, these arguments are founded on an assumption that is not necessarily true. It is assumed that the canon is a linear objective construct, which can be described in terms of Newtonian world of absolutes. For Bloom, adding together the various elements of language will tell him whether a work belongs in the canon while, for John Guillory, the literary piece is measured by its political and cultural influence to enter the canon. Both arguments calculate input, either elements of language or historical influence to gauge its output, the greatness of the work. Darren Stanley (2005) has noted, “if several factors are implicated in some system or process, then it is said to be linear if the end result is proportional to the input” (p. 143), and so by attempting to measure the proportions of influence in relation to the greatness of a literary work, literature is treated as a linear model. However, despite these careful measurements, none of the arguments satisfactorily describes the canon. Although Edward Said (2001) believes, that an autonomous aesthetic realm exists, yet how it exists in relation to history, politics, social structures, and the like, is really difficult to specify. Questions and doubts about all these other relations have eroded the formerly perdurable national and aesthetic frameworks, limits, and boundaries almost completely. (p. 64)

The literary canon debates do not recognize that relationships exist between the aesthetic and other aspects of literary works and that the nature of the relationships is difficult to quantify and is not clearly understood. Instead, essays and books on the topic continually try to adjust the measurements so as to get the calculations right, a futile effort if the process of canonization is not linear. If the process of canonization is not linear, then a close look at the foundation and structure of the canon is necessary.
The relationship among these aspects of the aesthetic, culture, and history creates a great number of questions that develop as the issue of the canon is debated. Is the literary canon simply a list of authors and titles of their most important works? If so, what process makes a work canonical? Is the canon of interest to only English departments at universities and to literary critics? To what degree does the canon reflect values and perceptions of the society? Does the canon by its nature bear political impact? Does the canon impact the culture and society so as to perpetuate itself? Attempts to answer any of these questions have done little to clear up the confusion that surrounds the concept of a literary canon, and the answers always leaves something missing. For example, Harold Bloom suggests that we “forget the canon as a list of books for required study” (p. 17) and that the canon “cannot be, precisely the list I give, or that anyone else might give” (p. 37). Yet, he does identify what makes up the Western Canon by providing a list of approximately three thousand literary works from various time periods and from various areas of the world including ancient India and Modern Africa. This list of works would take even the best of readers a lifetime to work through, leaving little time for any serious discussions of other works of literature. One could understand the necessity of providing adequate examples of what constituted great works, but the extensiveness of Bloom’s list suggests that the canon is fairly well set and the authors and titles can be identified. This creates some confusion as to what exactly the purpose of such a list of works as Bloom’s serves if it is not identifying a canon and defining the issue as to what makes up a canon.

The problem of looking at the purpose of the canon is similar to the problem of trying to reduce all factors of meaning and language usage within a literary work to a
single effect. The predicament John Wood (2004) identifies is that the parts of a literary work do not add up to the effect. Wood relates Leo Tolstoy’s answer who, when asked about the intent of his novel *Anna Karenina*,

argued that *Anna Karenina* was not a collection of ideas that could be abstracted from the book, but a network: “This network itself is not made up of ideas (or so I think), but of something else, and it is absolutely impossible to express the substance of this network directly in words: it can be done only indirectly, by using words to describe characters, acts, situations.” (p. 96)

Tolstoy’s suggestion that ideas within the novel cannot be broken into parts may give a clue to the problem faced by looking at the structure of the literary canon. In the same way, a network exists between these various elements of the canon, but awareness or acknowledgment that interrelationships exist has not occurred. Instead, discussions have centered only on a single element such as aesthetics or on historical placement and have ignored or given short attention to any sense of interrelationships between parts occurring. As long as the nature of the canon is unclear, attempts to answer these questions will be futile because the debates will be working from differing foundations. There is needed a clear description of these elements operating as a system that we call the canon.

I argue that the problem resides in the view of the canon as a Newtonian linear system, i.e., that the debates have assumed the structure to possess a deterministic sequence where “only one thing can happen next” (Lorenz, 1993, p. 7). For example, where Bloom finds no aesthetic greatness in Colonial literature of the United States, Raymond Dolle (1990) finds “these writings intrinsically worthwhile reading as the most
effective expressions of human experience in North America.” Thus, a reader becomes obliged to choose one or the other, for it cannot be both when the perspective is linear. Yet, in a chaotic system, multiple views are possible. An examination of each of the major concepts of canon formation: aesthetics, cultural representation, and historical development will demonstrate connections with concepts of the New Science involving the theories of chaos and complexity that have developed over the last several decades.

Methodology

The methodology to develop this theoretical construct is problematic due to lack of material connecting the canon to chaos and complexity theory, which makes developing a traditional literature review difficult. Although there is an abundance of literature on the science of chaos and even a significant amount of material applying chaos theory to specific works of literature (see Hawkins, 1995; Livingstone, 1997; Mackey, 1999; & Slethaug, 2000), the foundation that builds connections between this new science and the canon have yet to be laid. Instead, this study will weave in appropriate literature as it outlines the concepts involving the area of the new science and as it analyzes the three areas of canon formation that are commonly seen as guiding the development of a literary canon through aesthetic, historical, and cultural forces. Chapter Two will critically analyze the static perception of aesthetics and argue for the existence of a multitude of relationships. Chapter Three will observe how culture, emphasizing especially American culture, thrives on a multitude of culturally diverse literary influences. Chapter Four will examine the historical developments of the canon that acknowledge the multiple sources in its development and the shifting characteristics of a supposedly static canon, which results in conflicting and paradoxical relationships.
Chapter Five will discuss the interplay between these elements of canon formation in which the lens of chaos and complexity aid our understanding of the connections between the three, and how such interaction makes the structure of the canon dynamic. The conclusion will identify the benefits to this new understanding of the structure of the literary canon. I hope that the study clarifies the dynamics of the canon formation so that discourse is guided away from oppositional stances that present either/or positions common with Newtonian perspectives. Instead, discourse will be encouraged to focus on the roles different areas have on the formation of the literary canon.

The limitations of this study arise from its generalizations of the canon debate and of concepts of the new science. This study presents only a brief development of the great variety of discussions involving the literary canon. While it is a necessity for the scope of this thesis, it only hints at the extent of the dynamics involved in the formation of the canon. It also does not give final solutions for evaluating each of these aspects of canon formation.

**Conceptual Reflections**

I will first review the concepts connected with chaos and complexity theory and then clarify the usage of the term literary canon.

At the heart of the concepts of chaos and complexity is the recognition that the world is composed of not only objects but also of living systems. As Fritjof Capra (1996) explains, the Newtonian principles and the resulting mechanical construct view objects’ interaction with each other as a distant second to the objects themselves. Capra argues a conceptual shift must take place where the system is primary and “there are no parts at all. What we call a part is merely a pattern in an inseparable web of relationships” (p.
According to Capra, “the pattern of organization of any system, living or nonliving, is the configuration of relationships among the systems components that determines the system’s essential characteristics” (p. 159). Part of our understanding of system relationships is developed from the work of the neuroscientist Humberto Maturana. He describes the system of color perception as a “nervous system [that] operates as a closed network of interactions, in which every change of the interactive relations between certain components always results in a change of the interactive relations of the same components“ (in Capra, p. 96). It is this idea of an interacting relationship where component interconnections are multidirectional that Capra identifies as a system. A system is self-organizing and self-referring, both, Capra argues, necessary characteristics of system development. A discussion of chaos and complexity will expand upon and develop these characteristics further.

The concepts of chaos and complexity have developed as a new science over the last century within the fields of Mathematics and the hard sciences of Physics etc., and like ripples from a stone dropped in pond, the waves have spread into the area of the social sciences. To understand how these concepts have application to the literary canon, a brief review at the basis for these concepts will be helpful. The first essential point is to clarify the meaning of chaos as used in this study. Although the traditional and general meaning of chaos describes a state existing without form or structure, which we treat as synonymous with the idea of disorder, the essence of the New Science is to demonstrate the existence of order among systems where before only disorder was thought to exist. It is not the Newtonian sense of order that suggests predictability, but the concept of order where “any one of several things can happen next” (Lorenz, 1993, p. 7).
According to Edward Lorenz (1993), the application of the word chaos in this new scientific sense was most noticeably applied by Tien Yien Li and James Yorke in their study “Period Three Implies Chaos.” Even though he questions its appropriateness, Lorenz notes that the popularity of its usage became set after James Gleick’s (1987) best-selling book *Chaos*. Lorenz’s reluctance to accept chaos as a scientific term is understandable because as N. Katherine Hayles (1990) comments the word ‘chaos’ is not “usually employed by researchers who work in these [Mathematics and Science] fields. They prefer to designate their area as nonlinear dynamics, dynamical systems theory, or, more modestly yet, dynamical systems method” (p. 8). Despite this attitude, Lorenz clearly defines its usage. Chaos is a system “that is *sensitively dependent* [italics added] on *interior* changes in initial conditions. . . within one and the same system” (Lorenz, 1993, p. 24). This concept of sensitive dependence, which is the foundation of chaos theory, developed from the works, at the end of the nineteenth century, of the French Mathematician Henri Poincaré, “who rebelled against the strong presence of Newtonian determinism” (Stanley, 2005, p. 137). According to Darren Stanley, Poincaré’s work on nonlinear equations aided the understanding of a world where small changes, after recursion (the role of recursion will be clarified in chapter 2), can influence large systems, the core concept behind sensitive dependence.

However, it was not until the mid twentieth century and the use of computers’ ability to rapidly iterate large numbers of nonlinear equations and perform recursive calculations that sensitive dependence became easily observable. Edward Lorenz’s work dramatically and clearly modeled the commonplace occurrence and significance of this concept. To gain a perspective on sensitive dependence is difficult because the influence
of Newton and his linear approach creates a cultural orientation that suggests major changes only occur due to major influences. No one would take it badly having a wage difference of $.000555 instead of $.001 per hour. If one assumes a forty-hour workweek, the difference between the two wages amounts to less than a dollar over a time span of a year. Edward Lorenz (1963) discovered, however, that this same degree of difference in iterating nonlinear equations regarding weather patterns leads to a completely distinct weather pattern. When he was experimenting with a computer program’s graph of a weather pattern based on a selection of three nonlinear, differential equations, he discovered that, in dynamical systems, rounding numbers causes significant change. After reentering weather pattern data from a computer printout that rounded the decimal places from six to three places, the result was a graphed weather pattern that initially looked similar, but quickly developed into a distinctly different weather model. In a chaotic system, slight changes do create distinctly different solutions. Thus, all local conditions within a chaotic system can have significant degrees of influence upon a global system. This concept of sensitive dependence causes a significant paradigm shift. Instead of large systems impregnable to small variables, chaos theory allows they can be changed by the influence of very small factors.

Although Lorenz’ application was mathematical, the application of chaos theory has been broadly applied to many non-scientific academic fields. Finding chaotic structures occur in such areas as educational curriculum (Doll, 2005), human organizational structures (Wheatley, 1999) and literary works (see earlier references). Making applications of chaos beyond the boundary of Sciences such as Physics and Biology and of Mathematics, may appear as a misapplication. Certainly, this problem
has occurred in the past. For example, the application of Darwin to social concerns, known as social Darwinism, has shown that significant problems arise when hard science and social sciences cross. Hunter and Benson (1997) develop a clear criticism of the application of chaos theory outside of the hard sciences. They find Eric MacPherson’s use of chaos theory as a metaphor for the educational process and William Doll’s application of it to curriculum is misdirected. By using “a chaotic frame of reference,” they argue, these authors must demonstrate “that chaos theory has the answers for education” and that they must “show how chaos constructs subsume the current constructs in education” (93). The problem is that Hunter and Benson have become caught in the trap of a paradigm shift. Their expectation is that the process of examining issues continues to have the same form in which issues are examined as problems to be solved.

However, under chaotic structures, “the very nature of what counts as an explanation changes. Explanations under two different paradigms are not just dissimilar; they are incommensurable” (Hayles, 1990, p. 169). Because Newtonian science judges on the ability to predict outcomes rather than to identify patterns, Hunter and Benson judge the application of chaos theory on its ability to solve problems. However, looking only for solutions leads us astray. Many people see chaos theory as only telling us, as Lord May says,

that the world is very complicated, which we always knew. You don’t need chaos theory to tell you that the world is complicated. What chaos theory tells you is that sometimes really, really simple things—not like Jurassic Park—can be unpredictable. (in Kahn, 2005, p. 183)
Eric MacPherson emphasizes this point regarding chaos theory. He points out, “it is only accurate predictions, not causal relationships, that are lost in real chaotic systems” (p. 102). Chaos theory argues that a system containing multiple variables prevents predictability and thus solutions lose value. However, not all value is lost just because of a lack of solutions. Value also exists in identifying patterns that aid the understanding of a subject. What chaos can tell us is the nature of the relationships between parts. The application of chaos theory exposes and explores the patterns within a system, which, in turn, can give a greater understanding of the system.

The concept of complexity theory has direct links to chaos theory and its focus on patterns of systems, and for the purposes of this paper, the focus will emphasize the connections rather than distinctions between the two. Lorenz (1993) observes “the term ‘complexity’ has almost as many definitions as ‘chaos’ ” (p.163), but complexity theory does have specific characteristics that can be identified. As Mikulecky perceives it, “complexity is the property of a real world system that is manifest in the inability of any one formalism being adequate to capture all its properties” (p. 344), and formalism, Mikulecky describes, as the Newtonian tradition of transferring natural systems into a code of human making which involves the process of breaking the whole into parts. Smitherman develops this contrast further suggesting that rather than examining the parts, complexity theorists focus on patterns because “the patterns mean something in relation to the entire whole and the patterns inform what that whole might be” (2005, p. 164). In this way, applying complexity to fields such as literature allows one to examine and attempt to perceive the interactions occurring within a structure, a process that is lost in the Newtonian system of breaking the whole into a myriad of parts and examining the
part as an independent whole thereby breaking connecting links that may impact the
system. One purpose of examining links, Smitherman explains is, “to explicate how
systems function to rely upon feedback loops (reiteration, recursion, reciprocity) so as to
(re)frame themselves and thus to continue to develop, progress, and emerge” (p. 163),
which leads complexity theorists to view systems as self-organizing, that is to some
degree or another, systems create themselves. This idea of self-creation will be of
interest later in examining the development of a literary canon because it suggests that the
canon might be self-generating as opposed to a deliberate construction by individuals.

Self-creation is reflected in fractals which create in visual images the links of
reiteration, recursion and reciprocity found in patterns studied by chaos and complexity
theory. Benoit Mandelbrot (1983), the creator of fractal geometry, came up with the
word ‘fractal’ by drawing on the Latin word *fractus* which means “to create irregular
fragments” (p. 4); a combination that emphasizes both the idea of pieces and of
asymmetry form. Mandelbrot’s work is capturing the complexity of non-Euclidean
shapes. At its essence, “fractal meant self-similar” (Gleick, 1987, p. 103), which Brent
Davis identifies as having elements that center around recursivity and scale
independence, the same concepts which Mandelbrot makes use of in his pioneering work,

The image that Mandelbrot labels a quadric Koch island (p. 53), illustrates these
concepts. The recursion of a mathematic nonlinear equation creates an image of a series
of boxes from which protrude boxes smaller in size but of regular proportions. From
these boxes protrude boxes again half in size continuing in infinitum. Although straight
lines make up the creation of the figure, an image with an extremely irregular and
asymmetrical outline is generated. Magnifying any section of this figure, constructed by a recursion of blocks placed at points generated by nonlinear equations, reveals a self-similar image although of a different size. Repeating this process of magnification continuously will still produce a similar image so that, at even a magnification of twenty times, a similar image is produced as at a magnification of five. This notion of perpetual production of self-similar images helps us understand why James Gleick (1987) philosophized that the fractal is “in the mind’s eye, . . .a way of seeing infinity” (p. 98). These ideas of self-similarity of structures independent of scale indicate that relationships exist between variables whose interconnections form the structure. Breaking apart this structure destroys the relationships and prevents gaining a clear understanding of the structure.

The usefulness of fractals and chaos and complexity theory is illustrated by James Gleick’s story about Mandelbrot and his attempt to aid engineers who were working with the problem of telephone line noise that created errors in transmission. Mandelbrot examined a day’s time span of transmissions and identified the patterns of periods of clean transmissions followed by periods of noise fit the geometric model of a Cantor set developed by George Cantor in 1872. Beginning with a given segment of points, the middle third is removed leaving two end segments. Then removing the middle third from each of these two segments, leaves four segments. This process can be continued through infinity [see figure 1.2]. After enough repetitions, the visual image leaves a “dust”
of points whose number is infinite but their length is zero (Gleick, 1987, p. 93). It was this pattern that Mandelbrot found in the transmission lines. Taking a day’s recorded transmission, there would be spaces of clean transmission and periods of noise. Focusing at the level of an hour showed a similar pattern of periods of clean and noisy transmissions and the same pattern appeared at the level of a minute as well as when looking at a single second of transmission. Gleick records that although Mandelbrot’s analysis provided engineers no clear means of developing a solution for overcoming transmission noise, the engineers “accepted the inevitability of errors and used a strategy of redundancy to catch and correct them” (p. 92).

This story illustrates two points. First reiterative nonlinear relationships occur in even seemingly simple systems. A second point is that chaos and complexity theory’s ability to identify relationships and the use of fractal’s ability to visualize the system create not only an understanding of a system but also creates methods in working with systemic problems even though the analysis does not intend to solve the problem once and for all.

Complex systems possess different characteristics then simple systems. John Casti (1994) highlights four characteristics that mark complexity acting the opposite of simple systems. First, within simple systems is predictable behavior but complex systems are unpredictable and many times counterintuitive such as “lower taxes and interest rates lead to higher unemployment” (p. 271). Second, simple systems contain few interactions while complex systems contain many. Imagine the number of variables involved with barter economies compared to the modern international trade of the modern industrial world. Third, where simple systems tend to contain centralized
decision-making, complex systems “exhibit a diffusion of real authority” and “power is spread over a decentralized structure” (p. 272). Last, simple systems are decomposable, that is parts of the system can be removed without altering the system, whereas, complex systems are irreducible, which signifies breaking any links between parts destroys the system’s behavior. An understanding of the chaotic, complex, and fractal nature of the world promotes viewing systems as process rather than object. Just as noise in transmission lines are no longer considered an object within a system so too is the possibility to see the literary canon as a system and the books within the canon as a part of a process rather than an object embedded within the system.

The concept literary canon is a term that needs clarification. Just as there is a fuzziness to the terms chaos and complexity, so, also, there is a fuzziness to the concept of a literary canon. Jan Gorak (1991) explains, “etymologically, the term canon refers to a rod or reed” (p. x), and Strong’s Bible dictionary (2002) defines the Greek usage of “kanon” as “a rule... a standard” of measurement (kanon). The use of a rod or reed then appears as a method of measurement creating strong association with the idea of standards. The collection of the various books that makeup the Christian Bible, particularly the New Testament, generates a denotation of ‘canon’ as a sacred collection of writings coming from God.

This meaning becomes so pervasive that with the development of a literary canon “as the list of authors and works included in basic literature courses because they are deemed to comprise our cultural heritage-from a unique angle” (Kaplan, 1990, p. xvii) an association with the sacred is inherent. Harold Bloom plays with this association when
he declares, “Shakespeare is the secular canon or even the secular scripture” (p. 24).

This is ironical because as Gorack notes:

the selection of books accepted as ‘canonical’ by early Christian communities emerged only at the end of a series of bitter internal disputes. These communities did not recognize the same books as divinely inspired; not all members of the same community agreed on the exact number of the canonical books. (p. 4)

This lack of agreement as to the makeup of the accepted Biblical books remains an issue in the present day. Christian denominations lack agreement such as the differences that exist between the Catholic and Protestant versions of the Bible. Walter Reed (1996) believes that canonization creates dissatisfaction and restlessness because it attempts to arbitrate between the extremes of the forces that would draw a narrow canon and those forces promoting a large diversity. Although Bloom (1994) suggests that there are certain works that cannot be questioned as to their status in literature, the conflict in the acceptance of Biblical books suggests the possibility that all works can be questioned and that the conflicts and bitter arguments over the literary canon will persist and endure for a long time to come.

Even if a continual debate is accepted as a given in the literary canon, it is still important that an understanding of the structure of the literary canon is developed because of its power. The use of the word *canon* to describe the system of identifying great works of literature carries powerful religious associations, which affect its structure. In addition, the word *literature* also carries a special weight. Robert Scholes (1985) points out the difficulty in forming an analogy with the word literature. He notes where the form “artist” is to “art“ (p. 12) exists, there is nothing to fill the place of artist when
literature is substituted for art. He claims that “our cultural literature has been positioned in much the same place as scripture . . . we are in fact priests and priestesses in the service of a secular scripture” (p. 12). These religious connotations put emphasis on the literary canon as a standard that grants sacredness to literary texts and gives itself the voice of scriptural authority with the result that the literary canon becomes more than a simple list of great works.

The literary canon entails a significant degree of power. Its power includes influencing the literature taught not only, as mentioned above, in basic college courses but also the literature taught in high schools and the college courses offered at the graduate level. It is the canon that determines what is beautiful in literature, and it is the canon that, for many, lays down the values of the culture. Finally, it is the literary canon that gives power to the literary past by classifying literary works of the past into levels of worth. The following chapters will discuss and analyze this structure of the literary canon and the relationships that make connections with the new science.
Chapter Two
Multidimensional Aesthetics

Traditional Aesthetics

Aesthetic judgment forms a primary component of the structure of the literary canon. It is, I suspect, the most frequent point of discussion in evaluating the quality of a literary work and whether it is deserving of placement within the literary canon.

Generally speaking, defenders of a traditional canon argue that the ‘art’ of a work contains within it a beauty that surpasses other works and so hold aesthetic value as the critical element of a piece of literature that creates its uniqueness. For example, Andrew Delbanco (1997) favors the critics who “celebrate books as sources of aesthetic delight” rather than those critics who explore a literary work’s political dimensions (p. ix). This contrast in word choice between critics who *celebrate* and critics who *explore* suggests that the former help bring out all the emotions of joy and feelings of wonder found in literature where other critics focus on a book’s relationship with a world outside of itself.

The role of aesthetics is powerful enough that Harold Bloom (1994) can argue, as presented in this paper’s introduction, that it is the central value for determining a literary work’s placement in the canon. However, when we explore the nature of aesthetics, the traditional approach’s description of aesthetics inadequately explains its role in canon formation. Instead, if the concepts within the new science of chaos and complexity such as sensitive dependency, recursion, iteration, and self-similarity are used to describe aesthetics, its role in the canon becomes better understood.
For the defenders of a fixed canon, beauty within literature arises from its originality in execution of its form and its use of language. Their placement of Shakespeare at the head of the canon occurs because of the quality of his writing in these areas. Daniel Burt (2001) places Shakespeare at the head due to his “creation of fully realized characters, in the genius of his dramatic storytelling, and, most magnificently, in his supreme mastery of language” (p. 2). Bloom describes Shakespeare and Dante, “at the center of the Canon because they excel all other Western writers in cognitive acuity, linguistic energy, and power of invention” (p. 46). This placement of Shakespeare at the head of the canon reinforces the perception that the canon is a hierarchical pyramid. In this way, there exists a linear ordering of the canon starting from the top with Shakespeare and moving through various ranks of aesthetic quality.

Authors and their works become engaged in an ongoing competition among each other to be at the highest point possible within the canon. The idea that the placement within the canon can be calculated comes through in Bloom’s discussion of the aesthetic quality of works and his evaluation of the combination of language usage and originality. For example, he says, “Whitman’s originality has less to do with his supposedly free verse than it does with his mythological inventiveness and mastery of figurative language. His metaphors and meter-making arguments break the new road even more effectively than his innovations in metrics” (p. 266). Bloom also describes James Joyce’s passage at “the end of Finnegans Wake, the monologue of the dying Anna Livia-mother, wife, and river-is frequently and rightly esteemed by critics as the most beautiful passage in all of Joyce “(p. 425). There is an assumption made by Bloom that not only can he
rank the beauty of author’s work in comparison to other authors, but also he can rank the collection of one author’s works.

For the traditional critic evaluating the aesthetic quality of a work comes about through the breaking apart of the form and language of the literary work. The critic “undertakes the quest that is the final aim of literary study, the search for a kind of value [emphasis added] that transcends the particular prejudices and needs of societies at fixed points in time” (Bloom, p. 62). The critics’ task becomes processing the literary work and reducing it into parts. In doing this, the perception is that the critic can then express the quantitative degree of aesthetic value that the work possesses.

In this way, critics present a literary work as possessing an objective value knowable and quantifiable through the application of an analysis of a text’s structure and language. In this manner, all work can be assessed and evaluated in a linear format, and the traditional critic attempts to determine placement of a particular piece of literature in comparison with its predecessors. Is it a work of comparable value of Shakespeare? Of Milton? Of Twain? If the perceived value of the work changes over time, it is regarded as a misplacement due to some error in judgment or a misanalysis on the part of the critic. The traditional critics view aesthetic value as existing within the text independent of time and of reader. Because of this reliance upon critics, readers perceive the aesthetics of a work as a mysterious hidden entity with critics acting as bishops of literature, and English teachers becoming ministers baptizing novices into the mystery. Knowledge becomes limited in this system similar to the curriculum system described by Jayne Fleener (2002), who argues, “the problem with the logico-deductive systems is there is no way to generate new knowledge. All knowledge, once the foundations are set, is determined by
the primitives and postulates of the system using the agreed upon rules of reasoning” (p. 158). In the same way, critics dismiss differing perceptions of the canon because the ideas do not fit within their system of logic and their definition of the canon and thereby limiting not only the variables involved in evaluating a literary work but also limiting the type of knowledge that develops from the system.

This fits with Bloom’s and many other critics’ assumption that aesthetics is a static entity based in an objective reality. It is a value that “can be recognized and experienced, but it cannot be conveyed to those incapable of grasping its sensations and perceptions” (Bloom, p. 17). The traditional critic perceives the reader’s aesthetic experience as taking on a specific form that reflects accurately the aesthetic value of the work. If it does not take one particular form, it is because the reader lacks the capabilities. Aesthetics takes on the aspect of a singularity, an objective reality, existing apart from the reader of which only a few readers are refined enough to perceive, and when it is perceived, the experience is always the same and always repeatable. For the traditional critic, a literary canonical work awes the reader with the beauty of its language. The measuring the value of a literary work becomes the focus for critics’ writings (see Frus, 1996, p. 119). Under this scenario, the canon is fixed by a set of standards identified as the measurement of aesthetic value, and the only factor to be determined would be the degree of aesthetic value created by a piece of literature.

Within the traditional view, the understanding of the beauty of literary works develops from critics’ analyses, and readers depend upon critics for developing their sensitivity to the works’ dynamics. In this perspective, the critic’s role is essential to
understanding and experiencing literature, and it is due to critics’ influence whether a work is lost forever or brought to the light of day.

**Chaos within Critical Commentary**

Although the traditional critics recognize one aspect of aesthetics, they isolate the literary work from the reader and pretend there is no other facet. However, this process Stein Olsen (1981) describes as reductive because the process focuses on features of the text without any reference to human emotion or to the world outside of the text. The process reduces the concept of aesthetics to only one facet, that of aesthetic value, and creates as Newton did with the physical world, a linear and hierarchical world. However, aesthetics is not a singularity of the internal value of the literary work occurring outside the reader and limited to only the few who obtain the skills needed to experience it. Instead, it is a chaotic system of variables interconnected and interdependent. The recognition of a relationship between readers and the text makes aesthetics multifaceted. Instead of a linear experience, aesthetics of value and of experience creates a recursive interaction where the reader affects the value found within the literature even as the reader is affected by the aesthetic value of the work.

A non-reductive approach recognizes the multiplicity of features or as Olsen describes it as a “constellation”(p. 523) and that each literary work contains a constellation of features unique to the work and to the awareness of the reader. For example, a reader examines all of a poem’s elements such as the author’s use of rhyme scheme, alliteration, metaphors, and word similes. Not only the existence of these elements is noted but also their contribution to the poem’s imagery or meaning. This emphasizes that the poem contains a constellation of elements that interact with each
other to create an aesthetic value unique to the poem. Thus, even within a text, variables operate to develop a sensitive dependency. Not one particular feature can be assessed as the controlling variable. The rhyme of one poem may have great significance such as the rhyme scheme in Ralph Waldo Emerson’s poem Each and All. Using the traditional method of using letters to stand for the rhymes, the scale of the alphabet is covered in its whole range, which reflects the central theme of the poem that all of life forms a complete whole. In another poem, the rhyme may have a less obvious impact, yet remains a variable in the impact of a poem. Just as a weather pattern changes due to slight changes, so too does literature change due to minor variations creating a chaotic pattern.

When Harold Bloom (1994) argues it is Whitman’s use of figurative language more than his use of free verse that makes him of canonical stature, it suggests that the free verse may be removed without affecting the poem. Yet, Olsen’s concept argues that all of these elements work together and the separation of one would affect the remainder. Indeed, it would be a great loss, for example, to Whitman’s “Song of Myself” if it was metered poetry because the same originality of figurative language, for which Bloom so much admires Whitman, would lose power when placed into meter. Bloom admires Whitman’s lines “Solitary at midnight in my back yard, my thoughts gone from me a long while, /Walking the old hills of Judea with the beautiful gentle god by my side” (in Bloom, p. 286). However, the beauty of the irregular meter creates its own gentleness that connects with the startling image of walking with a “gentle god” which makes it unclear how the meter cannot be judged as part of the expression of an original idea.
The reliance upon different elements for the unity of the whole suggests a dynamic system. The nature of chaos is that each variable has a significant effect upon the whole. This sensitive dependency presents itself in the work of Whitman. Along with the inability to separate these as parts, we also find complexity in the same reference. The rhythm of the poem is an auditory recursion of the image of a gentle god. The gentleness of the sounds is the gentleness of God. This recursion created in sound possesses a self-similarity to the visual image.

The works of critics themselves contribute to the chaos inherent in assessing aesthetic value. Whitman writes a poem. A critic writes a commentary upon the poem. Later, another critic writes a commentary and refers to the first critic. Then another critic creates a commentary and probably draws on a selection of the previous commentaries. One commentary builds upon another. Critical commentary appears as a complex system of interacting relationships. In this system, the commentaries act as a recursive and reiterative process. Readings of Whitman’s poem and the collection of commentaries become similar to watching the movement of a fractal image. One perspective shifts to another perspective, which shifts another. The commentaries present a series of images linked by their connection to the poem. The critic that accepts the chaotic qualities of the literature finds within each literary work a fractal image containing “infinite detail, infinite length” and “self-similarity...generated by iteration” (Briggs & Peat, 1989, p. 95). Along with the literary work, each critic’s commentary is another iteration of the literary work in which the relationships reveal self-similarity not only between the literary work and the commentary but also among the other commentaries upon the work.
Because of the recursions and self-similarity, the literary work appears as a fractal image. Commentary shifts a reader’s perspective so that at one moment, we see the entire poem as from afar, and then the next commentary brings a close examination of a specific phrase. The commentaries, as fractal objects, show a scale of independence so that no matter how microscopic the view or macroscopic, the existing complexity remains just as Whitman’s poems are examined for their internal complexity and for his complex portrayal of American individualism. When a critic writes her commentary upon Whitman, she will cite other critics, and these critics will generally have cited other critics in a continuing expanding iteration of ideas regarding a work of Whitman’s.

This multiplicity of commentaries suggests that there is no single aesthetic standard of value. The literary work functions as a fractal design in which critics view similar images but with fascinating variances. Each commentary contains recursive threads by its bibliographic references, scale independence because the commentary’s length is independent of the literature it analyzes, and reflects self-similarity with the literature it analyzes and other commentaries. Recursive threads, scale independence and self-similarity are, according to Brent Davis (2005), the three main elements within the structure of a fractal. Because the critical commentaries contribute to a literary work’s placement in the canon, the fractal nature developed here shows complexity involved in the canon and its interactions among critics.

**Aesthetics from Values to Experience**

The traditional critic speaks as if aesthetics exists only as a value inherent within only the text itself. However, aesthetics cannot exist independently of the reader but must exist as an interaction between reader and text. Research, over the last several
decades, reveals reading as process in which a great range of variables interact. Meaning-making develops from text, environment, and the reader (see Pressley & Block, 2002), and the characteristics of readers create multiple variables that affect the meaning that develops from the text. The variables include, but are not limited to, the reader’s knowledge and use of reading strategies as well as the reader’s sex and age. Even physical characteristics such as eye movement affect the creation of meaning (Alderson, 2000). All of these variables influence what the reader finds as artistic and beautiful. Thus, in addition to aesthetic value, readers’ perspectives interact with the text to create an aesthetic experience.

Although traditional critics are aware of multiple perspectives, they appear unaware of the implications. It is amusing that Bloom notes Dickinson’s awareness of the multiplicity of perspectives even as he ignores its application to the concept of aesthetics. He describes Dickinson attempting “to think and write her way out of that siege [of multiple perspectives]. Yet she knows that we are governed by the contingency of living within the primordial poem of our precursors’ perspectives” (p. 305). Bloom also describes Shakespeare’s universal appeal is in part because he “opens his characters to multiple perspectives” (p. 65). Bloom notes the existence of multiple perspectives even as he himself rejects any perspective that does not place Dickinson or Shakespeare as canonical works. Bloom’s assumption appears to be that multiple perspectives are inherent to the work and unrelated to variables brought by the reader by their act of reading. In this way, traditional critics attempt to keep the concept of aesthetics limited to their conception of the aesthetic value of texts.
The factors of form and language cannot alone describe the totality of aesthetics. Aesthetics must include the experience described by encompassing the range of variables presented within the reader. Instead of establishing certainty and predictability, we find literary value arising from a variety of factors. Annie Dillard (1988) argues that literary value arises not only from critics but also from other readers. She sees the field of fiction is not just the domain of the critic, but any reader who, “prizes his own reactions and considers them useful” (p. 77). Along with the notion of the reader’s interaction, Dillard argues “all possible knowledge, from the identification of species to the size of your foot, is necessarily interpretative” (p. 132). Extending Dillard’s reasoning suggests each reader then contributes an independent assessment and value to a work of literature. Instead of a singular aesthetic value, the interaction of readers and works create multiple possible reactions and the potential of multiple values in aesthetic assessment.

Although the critic’s role must be considered a powerful and significant force in the evaluation of literature, even the most inexperienced reader brings into the calculations variables which affect the final evaluations of a work. Maxine Greene (2001) emphasizes the interaction of the reader with the text further when she argues that young people can contribute to the appreciation and understanding of literary works if there is an understanding that “an aesthetic experience requires aware participation on the part of . . . the reader” (p. 178). The focus of an aesthetic experience includes not the literary work alone but includes the reader and the reader’s awareness. It is an experience not limited to only arcane practitioners, but includes all readers who can generate a metacognitive awareness of their interaction with the text. Because of this, we can recognize that critics are capable of having great influence upon our perceptions of a
literary work, but they do not control the experience. There is the literary work itself, there are the perceptions of critics, and there is the reader’s experience.

That the aesthetic experience occurs as a part of the relationship between reader and the literary work creates a chaotic structure rather than a Newtonian one. Louise Rosenblatt (1993) presents the concept of the transactional relationship between readers and the text. She recognizes, “no sharp separation between perceiver and perception can be made, since the observer is part of the observation” (p. 380). Her theory of reader-response interactions does not allow a text to be limited to one particular meaning because the reader constructs meaning in relationship to the text and with what the reader brings to the text. For example, Robert Schaible (2003) divides readers of Whitman’s poem “Song of Myself” into two groups. One group of readers sees “the ‘self’ as personal and cosmic and functions within the closed system of the poem” (p.40). The other group of readers sees “the ordinary self that is simultaneously a transcendent Self” (p.40). This latter perspective of the poem, Schaible suggests, connects with a spiritual reality beyond the poem’s border.

Although the perspectives differ, fractal images exist. Recursion is found in the individual members of the group each applying their perspective to the poem. There is self-similarity between the groups as centered around Whitman’s image of self (no pun intended) producing the basic. Scale independence appears between the two views of the souls, one personal and transcendent, and it appears between one group limiting itself to the closed system of the poem and the other group going beyond the poem’s border.

The two readings of this poem suggest that Whitman’s ‘Self’ has multiple identities with each identity dependent upon the particular reader. This casts into doubt a
reading that attempts to form the poem around one specific identity. The poem does not change, but the shift is in readers whose aesthetic experiences in interaction with the poem shifts dependent upon the reader. Each aesthetic experience is separate and distinct, but each experience adds value to the reader’s perception of the world. This expands greatly the number of variables involved with the equation of aesthetic experience taking it away from a linear science composed of the values of form and structure into the new science of chaos and complexity. In addition to the variables of form and structure, we have each reader making a separate contribution. This gives shape to an image of nonlinear equations where each solution becomes a variable for a new equation. This sensitive dependency generates a multiplicity of assessments for each literary text. With a text from the literary canon, the chaotic effect is incalculable due to the number of critical commentaries, the multitude of readers and then the multiplicity of background variables reflected by the readers.

Instead of an aesthetic experience existing as an object attained by the reader, it becomes a description of what occurs between reader and the text. As Alberto Manguel (1996) describes the process:

book and reader becomes one. The world that is a book is devoured by a reader who is a letter in the world’s text. . . invisibly, unconsciously, text and reader become intertwined, creating new levels of meaning, so that every time we cause the text to yield something by ingesting it, simultaneously something else is born beneath it that we haven’t yet grasped. (p.173)

This complexity of the interaction between text and reader forms the aesthetic experience. The text by itself does not exist as an experience. Maxine Greene (2001)
reasons, the aesthetic exists “only in transaction with some human consciousness” (p. 14), which she argues prevents any final definition of the aesthetic except by the reader’s perception. For example, critics generally regard Mark Twain’s *The Adventures of Huckleberry Finn*, a narrative by a boy living at the fringe of society, as a well-established novel of the traditional literary canon. Through Huck’s experiences, the reader sees the racist attitudes and cruel nature of humans displayed. However, in teaching the novel over a period of nineteen years, I have seen occasions where some Black students experience the novel differently from other students. The pervasive references to the word “nigger” mark the racism of the novel’s society and beat the reader with its ugliness. The aesthetic value, in the artistic sense, of this marker and of the book as a whole are experienced differently by these Black students because the word has a personal and emotional impact not experienced by other readers. The students did not misread the word’s significance, and they did not misunderstand the intent of the novel. The aesthetic value remained, but their own background created for them a different reading experience than the other students. Their background interacts with the reading of the novel to create an aesthetic experience different from what others experience.

Although this was an extreme example, each reader carries a different background and different variables that create different aesthetic experiences. For instance, imagine a reader from Mark Twain’s own time and living near Hannibal. The aesthetic experience for this reader would differ from readers from other times or other places. Aesthetic experiences reflect fractal images. The image of the novel that the Black students carry contain self-similarity with the novel that other students have read but certainly the image would be different. The image differs from the other students even as it reflects the
similarity in the same moment. When discussion of the placement of Twain’s novel in
the literary canon occurs, all readers' fractal images of the novel will reflect, at the same
time, a self-similarity attached to the structure of the text and differ due to the experience
of each reader.

Chaos and complexity theory aids our understanding of what occurs in the system
of aesthetics. Canon formation generally has been regarded as developing from a
standard of values applied to literary works. As I have shown, no such standard can
exist. Instead, we find aesthetics develop from a multiplicity of elements, which are
sensitive dependent on the initial condition. The background of the reader becomes one
of many variables interacting within the process of reading. These variables force us to
recognize the complexity of the aesthetics existing in close relationship with the reading
process, a process that cannot be broken into parts but exists as an inextricable
relationship between text and reader.

The aesthetic experience is reiterative in that each time a literary work is read,
there exists the self-similarity because the text is the same, but the variables beyond the
text changes. It is an iterative paradox similar to Jourdian’s calling card. Printed on one
side of the card is the “The statement on the other side of this card is true” and on the flip
side of the card was “The statement on the other side of this card is false” (Casti, 1994, p.
117). Just as the sides of the card are self-referencing even as they make contradictory
statements, so too is there, as Beverly Voloshin notes (1995), exists a “literary
reflexivity” within the aesthetic experience because of contradictory perspectives. This
reflexivity creates a chaotic and complex world of the aesthetic experience and the
literary canon in which every variable of value and experience creates a multitude of
fractal images reflecting a literary work in some manner. Instead of ignoring the multiplicity of images of a text, a chaotic view welcomes this cacophony. The use of chaotic and complex system descriptions provides a means of describing this bewildering array of literary views.
Chapter Three

Culture and the Canon

Traditional Perspectives of Culture and Canon

The role of culture in society has been one of the great topics of the last century, and one area that its role has been widely debated has been in its relationship with the literary canon. The traditional view perceives the literary canon as a representation of the culture of American society, and as one reads the works of the literary canon, the reader gains knowledge of the culture and can participate within the culture (See Bennet, 1914; Adler, 1940; Hirsch, 1987; & Cheney, 1987). It is possible to argue that each of these writers presents different definitions of culture; nevertheless, these writers do share the common perception of culture existing as an object rather than a system. This chapter will outline how culture is treated as an object and why the paradigm should shift to viewing culture as a system. The word culture can be a slippery term capable of many different meanings, which holds true in this chapter. Culture is used primarily as a reference to ethnic, racial, and gender groups in this paper. However, at times culture is used in reference to the values, beliefs customs, and tastes of the aforementioned groups. In such cases, I am relying on the context to indicate such usage.

Supporters of this traditional perspective believe the canon is, at its core, a closed and fixed system and to open up the canon is to destroy its ability to convey culture. The traditional canon, for its supporters, expresses the culture’s essential values as a form of ideology, and, as a result, the canon functions as a curriculum for educating its young
members and immigrants coming into American society in the importance of these values so that they become fully functioning members of the society. For example, within Oklahoma’s Language Arts Priority Academic Student Skills (PASS), several objectives function on the basis that the process of the study of literature develops knowledge of American culture as well as other cultures. However, for many, writers, critics, and readers, this view creates concern with the canon becoming a representation of only one specific and narrow ideology, and the desire is to open up the canon to represent the multicultural society of America.

Lynne Cheney, former chair of the National Endowment for the Humanities, represents the narrowest view in *American Memory* (1987). Cheney argues that knowing the classics of Western culture such as, “Dante, Chaucer, Dostoevsky, Austen, Whitman, Hawthorne, Melville, and Cather” allows students to “realize our human potential,” the “essence” of our humanity, and our “duty” (p. 6). The lack of knowledge of these writers, Cheney argues, will destroy our “sense of nationhood” (p. 7). This is a canon that Robert Scholes (1985) describes satirically as, “pre-selected by culture, laid down like fossils in the sedimented layers of institutional tradition” (p. 58), and Guillory (1993) describes as a “Goliath” even though it is a “fictional cultural entity” (p. 42). Because American society centers its attention on its European/Western civilization heritage, Cheney’s argument creates fear among its members that any opening of the canon will destroy American culture.

A slightly broader representation of the traditional view is found in E.D. Hirsch’s book *Cultural Literacy: What Every American Should Know* (1987). Hirsch argues, as his subtitle conveys, that the American culture operates with expectations that its most
successful members possess a shared knowledge, and Americans who do not possess that knowledge, at best, demonstrate a lack of education and, at worst, are unable to participate effectively within the society of the United States. Hirsch believes that the educational institution and its policies “have shrunk the body of information that Americans share, and these policies have caused our national literacy to decline” (p. 19).

Citing experiments involving testing of various age groups of children, Hirsch argues that tests have, buried within their structure, information existing as an expectation of shared schemata. This leads Hirsch to suggest that a shared vocabulary of words and phrases exists which allows a student success if one possesses it, but causes failure for those who do not possess the shared vocabulary. He suggests it is not necessary that students should read a particular work, but be aware of particular ideas presented in the work. In the appendix simply labeled “The List,” the list of words and phrases which includes authors, artists, places and others aspects of culture is extensive, but Simonson and Walker (1988) saw “white, male, academic, eastern U.S., Eurocentric bias” (p. xii). They make a long list of omissions including some significant authors such as Jorge Luis Borges, Albert Camus, Carlos Castaneda, Kate Chopin, Carlos Fuentes, Zora Neale Hurston, Doris Lessing, and Toni Morrison.

Hirsch, Kett, and Trefil, at least partially, address this issue with the creation of The New Dictionary of Cultural Literacy (2002). The dictionary, broken up into wide ranging categories including ‘The Bible,’ ‘Proverbs,’ ‘American history to 1865,’ and ‘Literature in English,’ list words and phrases and develops succinct definitions for each item. For instance, the authors list the word *Friday* and note that it is a character, who aids the main character from *Robinson Crusoe* and that “figuratively, a ‘man Friday’ or
‘girl Friday’ is a valued helper” (p. 124). By creating an even longer and more extensive list, many of the omissions noted by Simonson and Walker are included although authors that do not make the dictionary include Kate Chopin, Albert Camus, and Carlos Castaneda. This suggests a problem inherent with Hirsch’s dictionary and with canonical lists that purport to be the defining of excellence. There is always the question of why some work or author is not listed. Hirsh’s original list omits significant people but by extending the list only begs questions of why one is added and not another. Why is Borges included but not Chopin? Why select Morrison but not Camus? What is gained by the addition of the selected authors? Broadening the scope of authors and works to be more inclusive is not effective when there is no clear understanding of what the author contributes. Cultural knowledge is not a question of representation by numbers, but a question of the process that determines selection.

In addition to Hirsch’s problem of cultural perspective, his approach also removes all of the subtlety and connotative force of culture and of literature. Hirsch’s description of Mark Twain’s novels gives equal weight to the creation of the novels *The Adventures of Tom Sawyer* and *The Adventures of Huckleberry Finn*, although critics and readers generally acknowledge the significantly greater complexity and artfulness of the latter work. For Hirsch, culture is made up of words, phrases, and people’s names that have some degree of meaning yet are devoid of any developed significance. This, in his judgment, is all that is required and necessary for cultural knowledge. Cultural knowledge becomes an object rather than a dynamic force that acts upon and influences people. Carlos Diaz (2001) suggests, Hirsch’s view of knowledge is “neutral and static. . . Knowledge, however, is dynamic, changing, and constructed within a social context,
not neutral and static as Hirsch implies [italics in original]” (p. 18). The selection of authors and the phrasing of definitions are not neutral and static; they are dynamic and the treatment of the material as if it is neutral and static creates a fiction that is more illusory than any novel.

Cheney views knowledge in the same manner as Hirsch. She assumes that the view of authors and their works have remained the same even though each year scholarship is produced that adds and sometimes dramatically changes our knowledge of authors and their works. Because Cheney (1987) and Hirsch (1987) both view knowledge as neutral and static, their perception of American culture and the literary canon also is neutral and static. Kaplan and Rose (1990) criticize *American Memory* for its narrow and imperialistic perception of culture, particularly how it relates to literature and a narrow canon of authors and that Cheney has forgotten the famed American diversity. It is this diversity that Cheney and Hirsch find menacing. If there is a change in the perception of who and what is represented by American culture, both the current culture and the literary canon are threatened because change causes, in the perception of Cheney and Hirsch, an ending to the literary canon and, subsequently, an ending to the culture, as they know it. For the traditionalists, they see the destruction of culture as a destruction of life as well as a destruction of their practices and their beliefs.

However, their own fear indicates the flaw of their argument and indicates the existence of a dynamical system of relationships between American culture and the literary canon. If changing the canon affects the culture and if changing the culture affects the canon, then the components are part of a system. Capra (1996) notes, “systems thinking is ‘contextual’ which is the opposite of analytical thinking” (p. 30). Analytical
thinking falls into an either-or pattern. For Cheney and Hirsch, American culture appears in only one form, and the literary canon reflects that form. Any other form, for them, must not be American culture. In their desire to create an imaginary culture, the relationship between the canon and culture appears as static. In turn, frustration sets in when the attempt to reset the cultural and canonical past fails. Although there are numerous arguments for opening the canon to minority cultures, there is also the argument that there needs to be recognition of the true nature of the relationship between culture and the canon.

**Critiques of Traditional Perspective: The Multiplicities of Culture**

The major assumption of both Cheney and Hirsch’s positions is that the traditional literary canon represents the essence of American culture, or at least a major part of it. The canon, for them, is representative and by reading this canon, any student, becomes transfigured into an American. This assumes that a specific culture exists that can be identified as American.

In the context of American culture, an enduring question focuses on the makes up the American character, an issue that has been debated since the United States formed. Crèvecoeur took up the question in *Letters from an American Farmer* (1782) and coined the descriptive phrase of the United States as a “melting pot” of mingled races. However, Crèvecoeur was speaking of the mingling of European races in which Southern Europeans mingled with Northern Europeans and the term has been found to be an inadequate description of the United States culture. Until recently, Americans descended from Europeans presented as varied a culture as the modern cultural mix of Latino, Asians, Blacks, and Native Americans that appears in the modern day United States. The
Irish, Italians, Polish, Swedes Germans etc. shared a common continent and not much else. They differed in language, customs, and religions (not only referring to Christianity and Judaism, but also the numerous and at times widely differing denominations of Christianity). As various large ethnic groups of European people immigrated to the United States, each group in its turn suffered from a stamp of foreignness in American society. In the early twentieth century, stereotypes abounded of Irish as lazy, Polish as ignorant, Germans as traitors, and Italians as Mafia hit men. The image of a homogeneous Western culture ignores the historical development of American culture.

A second assumption of Hirsch and Cheney is that authors broadly represent their culture. For example, Csicsila (2004) says, “most academic literary critics today would agree that one of the most prominent aspects of Mark Twain’s writings, though certainly less important than the intrinsic artistic elements of technique and theme, is their ability to evoke the atmosphere of the age in which they are set” (p. 89). However, Mark Twain did not represent the entire scope of American culture but rather represented the mid-western viewpoint, a viewpoint that had only recently become popular. John Guillory (1991) notes even “canonical authors could never... have reflected the actual social diversity of their periods” (p. 41). Instead of a watering down of the American culture, the expansion of literary works that occurs in the latter half of the twentieth century helps develop a more realistic representation of American culture. Modern high school texts such as *Adventures in American Literature* (1996) now include works from early Black writers such as Phillis Wheatley, Frederick Douglass, and Paul Laurence Dunbar as well as some Black writers from the twentieth century such as Langston Hughes Zora Neale
The inadequate representation of American culture in literature textbooks can be seen in examining the list of authors in the Fourth edition of *Adventures in American Literature* published in 1952 where only a few Negro spirituals were included, but no Black writers except for one selection by James Weldon Johnson and less than 10% of the authors are women. Recognizing the greater diverse group of authors does not dilute the culture but recognizes that American culture was much more diverse than credited in the early twentieth century. Modern textbooks attempt to represent Native American, Asian, and Hispanic American authors, which in doing so acknowledges other sides of American culture. This is a far cry from Jones and Leisy unabashed presentation of their revised and enlarged anthology called *Major American Writers* (1945) in which only two women, Emily Dickinson and Ellen Glasgow are included, and no Black or Latino authors are anthologized.

The action of recognizing that women and minority authors have membership in the literature of America expands not only the literature but the concept of culture. Opening the canon acknowledges “the tranethnic (and transgender) perspectives is but a logical consequence of recognizing that the reality around us and the concepts that we use to recognize it, race and gender among them, are cultural constructions” (Schwenk, 1996, p. 2). The canon becomes an acknowledgment of the varied constructions of culture. Culture is no longer a monolithic structure with one face, but many faces. The diversity of American culture is actually broader in scope than even the current canon reflects.
This suggests that the argument that the canon reflects the primary culture is not accurate and that the canon reflects at best a limited representation of the culture.

A third assumption of Cheney and Hirsch’s is their perception of culture and the canon reflects the long-standing truth and long standing values of American society. For them the recent development of culture wars over diversity in the literary canon threatens to destroy truth, that is their perception of truth. As Gregory Jay (1997) explains, the concern of traditionalists is not that the other works are trivial but “that academics are producing a body of different truths that threaten certain traditional value systems” (p. 31). This assumption that there exists a long standing value system is misleading.

Lawrence Levine (1996) reports a study conducted in 1928 by Ferner Nuhn finding that in American colleges in the early twentieth century, Italian, Spanish, German and French literature courses each accounted for more offerings than did American literature courses. College coursework in the early twentieth century focused upon European and Ancient Greek civilization. Colleges did not include development of American culture. It is not until after WW II, Jay observes, that colleges became oriented toward American literature. The shifting nature of courses in colleges suggests that cultural literature shifts much more frequently than we acknowledge. These shifts suggest, rather than one basic set of truths, cultural literature involves a shifting set of truths and values. This fluid structure reminds one of a Mandelbrot set, the equations that are the heart of a fractal, in which the form shifts but yet always maintains a recognizable form. Although the forms shift, the similar general pattern exists creating the image of basic truths and values.

Changes do not occur only in colleges. Culture changes due to shifts in the general population. According to Robert Pear (2004) the United States minorities now
make up one-third of the population in states such as California. Texas’ Hispanic population makes up more than one-half of the population. The changing population of minorities, of what has long been considered of negligible size, has a direct effect upon changing representation in literature, and representation “has been specifically linked, in the canon debates, to communally defined boundaries and experiences (Siemerling, 1996, p. 41). To define American culture as only European limits the community and excludes significant participation by significant members of American culture. America today is, as William Pinar (1993) notes, “multicultural, multiclassed, and multigendered. Despite this fundamental truth, various elements in the American national character [including literature] continue to be devalued and repressed” (p. 66). This broadening of American culture in the twentieth century makes the traditionalist canon and its lack of representation of American culture particularly noticeable.

Instead of seeing the canon as a fixed form, canon formation can be, as Guillory (1993) suggests, a process of “revaluation of particular authors [which] alters the set of terms by which literature as a whole, or what we like to now call the canon, is represented to its constituency, to literary culture, at a particular historical moment” (p. 135). The culture represented then is not the culture that originally generated the literature, but the culture that currently evaluates the literature. Thus, the canon is always an image of the culture of the past, not of the present. However, traditionalists would have us see the American identity as perceived in the classical canon as existing over hundreds of years, but Guillory (1993) notes, “social identities are themselves historically constructed; they mean different things at different historical moments” (p. 17-18). As
cultural shifts occur in the population, it is reasonable to expect changes occurring not only in the culture’s identity but also in the literary canon.

Frank Kermode (2004) also sees the literary canon as a shifting shape, which he finds is reasonable. Kermode argues that “changes in the canon obviously reflect change in ourselves and our culture. It is a register of how our historical self-understandings are formed and modified” (p. 36). The perception of American culture as primarily European, while remaining strong, has expanded to include the contributions of Asians, Africans, Latinos, and Native Americans. These changes work bidirectional. The literature changes our perception of ourselves, but the changes in our culture work to change our perception of the literary canon. The canon cannot represent absolute cultural values because what the canon represents changes as critics and readers analyze and digest literary works. Nor does the value represented by culture stay the same. The last one hundred years of history in the United States shows the cultural values change in perception, in form, and in application. Women’s role in society, the ending of segregation, and the changing Hispanic population illustrate the multiplicity of values contained within culture. The interaction among these multiple values creates a sensitive dependent system that produces a clearer understanding of the forces at work than the传统ists’ explanations.

**Canon and Culture as System Theory**

The crux of the traditionalist approach to culture and the literary canon lies in their treatment of the canon and culture as distinct, independent objects instead of treating them as a dynamical system. For the traditionalist to add or subtract works from the canon alters it and makes it into something that is no longer the same object. For the
traditionalist, to alter the canon makes it no longer the canon. The canon no longer identifies what the Anglo-centric culture identifies as the best works of literature. In the same way, the object that is the American culture becomes altered when Latinos, Blacks, Native Americans, and Asians attain equal status with the Anglo culture in American culture. American culture no longer exists. For the traditionalist, American culture consists only of the Puritanical, British culture of the original thirteen colonies, especially of New England, and the addition of any other culture corrupts that American culture.

This reductionism also takes place in the Oklahoma PASS objectives, referred to at the beginning of the chapter. Although the intent of the objectives are clearly intended to promote multiculturalism, the objectives promote the idea that literature is a tool to be used rather than a facet of the system of culture. Objectives frequently include some work with “literature from various cultures to broaden cultural awareness” (p. 65, 74, 84, 93, 102, 112, & 121) emphasizing the concept that literature is a tool to learn about the culture. There is no indication that the culture and literature interact.

This application of a Newtonian reductionist approach is the cause of the failure. Reducing the system to separate objects “destroys complex relationships and emergent properties of dynamical systems” (Fleener, 2005, p. 3). This in turn prevents gaining an understanding of the nature of the system, or as Virginia Woolf (1958) said, when assailing the idea of breaking writing down into parts so that the art of writing might be discovered, “you may dissect your frog, but you cannot make it hop” (p. 55). Just as trying to break the art of writing into separate and independent parts destroys the whole art of writing, so does treating the system of the culture and the canon as distinct objects destroys the essential nature of the relationship between the two.
The treatment of culture and the literary canon as a chaotic and complex system, as I have shown, must take into account the interplay of relationships between and within these elements. One relationship to establish involves the role of cultural values in forming the literary canon. Jan Gorak (1991) declares of all the twentieth century, “attempts to redefine the idea of canon, . . . the most spectacular” were Northrup Frye’s (p. 121). Gorak describes Frye’s idea of the structure of the literary canon as visionary because Frye saw the canon as, “a collection of stories that recur again and again in the course of a society’s history” (p. 143). This recurrence of stories expands and reflects the self-similarity found in readers’ aesthetic experience presented in chapter two. The recurring stories become fractal images that reflect the background of the readers. Readers’ backgrounds that contained these recurring stories would reflect self-similarity.

Robert Dunne (1992) also views the existence of an interwoven relationship between texts and culture when he says, “Inherent . . . is the assumption that texts are documents that have a kind of dialectical relationship with their respective culture.” For example, Charles Dickens’ novels point out the failures of British industrial society even, as part of the classical canon, they are part of the Anglo culture, and Nathaniel Hawthorne’s *The Scarlet Letter* critiques Puritanical life even as it acknowledges Puritans as part of American culture. This suggests that literature takes on the cultural values and reflects these values back to the culture. This fits the concept of recursion and reflects the complexity of literature interacting in repetitive and recursive motion with culture. In addition to the earlier discussion of the fluidity of literary culture, the literary canon’s interaction with culture strengthens the image of a Mandelbrot set shifting its images as the values within the equations changes the shape of the culture and of the canon. The
fractal and sensitive dependent nature of cultures’ interaction with literature describes the actions of a strange attractor, which is a particular type of fractal image (see chapter five for an expanded discussion of strange attractors). Culture intersects with literature at particular points.

Within the mythology of narratives, Northrup Frye (1968) distinguishes between knowledge of literature and value in literature. He says, “in knowledge the context of the work of literature is literature; in value judgment, the context of the work of literature is the reader’s experience” (p. 311). Frye’s recognition that value in literature is reader-based identifies an existing cultural relationship with the literary canon that cannot be limited to just the qualities of the literature. However, Frye attempts to construct a barrier between the two elements of knowledge and value judgment. He sees the “attempt to make criticism either begin or end in value judgments turns the subject wrong side out” (p. 315), and it is an error for critics to mix values and evaluation of literature. Frye argues the scholar must be able to divorce oneself from judging value. By constructing a wall between these two elements, Frye avoids having to struggle with the multiplicity of interactions that would occur if there was no wall. With no wall the interactions would form a nonlinear explosion found in chaotic relationships. Along this line, Gorak (1991) argues that literary value exists, “not [as] a self-evident property but a sphere of interlocking interests” (p. 227). Recognizing these dynamic relationships emphasizes the chaotic relationship that exists between canon and culture. To include values with knowledge recognizes a sensitive dependent relationship that allows one to understand the causes of the shifting form of the canon. By embracing the scope of values
interacting with the knowledge of literature, we can attempt to find a pattern to the description of a literary canon and its relationship with the culture of its readers.

Another element that must be recognized is changes that occur in the culture of readers. The development in the change in readers derives from changes in the ethnic and gender makeup of college students. Levine describes the change in student population of American colleges that occurred over the last forty years of the twentieth century. He notes that the minority population in 1960 was 6% but by 1988 over 25% were minorities. In 1960 women earned 35% of the bachelor degrees and 10% of the Ph.D.s conferred, in 1990 the numbers were 54% and 37% respectively (p. xvii). Guillory (1993) suggests that the changes in students served by educational institutions causes a change from a “bourgeoisie” to a “vernacular canon” (p. 76). Guillory argues this creates an interaction which is “extraordinarily complex” between standardization of the vernacular language and the ideology inherent in educational institutions (p. 77).

While the changes in numbers is significant, sensitive dependence arises from the change in the initial condition. There is a movement away from the White European male student. Yet, the movement is not in one direction but in multiple directions generated by increases not only in women students but by change in ethnic groups. Just as Europeans is an overly simplistic cultural label, the same can be said for other ethnic labels. Levine (1996) explains when a close look focuses upon any one ethnic group “what looked like a culture becomes a series of cultures” (p. 155). He notes as an example, Japanese Americans included,

*Issei* born in Japan and legally barred from becoming United States citizens; the *Nisei*, born and raised here and thus citizens by birth; the *Kibei* born here but
raised in Japan and thus legally Americans and culturally Japanese; as well as those who lived in cities and those who live on farms; those who struggled to maintain the old ways and those who hungered for acculturation. (p. 155)

Levine argues the same can be said of any other group. The multiple dimensions of cultural groups are extended also, Jay argues, by economic, social, and political changes in readers not just changes in gender or ethnicity. In considering the relationship between the literary canon and culture, we need to consider the series of cultures under the umbrella of a general cultural group. Native Americans are members of a variety of tribes each with a culture independent of the other. Hispanics are of a multitude of backgrounds and descended from different nationalities. Caucasians are descended from a great variety of cultures and nationalities.

Multiple dimensions that are contained within each group create a bewildering number of interactions. Each of these interactions contains specific dependent variables that are part of this multiple dynamic systems of culture and literature. Each group reflects fractal images independent in scale. The general group provides one image and then each sub group reflects a different image generated by the cultural unique to it. However, each sub group contains within it a self-similarity with the general group and with the other sub groups. The equations involved in these calculations might make trying to calculate weather patterns appear simple in comparison.

The relationship of the literary canon with culture involves chaos and complexity. The swirling interactions of variables involving culture and the canon help us understand the confusing debates over the literary canon. Yet, it is a common human tendency to set concepts in absolute terms. Frye (1968) says, “Every age, left to itself, is incredibly
narrow in its cultural range, and the critic, unless he is a greater genius than the world has yet seen, shares that narrowness in proportion to his confidence in his taste” (p. 313). Frye’s comment suggests that it is natural that a culture develops a restricted canon supported by its members even including literary critics. What causes changes to occur is the dynamical interaction between the two. Although the sense of value for literature, Frye believes, is an “intuitive reaction to knowledge, he also sees, “the sense of value develops out of the struggle with one’s cultural environment “ (p. 312). This simplification disguises the multiple variables existing within the conflict. When the culture becomes broader in perception or it changes in its makeup, values change.

The dynamics then of the canon includes a continual tension between the dominant culture and other cultures. The dominant culture continually attempts to stabilize their culture by exerting power to control and limit interactions with other cultures. These attempts to maintain an existing equilibrium is important to the dominant culture because the Newtonian view says that in equilibrium there is order. This pursuit of order and certainty reinforces the power structure of the society. Meanwhile, the multiplicity of literature foreign to the dominant culture’s canon attempts its own interaction with the dominant culture by exerting what power it possesses to pull and to shift the shape of the canon in multiple directions. This action moves the system away from its current equilibrium in the canon and in society, and the power relationship is changed in such a struggle. Complexity theory says that such a dissipative system [expanded discussion appears in chapter Four], as is found in this conflict between cultures at a far-from-equilibrium state generates “a source of order” (Capra p. 190).
Complexity allows for the possibility that allowing the interaction between cultures does not mean destruction, but instead brings the hope that a new structure will emerge.
Chapter Four

Process of Canon Formation: An Historical Perspective

The use of the phrases literary canon and the classics suggests permanence is an expected characteristic of quality literature and that quality literature adheres to an objective and relatively unchanging measurement or standard. The use of terms like the canon creates the impression of the existence of a single list of authors and works that remains relatively stable over the centuries. Certainly, most American readers recognize the names of Sophocles, Shakespeare, William Wordsworth, and Mark Twain and expect that any list of canonical authors would include these names. The canon, readers assume, has been relatively fixed over the centuries with a few names dropping off the list and a few names added over the span of the history of literature, but its basic form has remained unchanged over the centuries.

The sense of permanence and stability of the literary canon comforts many people, who find reassurance believing that any reader can simply return to an old classic piece of literature and have the same experience as other readers have had over the centuries before them. They find comfort in the idea that the reasons that works and authors become part of the canon, as Harold Bloom does, are due to a unique and special quality recognized by all except for the most unsophisticated. However, there is no one definitive list of great works and authors now nor in the past. The canon is not a fixed form and not developed from a unchanging standard. Instead, its form is in constant flux and change constantly trying to achieve equilibrium. The canon changes due to random
as well as reasoned influences. The canon represents not a single purpose, but a variety of purposes throughout history. In addition, the canon even when used for a specific purpose, such as literature curriculums within colleges and universities, changes dramatically over time. I argue that this historical process of canon formation is a chaotic structure creating recursive and reiterative relationships, which are a necessary element of the sensitive dependency of chaotic structures. This sensitive dependency, in turn, causes the canon to continually shift in shape and form in an unpredictable manner even as the patterns seen in the literary canon remain.

It is impossible for this work to cover the entire historical development of the canon and, at the same time, provide the substantial background information needed to clearly describe the process that has occurred. The compromise that I have tried for in this chapter is to work through the relevant developments of the canon formation that takes place in Britain during the sixteenth and seventeenth centuries and then to outline the development that leads into the formation of the literary tradition within the United States. The main purpose of this chapter is to supply an understanding of some of the great variety of influences underlying the canon. What will become clear is that the history of canon building reflects a varied and diverse smorgasbord of interests. The application of chaos and complexity theory allows us to re-think these often conflicting interests.

**Early British Canons**

The beginning of the literary canon is not fixed in a specific moment in time. A general perception in modern times portrays the beginning of the literary canon occurring with Samuel Johnson’s (1781) publication of his multivolume work *Lives of the Poets*
(see Kaplan & Rose, 1990; Lipking, 1981). However, the truth is the beginning of the English canon cannot be attributed to a single source. Instead, it is the result of a variety of biographical, critical, and anthologized works and political developments.

Richard Terry’s (2001) book *Poetry and the Making of the English Literary Past* explores the development of the literary canon from the sixteenth century up to and including the time of Samuel Johnson. Terry’s work demonstrates that the canon arises from a foundation of significant age and strength generally not otherwise noted. The earliest works appearing to give weight to particular authors include William Webbe’s (1586) work *Discourse of English Poetrie* and George Puttenham’s (1589) *Arte of English Poesie*. Both works note the classical authors such as Homer and Virgil, but include English authors. At least one purpose of these works was to promote the English language as capable of literary achievements on the same scale as the Latin and Greek classics. Within England during the Medieval and Renaissance eras, knowledge of Latin, Greek, and French characterized educated and civilized people, and English possessed only the slightest respect as a language. English appeared more as a vernacular language fit only for common usage and, generally, the educated classes saw it as a substandard, language. The biographical dictionaries struggle against this closed language system represented by the Latin and Greek classics. By showing the variety of literary creations that the English language was capable of producing, biographical dictionaries acted as apologetics for English as a language that deserved a place among the Latinate and Greek languages.

It is not only ironical that the English language once had to battle to gain representation into a canon of which it now heads, it is significant. The conflict between
the forces maintaining Latin and Greek as the status quo and the forces attempting to break into the canon during the sixteenth century connects with contemporary conflicts within the United States. For example, the forces that try to maintain English as the canonical language struggle against the forces trying to break into the canonical language to include the Spanish of the Americas. This suggests the existence of a system of relationship between the two forces that is ongoing. To find such a system as dynamic and fitting with the concepts of chaos and complexity requires further analysis showing that what we see is a persistent ongoing interplay between different forces and not just two endpoints of a linear relationship.

The biographical dictionaries mark the beginnings of a British literary canon. By the end of the sixteenth century, not only is Chaucer a highly respected author, but also of substantial enough merit for Terry to find a record of Robert Greene within Greene’s Visions (1592) declaring, “who hath bin more canonized for his works than Sir Geoffrey Chaucer” (in Terry, 2001, p. 35-36). A list of great English authors is formed by the end of the sixteenth century so that, along with Webbe and Puttenham, the works of Sir Philip Sidney and Frances Meres identify a literary tradition of Medieval poets that include “Chaucer, Gower, Skelton, and Lydgate” (Terry p. 37). The creation of this list promotes English as a language capable of the expression of high ideas and aesthetic qualities normally thought limited to Latinate and Greek languages. This process of literary works marking the development of English as a respected language continues into the next century.

This formation of literary lists of great authors develop not as acts of judgment separating the great writings from writings of lower quality, but instead are selected so as
to act as evidence for presenting English as a language deserving of a place alongside the civilized languages of French, Latin and Greek. This process develops English literature in relationship with the ancient classics. English literature does not come into being as an independent structure, but as a system in relationship with the French, Latin and Greek classical literature. The basis for the English canon stems from relationships, not as a list of works and authors independent of context. In this way, a canon’s structure appears as an emergent system. The canon becomes organized not just around the classics, but expands because of its interaction with its English surroundings. English authors and works add a multiplicity of literature to the classical canon despite the attempts to limit it to a closed system of the past.

These works of the history of English authors go only back to Chaucer and John Gower. Terry finds, the later work of William Camden’s *Remains of Britain* (1605) expands the list of authors. This work brings in authors before Chaucer including Caedmon, and Geoffrey of Monmouth but also expands the scope of the form of English works because the languages in use are Old English and Latin even though they are English works. Camden’s work, in turn, influences the selection of authors in Edward Phillip’s (1675) *Theatrum Poetarum* even though, Terry argues, that Phillip’s had no personal knowledge of their works with his ignorance partially reflected in misnaming Geoffrey and calling him an important English poet when he is distinguished by his prose works in Latin. Phillip’s work, as will be seen later, influences the material of Samuel Johnson.

The development of the English list of authors does not occur chronologically nor do they conform to an orderly development of language. The development of this list of
great English authors appear as random events and efforts of authors expanding the canon so as to include not only Latin classics, but English works in Latin, English works in Old English, Middle English, and modern English. This occurs without any apparent order and not by developing any clear understanding of the development of a literature. The order of this chaotic system emerges as not as a piece fitting into a puzzle, but instead as part of a dynamic system where each new piece interacts with the other.

Other sources in the development of a history of authors that Terry finds appear in the development of biographical dictionaries of the English poets published in the seventeenth century. He discusses the work of Thomas Fuller’s (1662) *The History of the Worthies of England*, which includes, not only biographies of aristocrats, religious figures, martyrs, and judges, but also authors. This work influences other works such as, William Winstanley’s (1687) *Lives of the most Famous English Poets* and Gerard Langbraine’s (1691) *Account of the English Dramatick Poets*.

Two elements of the biographical dictionaries form prevented critics perceiving them as canon-making, according to Terry. One element is the tradition of the time that fame reflects an exemplary moral life and often focused upon moralizing the author’s life rather than focusing upon their work. The power of a poet was neither upon a particular work nor even a collection of works but “in which the exposition of the life of a meritorious individual was supposed to have a morally exemplificatory role” (Terry, 2001, p. 82). The second element was that the form was exhaustive in its coverage of authors and as a result made no distinctions in the quality of their work. As a result, these biographies create a literary history of English writers selected based on their degree of fame and all, at least of the contemporary authors, were included.
However, even though the biographies do not directly deal with a hierarchy of literature, in the manner of dealing with fame, the dictionaries affect the standing of the author. The works made a distinction between writers of unambiguous fame and writers of lower standing, which, Terry suggests, “easily passes into a distinction between authors most and least deserving of it” (p. 85). More importantly, Terry elaborates on how the culture of the time perceived writing as fixing in place the sum of the author’s experience and life. An author was not honored because of the work produced, but the work was an honorific of the author. It was not the work that was immortal, but the author. Thus, the very beginning efforts in recognizing the greatness of authors had little direct connection with the quality of their works but with the supposed moral uprightness of their lives.

Terry describes other methods in which authors achieve a canonical standing besides recognition by biographical works. He notes how burial in the Poets’ corner in Westminster Abbey practically gives canonicity to poets. However, burial in this area of the abbey was not to acknowledge literary class but social class. Chaucer entombment at Westminster occurs not because of his literary greatness but due to his membership in the King’s court. However, the effect of his placement leads to a desire to honor Edmund Spenser’s poetry by placing Spenser’s remains near Chaucer. Terry notes that by the middle of the seventeenth century burial at Westminster Abbey becomes a practice of recognizing literary greatness. It became enough of an honor by then that Andrew Marvell created a satire on the burial of Tom May in which the spirits of Chaucer and Spenser rise up in anger against his inclusion. By the eighteenth century, Shakespeare, although laid to rest at Stratford-upon-Avon, is recognized by a cenotaph in the corner
avoiding a critical gap in the canon. Terry notes that despite the sense of honor placement in the Abbey gives, that selection is not made by any specific literary organization or authoritative society. Terry relates the story of Earl of Dorset, wishing to honor John Dryden, has his remains moved to the Poets’ Corner. Yet, Dryden’s placement becomes a recognition of his literary greatness. The efforts of one man were sufficient to award an author with special recognition and the result is a significant push towards canonization.

The stories behind Poets’ Corner take the appearance of a chaotic and dissipative system. Disorder is usually viewed negatively. However, the work of Ilya Prigogine showed that dissipative systems use disorder “to create new order” (in Wheatley, 1999, p. 21). Small changes disrupt the equilibrium of the system; turbulence grows until the system reaches a state far away from equilibrium. At this point, Fritjof Capra (1996) observes, dissipative systems reach a new state of order through self-organization, and the dissipative system demonstrates a new sense of structure in its movement. Chaucer’s placement in the abbey introduces random change into an orderly system of court burials over hundreds of years. The addition of each new author introduces growing perturbation until the burial of authors, which created the original disorder, leads to a new system of burials. Random small decisions that underlay the placement of bodies in Westminster abbey have had significant effects.

Terry notes that John Dryden’s *Of Dramatic Poesy* (1668), considered the earliest works of literary criticism makes use of the biographical materials from earlier works as does Samuel Johnson in his *Lives of the Poets*. Although Johnson’s work is admired for its literary criticism, one of the biggest problems with citing Johnson’s work as a
canonization of authors lies with the process in which the poets were selected. Both Terry and Kathleen Kemmerer (2005) find that Johnson selected only a few of the authors for his *Lives of the Poets* (Kememerer identifies four and Terry five). The remaining fifty-two authors had been pre-selected by the thirty-five booksellers who hired Johnson to produce the work. Their selection of poets, Terry and Kememerer describe, were based on retaining their literary copyright to authors recognized by and popular among the readers of the time. Johnson did not pretend he had selected the poets nor did he give unqualified praise to the selected poets. Regardless of the truth, history has regarded Johnson’s work as a sifting among the best poets to find the greatest. This fits with Roderick Nash’s (1989) comment, “of moment, after all, is not whether an idea won or lost, but how it functioned in history” (vii). Complexity theory suggests that it is recognition of patterns that is important. A recognition of a discrepancy between what is perceived in today’s time about Johnson’s work and its actual construction is important in the pattern revealed in the formation of the creation of the canon and what is developed about the system than in the fact that Johnson’s canon is not quite what people believed it to be.

Johnson’s accomplishment as a work of critical assessment of poets is not minimized by the recognition of it development; in fact, it aids in understanding Johnson’s contribution. However, the method of Johnson’s selection of poets reveals that the work known as the most significant assessment of meritorious English poets of the seventeenth and early eighteenth centuries occurs as a system of random development through history. The story of Dr. Johnson’s canon shows random acts having large consequences. The specific dependency in this case comes from an attempt by Johnson
John produces a work that creates a tremendous impact on the development of the literary canon in which there is a recursive effect caused by the multiplicities of critical references that follow over the next centuries. This creates a series of fractal images of Johnson’s canon shifting and changing over the centuries in which each reference create a new image larger than the last. Each image reflects the self-similarity of Johnson’s canon but each reference expands the reputation of *The Lives of the Poets* toward its modern day image as the foundation for the formation of the English canon.

The multiplicity of these generative relationships among biographical works, politics, and economics, speak to the complexity that exists in canon formation. Even when we focus on just one area, complexity exists, for example, within the promoting of English as a civilized language. Multiplicity exists in the conflict taking form in the late seventeenth century, which Terry identifies, as the *battle of the books*. The controversy struggled with the qualification of literature in which on one side were the institutions of education, which held that only classical texts of ancient Rome and Greece could qualify as literature and were at the heart of their curriculum. The opposing side, made up a disorganized group of a few authors and others, believed English works modeled after the classical texts could offer as much value. Thomas Rymer’s (1692) *A Short View of Tragedy* is an example of the conservative side of the conflict at work. Rhymer criticizes Shakespeare and other modern writers for their failure to observe the established rules of tragedy gleaned from that ancient classic tradition, but William Wotton’s (1694) *Reflections upon Ancient and Modern Learning* finds these same authors as worthy models of the ancient works. There existed yet a third side to the conflict in which
authors such as Daniel Defoe and Richard Steele struggled against what they saw as a monopoly of the classics over English and supporting a contemporary modern literature independent of the classical texts.

The results of this conflict becomes an interaction of these three positions so that in contemporary times there is an impression that the literature of the ancient classics stand independently, that English literature represents progress of literature from the ancient classic structure and that English literature stands independently of the Latin and Greek classics. Rather than any of the three winning the conflict, we find the three forming a dynamical relationship in the contemporary era so that there is an emergence of a new system. Many of the Latin and Greek works remain as part of the classical canon. Modern descriptions of Shakespeare echoes the ancient form of Greek tragedy, but adds new elements not present in the Greek form. Shakespeare can be presented as a new form independent of the ancients. Many literary works contemporary to Defoe and Steele are now part of the traditional canon. What appears as a conflict in the past emerges as a new system that allows for multiplicity. Although the advocates of the traditional canon in contemporary times only see the unity that is currently present, chaos and complexity allows us to acknowledge the existence of disequilibrium works toward an emergent structure with a new equilibrium.

The existence of complexity is much easier to see in the canon because of the framework of time. Terry argues, although female writers struggled to make a place for their works in the male-dominated society of early British literature, women writers did attain recognition in the sixteenth and seventeenth centuries. Terry does acknowledge that the release of multivolume collections of works by Samuel Johnson, John Bell, Robert
Anderson, and Alexander Chalmers listed not a single female author although each represented their work as a complete collection of English poetry. Although anthologies of literature often ignored women writers, Terry notes two issues. One is that not all anthologies ignored female writers completely. Terry cites anthologies such as James Greenwood’s (1722) *The Virgin Muse, Being a Collection of Poems from our Most Celebrated English Poets*, Robert Southey’s (1807) *Specimens to the Later English Poets*, which included “a large number of women poets” (p. 259), and Alexander Dyce (1825) published *Specimens of British Poetesses* indicate that women writers had published works of significance. The second issue is that anthologies were not the only process of recognition of writers, but that the biographical dictionaries of authors that played an important role in Johnson’s and other works included women writers. Phillip’s 1625 work included a section on women writers and Langbraine included six women playwrights. Terry notes at least four other works over the next century that includes biographical entries of women writers. Women writers from these past centuries had to struggle for recognition despite these biographical dictionaries clearly indicating a number of works produced.

One of the major criticisms of the modern canon has been the limited representation of female writers. Certainly, the beginning of the British canon frequently has been represented as having no female writers prior to the seventeenth or eighteenth centuries. For example, an undergraduate college survey text George K. Anderson’s (1979) *The Literature of England* contained not a single woman writer before the nineteenth century. A quarter of a century later, the W. W. Norton publishing company (2005) advertises that its *Norton Anthology of English literature volume 1* adds twenty
more women writers from its previous edition bringing the total of women writers to sixty and including representative pieces for the early eras of English literature. At the graduate level, programs now list women writers as standard reading. Doctoral reading programs in English such as at University of California at Santa Barbara (*First-qualifying exam reading lists, 2001*), The University of New Mexico (*Ph. D. reading list, 2003*), and Ohio State University (*OSU department of English M.A. exam list, n.d.* ) list women from these latter centuries. Although clearly women have attain significant greater representation, *Norton’s Anthology of English Literature: The Major Authors 6th (ed.)* (Abrams, 1996), a text clearly offered for undergraduate survey courses, limits women authors representation to two in the sixteenth century, one of which is Queen Elizabeth, and one in the seventeenth century. Thus, the attention given women appears to be sporadic and limited even as they gain in standing within the literary canon.

While the struggle for recognition of women writers seems to have attained a significant milestone, many of the women from earlier centuries had achieved some recognition before in the earlier biographical dictionaries that Terry notes. Recognition then is not a progressively escalating movement upwards but a movement like a tide with its rising and falling pattern. The recursion and iteration of recognition of women takes on a fractal image of self-similarity. The recognition of women in the sixteenth and seventeenth centuries is not the same as the current century, but there are enough connections to cause wonder in readers as to what the next hundred years hold in store for women writers.

By juxtaposing the early development of the canon in Britain against the modern era, we find a ghost of the canon haunting us similar to the ghosts William Doll (2002)
finds haunting the curriculum. Just as women writers of the sixteenth and seventeenth centuries struggled to achieve recognition, their ghosts also struggle for recognition in the canon of this era. As Dolle’s curriculum has “its own life force, spirit, ghost” which “controls” curriculum (p. 28), so to is our modern day canon controlled by the ghost of the sixteenth and seventeenth centuries in which we find a “complex unity with change and stability inherently united” (Doll, p. 38). The expression, ‘the more things change, the more they stay the same,’ is a phrase reflective of complexity. We see in the past and in the present attempts to change the literary canon even as the stability of the structure resists change and disruption of its equilibrium.

The presentation of the sixteenth and seventh centuries as a time in which the canon is coalescing into a solid form is misleading at best. Instead, this historical examination shows the great variety of variables going into the creation of a literary history. The forming of the canon is not the result of one or two publications or events, but of a multitude of publications, events, and forces interacting with authors and their works. These small occurrences create random interactions. From this disequilibrium of sensitively dependent markers, chaotic structure emerges into an orderly canon only to dissipate into disequilibrium. A doppelganger effect surrounds the modern canon that causes the sixteenth and seventeenth centuries to appear as ghosts of the modern day conflicts present in our canon war. The past and the present have an inherent relationship. While Newtonian science suggest that we can break the past and the present into separate parts and gain understanding, what we find in the science of complexity that to do so creates a description of the structure of the canon that does not exist.
American Literary Development: Scottish Influences

A canon as a reflection of national identity develops in the university curriculums of Scotland in the early half of the eighteenth century. Professors worked to establish models of proper and aesthetically-pleasing language usage which included Adam Smith. Smith, in his instruction of students, stressed the important connection of language and laws in that both reflected, “the customs and ideals of the culture” (Court, 1992, p. 19). English literature became a standard in the Scottish educational curriculum, and Court focuses on the ethnocentrism of the canon’s development in that the early motives of universities desired to help Scotland past the economic impediment of their “inferior” knowledge of English by acquiring the superior “cultivated English taste” and a higher civilized state (p. 18). As the languages of French and Latin were to English a century before, so English is to the Scots, the language of an educated class. This switching of roles suggests a recursive relationship exists between languages. Instead of languages acting as a Newtonian object static and independent, languages are continually interacting with other languages. To describe English, we are continually putting it into a relationship with other languages. On occasion, it acts the part of a subordinate to a perceived higher language, and at other times we find it in the role of the higher language.

E. D. Hirsch (1987) and Franklin Court (1992, 2001) both make note of the importance of the Reverend Hugh Blair, the first chair of the Regius Professorship of English established in Edinburgh, Scotland in 1762. While both note his publication of Lectures on Rhetoric and Belles Lettres (1783), only Court notes as Blair’s “most notable contribution to the development of English Literary Study” the forty-four volume edition
of *The British Poets*. Both critics note Blair’s purpose as the teaching of English rhetoric to Scottish students so that they could function in business and governmental dealing with the English. However, Court emphasizes the purpose also included developing the moral values of students through the study of aesthetics, while Hirsch emphasizes the necessity to recognize the background knowledge of the dominant English culture. He does not acknowledge that Blair’s purpose encompasses much more than the static transmission of bits of knowledge. Hirsch’s limited perspective of Blair’s purpose simplifies the roles that literature serves. Because of our cultural conditioning, the temptation always exists to view historical developments from a Newtonian perspective. A canon is much easier to describe if it is seen as a closed system, serving a limited purpose. The multiplicity of Blair’s purpose expands his use of a canon beyond an introduction to English culture. Instead, literature serves not only to familiarize students with the English culture but serves also to develop the aesthetic senses, and moral thinking of the students.

A developing canon was necessary, for the Reverend Hugh Blair, who saw, a “need of imitative models” (Court, 1992, p. 35). Court describes Blair as “a powerful influence on the future of the literary culture. His critical enthusiasm for canonizing certain writers and works, Court describes, as betraying more self-righteous personal zeal than professional discretion or exegetical skill” (p. 31), and his “ideology was situated firmly within the idea of cultural and racial supremacy” (p. 33). Smith’s and Blair’s approaches were separated by theory. Adam Smith “advocated the ideological and political value of the study, [and] Reverend Hugh Blair focused upon its aesthetic value” (p. 30). Although their approaches differed, these approaches both centered on the idea
that the English language, the language of the educated classes specifically, and the
English culture were the goals students should desire to possess. The formation of the
canon, which America would be receiving due to Blair’s influence, begins as a selection
of works formed around a specific identity. Because of this, the selection of works were
perceived as a closed system, closed to works not representative of the national identity
portrayed by the dominant culture.

**American literary development**

It is Blair’s *Lectures* that Franklin Court in *The Scottish Connection* (2001) shows
becomes the basic text in American colleges education. Yale, Harvard, College of Rhode
Island, Amherst, Columbia, Middlebury, and many other universities and colleges used
Blair’s text. At Harvard the promotion of English studies at the end of the eighteenth
century took the form of including a lecture “on the English language *one afternoon per
week* [italics added]” (p. 60). It is significant that the course, as in Scotland was not for
literary study but for the study of rhetoric and oratory. The combined purposes of the
courses, Court identifies, taught morality, oratorical style, and correct grammar. Studies
in literature took place under the study of Latin and Greek languages and not English.
Gerald Graff (1987) and Court, who draws upon Graff’s work, both note how that
reading English literary works was encouraged not as a study of literature but as a
practice for oratory through recitations. Graf quotes a Yale student remembering the
recitations include “the best things in the older English writers, but [also] inspiring poems
of Whittier, Longfellow, and other moderns” (p. 43). It is these studies in oratory that
Court argues leads to linking the study of English as a language to literary criticism, a
movement was to take the better part of a century. Graff’s and Court’s discussion
provides an image of language and literary development resembling the development of
English literature during the sixteenth and seventeenth centuries.

As English literature struggled to be accepted as possessing a literature of
equivalent value of the ancient classics, so does a similar process of literary development
go to work in the United States. Again, the development is placing literature in
relationship to other works with American literary works trying to establish themselves in
relation to the English canon. Repetition of a process points to canon formation
occurring as a system, and not indicative of a single cell structure. Canon development,
whether in the sixteenth century, the nineteenth century, or in the twenty-first century
does not occur as a series of independent events, but becomes a matter of a system of
relationships with the past.

Graff describes the nineteenth century college work in English as primarily
philological. Court notes that Yale in the 1820’s promotes the use of British and
American literature in the teaching of humanistic principles. Amherst, in 1827-28 tried a
drastic change in curriculum in which a new course of study concentrated on modern
languages and literature particularly on English literature, but by the next year so few
students enrolled, it was discontinued. Court suggests that it was possibly due to a lack
of enthusiasm among the faculty. It was possible Graff reports that a modern language
scholar at Yale could pass four years without an instructor making a single reference to
an English author or English literary work.

Even when English was studied such as at Harvard in 1872, Graff notes
Shakespeare was not necessarily placed in the historical context of the Elizabethan stage.
Instead, the plays were studied for figures of speech, grammatical style, or even parallel
The Literary Canon

references for exams. Graff relays an account of the 1883 meeting of the Modern Language Association where English literature is discussed as undeserving of serious study. The secondary schools reflected the models of colleges as far as the study of English. Kathryn Fitzgerald (1996) found grammar and rhetoric were the constants in the study of English, and literature was most often in Latin. Readings in English literature in preparation for college entrance exams were left up to the student. The purposes of English literary study were multiple and made to serve a particular purpose of the instructor. A literary work, as a part of a literary canon, gained no recognition itself. Instead, it served to aid in the development of language skills.

In contrast to the limited role of English literature studies in colleges, the epitome of the canon, Shakespeare, receives great public acclamation. Lawrence Levine (1988) describes in detail Shakespeare’s dominant role in American theater during the majority of the nineteenth century. The performances were exceptionally dramatic and “actors were vigorous, tempestuous, emotional” (p. 38). These performances drew crowds from all walks of life, reminiscent of Shakespeare’s own time. Shakespeare was seen as representing the American character, independent and connected to the common man. Plays were seen as moral lessons for individual character development such as the evils of jealousy or interracial marriage in Othello and the importance of filial duty in King Lear. Levine notes that an 1870 playbill specifically outlines the moral of Twelfth Night as involving the weakness of the mind when love overpowers reason.

By the latter half of the 1800s theaters became divided along class lines where a performance by Edwin Booth involved a cultured restrained audience and, on the same evening, Edwin Forrest performing for an audience described as coarse and loud, and
overflowing the seating. Levine notes though that a willingness to alter and adapt Shakespearian lines and to present the plays alongside animal shows and farces created a backlash against what was seen as the degradation of an art. By the end of the century, Shakespeare, Levine finds, “has been converted from a popular playwright whose dramas were the property of those who flocked to see them, into a sacred author who had to be protected from ignorant audiences and overbearing actors” (p. 72). The canon, at this point, takes on a role not previously seen. The purpose of the canon becomes a form of protection for the literary work. A static and concrete canon, rather than increasing access, causes the literature to be elevated above the popular culture because the literature becomes, as Levine suggests, “systems of taste” (p.177). Instead of the canon representing a national identity, the canon becomes an aristocratic form in a democratic nation. The purpose of the canon takes on role similar to Blair’s. The canon raises the individual above the common uncultivated masses. This context aids our understanding of Bloom’s suggestion that not all readers can attain aesthetic sensibility. This context for a canon also requires a perception that it is a closed system with no relationship to popular literature.

By the beginning of the twentieth century, change in the status of English, as a course of study, had developed. The Committee of Ten in 1892 recommended an emphasis on English study including literature. The National Conference on Uniform Entrance Requirements in 1894, Graff reports, created a list of texts for college entrance examinations in English thereby creating a canon of literary study in secondary schools. After World War I, Gregory Jay finds, American literature, as a part of the emphasis on
patriotism, becomes an institution and by World War II a canon of American literature takes definite form.

During the twentieth century, a list of literary selections became standard within anthologies. Within a few decades, the anthologies would be viewed as incomplete and of questionable value if specific selections were not anthologized. For example, the emphasis on the Puritan beginnings in American literature disregards Indian, French and Spanish writings, and it minimizes the writings from colonies other than in New England. This suggests only a single history existed of the colonies that formed the core of what was to become the United States (Dolle, 1990); (Krupat, 1998). An examination of Norton anthologies by Harold Kolb (1990) from the years 1957 to 1979, show the texts expand from 2,584 to 4,951 pages, an addition of over two thousand pages. However, the changes involve addition of modern writers rather than expanded views of earlier eras of American literature. In this way the canonical authors become “the representative of a social identity, an identity that explains . . . why the texts the author produces are, or are not canonical” (Guillory, 1991, p. 52). As a result of this reductionistic method of presenting the literature, students walk away believing there is a single history of the literature in the colonies that is of significance. The firmness of the entrenchment of these authors fits well the concept of curriculum ghosts as a perspective, and, unfortunately as a control on the curriculum (Doll, 2002).

The image of the Western canon as a progressive and developing form that moves smoothly from the Greeks to the Romans, to the English, to the American literary tradition is a static, reductionist, and, most especially, a false image. Those who uphold a traditional image of the canon try to create a “Newtonian time axis to represent a set of
observed real-world events, [they] try to produce somehow a ‘clock’ whose time moments (the vertices) can be put into one-to-one correspondence with the set of events” (Casti p. 200). Traditionalists portray the canon as segmented, sequential, and closed. Their view would look similar to figure 4.1. However, this examination of the development of the literary canon shows a multitude of variables, many unrelated to identifying the quality of a literary work, interacting in the development of the canon. The canon is sequential, but it also is non-sequential. Its development over time includes recursive movements between literary works. The form the canon takes alters with purpose and perspective. This historical description graphed would take a form similar, in its bidirectional and nonlinear movements, to Brent Davis’ (2005) diagram of his life where instead of an emphasis on chronological and hierarchical relationships, we find a swirling mass of intersecting relationships. The contrast between the traditional presentation of the literary canon and the canon as chaos and complexity view it might look similar to figure 4.2 on the following page.

**Figure 4.1 Traditionalist Literary Canon Fragment**

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Middle Ages → Renaissance → Romanticism → Victorian era → Modern
Chaucer → Shakespeare → Milton → Shelley → Yeats → T.S. Eliot
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Figure 4.2 Chaos & Complexity Canon Fragment
Chapter Five

Strange Attractors/ Strange Canons

Chapter One developed that critics tend to center on one of three different perspectives on the literary canon. Harold Bloom focuses on aesthetic influence upon the literary canon; John Guillory stresses the role of culture; and E. D. Hirsch emphasizes the historical as a source of knowledge. The three chapters that followed demonstrated that each perspective or facet of the canon operates as a chaotic and complex system. This final chapter will bring in another concept of chaos and complexity theory and then connect it with the three facets of the literary canon. The chapter will then conclude with describing the shape of the literary canon that results from a dynamic system of inextricably linked interrelationships.

Background to Strange Attractors

Strange Attractors develops from within chaos and complexity theory. Edward Lorenz (1993) believes that the strange attractor “is truly the heart of a chaotic system” (p. 50). Lorenz describes an attractor as where that state of a system occurs in a periodic repetition. A strange attractor, he describes, is “an attractor that consists of an infinite number of curves, surfaces, or higher dimension manifolds. . . often occurring in parallel sets, with a gap between any two members of the set” (p. 48). An illustration Lorenz uses to discuss strange attractors is in the tracks of a multitude of sleds on a snow-covered hill. Taking the sensitive dependent variables of speed and position, the variables are first placed in random positions, but as the movement is traced, the variables that develop
from the recursive and iterated calculations form figures similar to the symbols of *yin* and *yang*. The figures curve around each other, yet they never intersect. Each variable appears at random points, but the entire form clearly presents a pattern. These figures represent the form of a strange attractor. What develops is a cantor set where there is an infinite variety of sled runs within a finite restriction.

Harriet Hawkins (1995) expresses the general idea a little clearer. She describes an attractor acting as part of a system’s behavior where cycles are predictable such as the fixed point attractor in a glass of water or the periodic cycling of a pendulum’s movement. However, a strange attractor describes, Hawkins says, particles in random motion traveling “wildly and erratically” but within a restricted boundary of space (p. 126). Thus, prediction of a particle’s movement is impossible even though the boundaries and patterns of the system can be identified and diagramed. Katherine Hayles (1990) notes that the diagram of these strange attractors is not a Cartesian grid but a map of phase space. The diagram does not show a trajectory, but instead “is a map of changes in the system’s behavior over repeated cycles” (p. 148). Figure 5.1 is a common graphical representation of one strange attractor called a Lorenz attractor, also known as a butterfly attractor. This reference is to Lorenz’s initial 1972 paper “Does the Flap of a Butterfly’s Wings in Brazil Set Off a Tornado in Texas” that presented sensitive dependency, the basis of chaos theory referred to in chapter 1. Ivars Peterson (2006)
relates the story of a concert pianist using the Lorenz attractor for plotting a Bach composition and using it to compose a new piece, which reflects the Bach original score. Although strange attractors do not give answers, they provide a possibility for new insights to emerge.

Aesthetics, Culture, and History: A Dynamical Relationship

The literary canon is deceptive in appearance. Its shape, in its simplest appearance, is a list of authors and their works. Its shape, in a more complicated form, expands the list by dividing the list into genres, time periods, and countries of origins. Even at its most complex form, the canon appears simple in construction. Thus, these numerous and unceasing debates over which authors and what works must appear in the canon and their lack of any clear resolution seem to many people an unnecessary complication. Even for the debaters, the core of their arguments assume that once all the facts are in hand, and after critics have carefully assessed every author, the structure, as well as the shape, of the canon will be known.

However, the previous chapters show that the canon’s structure is immensely complicated in its relationships with three essential facets of the canon. Each area, aesthetics, culture, and literary history interact with the canon in a dynamic relationship that is sensitive dependent upon a variety of random forces. We find aesthetics in a chaotic and complex relationship with the canon stemming from multiple readers resulting in multiple perspectives and creating a self-similarity of experiences. Multiple perspectives also are found in the canon’s relationship with culture. Multidimensional cultural groups create multiple perspectives and this causes dissipative structures that continually lose equilibrium only to regain it in another form. Instead of a sequential
development of literary history, we find chaotic and complex relationship existing between the past and the present and recursive processes creating self-similar fractal images in the development of the canon.

While the previous three chapters have described three different relationships of the canon with each chapter developing how each relationship appears chaotic and complex, the chapters have not dealt with the interactions and relationships that are present between each area. This chapter attempts to take up this task of presenting the dynamics among these areas to enrich what I have discussed in the previous chapters at a more global level. Instead of the canon forming three different systems, the canon itself is a single system with aesthetics, culture, and its literary history interacting among one another in a chaotic and complex way. This description allows for the interplay that each facet exerts upon the other as it interacts with the canon. However, the number of the sensitive dependent variables, which interact, has increased the chaotic effect involved in such a relationship. If each facet is viewed as a strange attractor, the pattern of a literary canon emerges and re-emerges along a shifting boundary that holds both structure and change.

One illustration of the expansion of the relationship is to consider the dynamics involved between aesthetics and history. Although critics generally praise Shakespeare’s dramatic work extensively for his use of language, for any author to write in the same style today would be the height of folly. For all the praise received by the Romantic novels of the eighteenth century, the present day writers show little interest in writing in the same style as the Brontë sisters, Nathaniel Hawthorne, or Herman Melville. Even an analysis of Mark Twain’s *The Adventures of Huckleberry Finn* shows that although it
follows some of the Romantic characteristics such as an emphasis on the beauty of nature and the corruption of civilization, yet, it avoids the language style of the Romantics. In fact, Twain’s writing style was so dramatically different that the early censorship of the novel occurred due to the author’s use of coarse language and grammar coming from the common people who comprise the majority of characters in his novel. As presented in chapter two, literary style can be considered sensitive dependent involving both the writer and the reader, but instead of limiting the variable to only aesthetics, the variable of time interacts with style linking both aesthetics and history in a dynamical relationship.

This interaction between aesthetics and history in the style of language is also recursive. The language of the Renaissance writers, especially Shakespeare, made use of both a common and formal writing style. Over the next few centuries, writing styles emphasized a learned image so that by the time of the Romantic writers, writing styles were erudite, formal and stiff with long sentence structures. Then writing styles shift back towards an informal style. Ernest Hemingway, a half-century later, experimented with a writing style that relied heavily on short simple sentence structure that many writers regarded as poor writing. Yet, his writing won him the recognition of a Nobel Prize in literature in 1954.

The effect is that while the writing style of the past challenged the readers of its own age, it quickly becomes adopted as the norm and accepted as a standard for those who follow and then later still becomes an outlandish style of writing. The history of writing styles tells us that the aesthetics of writing is in a state of apparently constant change that is unpredictable and yet it moves in recursive patterns of development. What makes this relationship particularly chaotic is that Shakespeare’s language in the modern
era would not be aesthetically pleasing, but the same modern readers, who appreciate the language style of the Renaissance, find the language aesthetically pleasing as it appears in its context of Renaissance literature. These recursive movements of language styles are both a variable and part of the effect of the history of literature. A fractal image becomes the easiest way to describe the relationship between time, aesthetic language, and literature.

Culture also finds itself in a dynamical relationship with history and aesthetics. The aforementioned discussion of writing style certainly connects with culture. The problem of this relationship is that any one facet is always in participation with the others. Why did our perception of aesthetically pleasing writing styles change? At least one reason is that culture changed. During the Renaissance era and over the next several centuries, the educated classes of society considered artificial speech, that is speech full of artfulness with ornate and metaphorical language, respectable and desirable. The more ornate the language reflected a higher attainment in education. However, the writing of modern times centers on language usage of common speech including slang. As Levine (1988) notes “culture is a process, not a fixed condition; it is the product of unremitting interaction between the past and the present” (p. 33). Yet, we can narrow the fractal image to the specific form of a strange attractor. If aesthetics acts as a strange attractor, we can plot literary style as it moves down a slope of history interacting with the driving force of culture. This imagery allows for the perception and existence of a boundary operating on literary style even as changes occur.

By limiting the discussion to just a single aspect of literature, writing style, I hope to create a sense of how chaos and complexity shows the potential of viewing the literary
canon as dynamical system. This relationship of interactions among the facets interweaves itself around and through the literary canon simultaneously, which, consequently, makes us aware of the difficulty of analyzing the effect one facet has upon the canon. The interactions of each facet act as a strange attractor as the elements bear parallel relationships within the facet. At the same time, another strange attractor exists developed from the global interactions occurring among the facets. These facets also bear parallel relationships among themselves. Each change in one facet creates change in the other facets.

The reason this interaction is not generally recognized lies with our tendency towards Newtonian thinking. It encourages us to attempt to separate the facets and to focus only on the part of the structure that encourages linear thinking. Although the nature of a strange attractor displays both disorderliness and “an inherent orderliness” (Wheatley, 1999, p. 22), it is the orderliness of aesthetics, culture, and literary history that causes readers and critics to hope that the literary canon can be mastered. With each new analysis and with each discovery of new knowledge, the mastery seems just within their grasp. However, each facet acts as a strange attractor that constantly defies any fixed boundary beyond predictions; furthermore, the attraction and dispersion among strange attractors makes mastery an impossible goal.

The test of arguing for such a complex literary fractal as strange attractors is in their survival. Each strange attractor’s survival is confirmed when “it continuously resonates, on multiple scales—imaginative, aesthetic, intellectual, orderly and disorderly—in the minds and memories of individual readers of successive generations” (Hawkins, 1995, p. 103). Susan Aiken (1986) argues that “each era creates—and re-creates—its own
canons, according to a complex historical process that entangles aesthetic judgment and discourse with changing ontologies, mutable tastes, shifting cultural ideologies, political pressures, and academic exigencies” (p. 290). Aiken’s description captures the imagery of the recursive and multiplicity relationship between aesthetics, culture, and history depicting the movement of literary strange attractors.

**The Literary Canon as an Emergent System**

If strange attractors challenge the stability of the canon’s structure, is it possible that a multiplicity of canons exist serving different purposes for different groups of people? Alastair Fowler (1979) promotes the idea of multiple canons suggesting there are six different canons; the Official, Personal, Potential, Accessible, Selective, and Critical canons. These multiple canons exist because “the current canon sets fixed limits to our understanding of literature” (p. 98). Instead of recognizing only the authoritative and institutionalized literature of the Official canon, Fowler argues that canons of other works exist. He believes the literature that an individual responds to makes up a Personal canon that has “no simple inclusive relation” with the Official canon (p. 98). He sees these two canons as distinct from each other as well as distinct from the Potential, Accessible and Selective canons, which are separated by the degrees to which literary works are available in publication. Each of these canons are distinct from the Critical canon, where literature is marked by critical commentaries in academic articles and books over repeatedly the same authors. Fowler describes each of the six canons as influenced either by the reader or by the literary work’s prominence as a result of its historical development.
Fowler’s concept of multiple literary canons works within the perception of the literary canon as a dynamical system. Although the description of the multiple canons suggests independence, Fowler describes all of the separate canons “as standing for much larger groupings” (p. 100) and that the literary canon “constitutes an important image of wholeness” (p. 100). Fowler views the literary canon acting as a global system under which the six canons operate. While the makeup of each canon would be of interest, what is of significance is that he sees each canon forming a relationship with the larger canon. Such a relationship implies the possibility that a change in one of the six canons would affect the larger canon and such a relationship would then be sensitive dependent. Thus, Fowler’s description suggests that multiple canons are a natural aspect of the chaotic and complex system of the literary canon.

If multiple canons can develop from different readers and from the degrees of the availability of literary works, then each of the three facets of the literary canon would also encourage a multiplicity of canons. By applying the ideas developed in the previous chapters, I find that multiple canons grow out of each facet of the literary canon. The chaotic structure of aesthetics within the fractal nature of commentaries would encourage the development of multiple canons, as would readers’ experiences. The cultural facet would encourage a multiplicity of canons due to changes in American culture such as occurring when diverse social ethnic identities are acknowledged. The historical literary development results in a multiplicity of canons as different eras of time develop different canons due to the period’s unique experiences. Each of these canons shifts and changes as they interact with themselves.
All of these multiplicities of literary canons possess a self-similarity to the larger global canon. They are not the same, but there is a recognizable connection between them. This results in a series of recursions and iterations on a shifting scale. The large global canon of Western civilization affects the smaller European-centered culture, as well as affecting the African-American, Native American, and Hispanic cultures within the United States. Each of these smaller canons is turning in a series of interactions within themselves. However, they are also turning in a series of interactions with each other and with the other facets of the canon. Even as these series of interactions occur each of these has a simultaneous effect upon the global literary canon. The resulting image is a series of dynamical interrelationships occurring within a chaotic and complex system. Thus, emergence is a descriptor of what develops from chaotic and complex systems. Roger Lewin (1992) describes emergence as the opposite of the Newtonian view that analyzes the parts of a system. Emergence, Lewin describes as, “the creative principle. . .[which] emphasizes that from the interactions and relationships among the parts arises the self-organizing properties of the whole which does not exist in parts” (p.70). Emergence in the literary canon creates patterns of shifting movements that we witness with an open canon. These patterns offer insight into the deep structure found within complex structures such as the literary canon. While we cannot dictate change or stability, we can gain an understanding why changes occur.

Even though the supporters of the traditional perspective see the literary canon as complete and attempt to shut down any change, chaos and complexity theory reveals the literary canon as a self-organizing and emerging system. The local interactions of facets of aesthetics, culture and literary history develop this canon as a global construct which
then in its turn influences the three facets that helped to develop it. As we envision each as a strange attractor, we find the global construct creating emergent patterns even as at the same time each facet acts as “points of instability” (Capra, 1996, p. 190) when they clash with each other or with the global literary canon. The entire system acts as a dissipative structure. When these clashes occur, the global canon falls from equilibrium, but precisely in the state where the system is far from equilibrium, the dynamics can bring the canon towards a new emergent structure.

**Conclusion**

The recognition of the literary canon as a dynamic system operating within the framework of chaos and complexity does two things. It suggests that the attempt to treat the literary canon as a closed system is in the end futile. A closed system, Daiyo Sawada and Michael Caley (1985) observe, requires that its parts can “be isolated from its surroundings” (p.12); whereas they describe an open system can only exist by its interactions with environment. As I have shown, the canon is in constant interaction with its surroundings and attempting to blockade the canonical structure would be to cut it off from the interactions that maintain it thereby likely leading to its destruction.

The second development is that rather than an open canon being a threat to the classical literary canon, it is, instead, a natural part of the process of canon formation. The concepts of emergence, recursion and self-similarity entail that as new literature enters into the canon, the canon itself will continue to influence the three facets of the canon. Thus, the classical canon, even as it changes, maintains a recognizable shape. The end result of recognizing the literary canon as a chaotic and complex system
encourages the use of a diverse canon and the continued study of the processes of aesthetics, culture and history on the literary canon.
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VITA

Martin Thomas Meadows

Candidate for the Degree of

Master of Science

Thesis: THE LITERARY CANON AS A DYNAMIC SYSTEM OF CHAOS AND COMPLEXITY THEORY

Major Field: Teaching, Learning, & Leadership

Biographical Data:

Education: Graduated from Oklahoma State University Stillwater, Oklahoma in May 1986. Received Bachelor of Science in Secondary English Education. Completed the requirements for the Master of Science degree with a major in Teaching, Learning, & Leadership in Education at Oklahoma State University in May 2006.

Experience: Taught American and British Literature at Bartlesville High School 1986 to present. Served as Chair of Bartlesville school district 2000-2004

Professional Memberships: Phi Kappa Phi Honor Society. National Education Association
Title of Study: THE LITERARY CANON AS A DYNAMIC SYSTEM OF CHAOS AND COMPLEXITY THEORY

Scope and Method of Study: This theoretical study explores the structure of the literary canon. The paper identifies and analyzes three facets: aesthetics, culture, and history of the canon. Selected concepts of chaos and complexity theory describe the canonization process including sensitive dependency, self-similarity, recursion, multiplicity, and fractal images. Next, the interactions of the three facets are described in terms of global interactions within the conceptual framework of chaos and complexity.

Conclusions: The literary canon is a system rather than an object. Concepts from chaos and complexity theory clarify the dynamics taking place within the system of the literary canon. Contrary to the notion that the canon must be a closed system, the concepts of dissipative structures and emergence shows the tendency of the literary canon to operate as an open system in which its equilibrium cannot restrict the movement of iterations due to the sensitive dependency of its interactions.

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