

Fractal Analysis of W.E.B. Du Bois' *The Souls of Black Folk*

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Abstract

This paper teases out and analyzes the fractal complexity that exists in one of W.E.B. Du Bois' seminal works titled *The Souls of Black Folk* (1903). Fractal or the fractal analysis process is generally defined as a graphical approach whereby sections are subdivided until those sections are smaller than one screen pixel in size. Essentially, the power of the fractal process is that regardless of the size of the section, one can still produce more detail by assessing the procedure on the new, smaller section (Bangura, 2010). This paper offers a critical assessment of *The Souls of Black Folk* employing fractal analysis, which until now has not been done. I argue that the complexity of the ideas discussed by Du Bois mirrors the complex lives of Blacks during this time. Utilizing fractal analysis allows me to empirically demonstrate how difficult life was for Blacks in the 20th Century. Not only does fractal analysis offer a novel approach to examining text, it also contributes to existing literature by examining concepts authors studied in their works.

Keywords: Fractal, Analysis, W.E.B. DuBois, Souls, Black, Folks

Introduction

This paper entails a fractal analysis of W.E.B. Du Bois' *The Souls of Black Folk* (1903). In order to properly understand this work, it is appropriate to begin with definitions of the four major concepts: (1) fractal analysis, (2) souls, (3) Black, and (4) folk. By defining these concepts, the reader will gain a better insight of this research.

According to Ron Eglash, "fractal geometry has emerged as one of the most exciting frontiers in the fusion between mathematics and information technology. Fractals can be seen in many of the swirling patterns produced by computer graphics, and have become an important new tool for modeling in biology, geology, and other natural sciences. While fractal geometry can take us into the far reaches of high tech science, its patterns are surprisingly common in traditional African designs, and some of its basic concepts are fundamental to African knowledge systems" (1999, 3). The fractal or the fractal analysis process has been commonly defined as a graphical approach, whereby sections are subdivided until those sections are smaller than one screen pixel in size. Essentially, the power of the fractal process is that regardless of the size of

the section, one can still produce more detail by assessing the procedure on the new, smaller section (Bangura, 2010).

In the text Du Bois defines the terms souls, Black, and folk. In the introduction, “souls” reflect the sense of dualism that is a theme in Du Bois’ work. As he states, “The ‘souls’ of the title is a play on words, referring to the ‘twoness’ of the Black American: two souls, two thoughts, two unreconciled strivings...in one dark body...” (Du Bois, 1899, xix). Du Bois’ use of “souls” refers to his concept of double-consciousness whereby African Americans are torn between two worlds: (1) that of the American way of life looked upon as a foreigner or someone different than their White counterparts and (2) that of their connection to the continent of Africa. This notion of double consciousness is a prevailing concept that is delicately woven throughout the work.

According to Du Bois, the “Black” or “Negro” “is a sort of seventh son, born with a veil, and gifted with second-sight in this American world, a world which yields him no true self-consciousness, but only lets him see himself through the revelation of the other world” (1899, xx). African Americans, according to Du Bois, are battling a duality. For him, to survive the realities of his circumstances, the Black man (and woman) must navigate living in two conflicting spaces: one being the White world, where s/he must show up in a way that is not displeasing to Whites and the other is his/her more authentic self. This conflicting duality has led to this notion of double consciousness because Blacks are forced to see themselves through the eyes of others.

“Folk” is the last major concept Du Bois defines. Folk is not a term delineated for the sole description of Blacks. He often used the term White folk to describe the pejorative majority that lives free of the “veil.” The “veil” is a term that Du Bois used to describe an obstructed and sorrowful view of society.

Now that the four major concepts have been clearly defined, it is my hope that the reader now has a better understanding of what is meant by the major terms used. This paper offers a critical assessment of *The Souls of Black Folk* employing fractal analysis, which until now has not been done before. I argue that the complexity of the ideas discussed by Du Bois mirrors the complex lives of Blacks during this period. Utilizing fractal analysis will empirically demonstrate how difficult life was for Blacks in the 20th Century. Not only does fractal analysis offer a new approach to examining text, it also contributes to existing literature by examining concepts authors have studied in their works.

The next section consists of a review in chronological order of works that examine and serve as critiques of Du Bois’ text and the research methodology. The paper then moves to an in-depth data analysis utilizing the fractal analysis technique and assesses previous findings in terms of my new findings. Lastly, I conclude by summarizing my findings and how they can help to offer a new methodological approach to analyzing similar works.

Literature Review

W.E.B. Du Bois is revered as a great sociologist, cited numerous times as a prolific author, and credited for being a Black intellectual. *The Souls of Black Folk* is known as the author’s most notable work and continues to encourage debate about race in America. *Souls*, along with *The Negro*, *Philadelphia Negro*, and *Dark Princess* to name a few all explore the issue of race in America and around the world. *The Souls of Black Folk* was received with mixed reviews when it was first published in 1903. The following review consists of material found in connection to

his title work and is organized in a chronological order of the dates of publication.

John Daniels is one of the first to write a review of *The Souls of Black Folk* in *Alexander's Magazine*, which was an African American magazine that was published from 1905 to 1909 in Boston, Massachusetts. Daniels states that the book was essentially a poem and the facts in the text were poetic (Moses, 1978). Although Daniels finds the book to be bitter and sad, he does not think of it as a pessimistic nor cynical text. He also does not view the book as an anti-Booker T. Washington argument; he simply sees Du Bois' work as a book of poems (Moses, 1978). He encourages readers to review the work in a critical manner, not scientifically, but artfully. He adds that Du Bois' work is a spiritual and not an intellectual offering that should appeal to one's heart and not the head (Schneider, 1997). In sum, Daniels discusses the paradoxical style Du Bois uses to display his feelings of legitimacy, bitterness, and despair.

Stanley Brodwin (1972) analyzes one of the major themes of the book: the veil. Brodwin first praises Du Bois for using a variety of literary forms to voice frustration and confusion with the psychological and societal state of Blacks. He goes on to name some other 20th Century writers who only used fiction to describe their frustration with the plight of Black folks: e.g., Paul Laurence Dunbar and Charles Waddell Chesnutt. Throughout the review, Brodwin identifies the literary styles and techniques Du Bois uses to define the meaning of the "veil," such as essays, newspaper articles, novels, speeches incorporating symbolic patterns, musical motifs, and rhetorical tropes. The author states that Du Bois used these different literary techniques to define and illustrate the meaning of "the veil." Brodwin praises Du Bois for presenting "an intensely personal vision on how one man confronted and transcended the complex tragic life generated in living behind the veil of the color line" (Brodwin, 1972, 1). Brodwin adds that *The Souls of Black Folk* assisted those in the Black community to understand that in order to achieve a social revolution, the assistance of Whites would be needed.

Similar to Du Bois' text *Darkwater: Voices From Within the Veil* where Du Bois speaks about living behind the veil and the injustices faced by Blacks and women during Jim Crow. He also argues that if we are to survive, Blacks and Whites will have to work together. Brodwin further notes that in Du Bois' work he highlights the fact that the economic strains of the times affected both Blacks and Whites alike; "therefore, *The Souls of Black Folk* had to be not only a force in awakening Black pride, but also a spiritual guidebook for Whites, most of whom had little awareness of the genuine strivings and psychic realities in Black folk" (Brodwin, 1972, 306). In addition, in *Dark Princess*, which tells the tale of a dark Messiah who would save black America and lead them to liberation and ultimately Black superiority, Du Bois made the conscious effort to praise the beauty of the princess. Much to his critics' chagrin, Du Bois sought to instill a sense of Black idealism and pride. Brodwin also applauds Du Bois for being able to bridge the gap between the two mentally and culturally different audiences to which the readers belonged.

Arnold Rampersad (1989) reviews *The Souls of Black Folk* and states that Du Bois' work was a response to Booker T. Washington's *Up From Slavery*. Rampersad argues that the rigid critique of Washington stems from Du Bois' distaste of his ideas of how the Blacks could achieve advancement. Washington focused on Blacks learning a trade and to stay within their own communities; whereas Du Bois believed in higher education and integration. In the text titled *The Suppression*, Du Bois offers firsthand accounts on how slavery was a thriving business for the United States and the lengths the government took to prolong slavery and the ramifications for doing so. The review goes on to discuss in-depth the intrinsic differences in the *Souls of Black Folk* and *Up From Slavery*. Hence, the review turns into a comparison.

Rampersad states that Du Bois and Washington were two different men, although both were Black. Washington was a direct descendant of slavery who was raised in the South whereas Du Bois' ties to slavery were further removed, and he was from the North. Rampersad affirms that these two differences are the backbone of each of their respective works. Overall, the review displays a concise argument that presents Du Bois as a deliberate and conscious writer.

Bruce Jr. (1992) discusses the term "soul" in this context introduced in 1897 and coined by Du Bois in 1903. The author examines the origin of the term saying that Du Bois used European Romanticism and American Transcendentalism as the springboards for the idea. Bruce goes on to discuss the rapid change in 20th Century America, stating the industrial change seen across the United States begged for the revitalization of the spirit. Du Bois' theme of double consciousness addressed this by acknowledging the existence of two souls. The idea separates his African ways from his American ways: African traditions viewed as soulful and American traditions viewed as soulless. Bruce also discusses the medical origin of the idea of double consciousness. In 1817, there was a woman by the name of Mary Reynolds who fell into a deep sleep and woke up with a different personality. Months later, she woke from another deep sleep possessing her original personality: psychologists then called this double consciousness. The twoness/two personalities she experienced and the industrialization of the 20th Century, according to Bruce, may have influenced Du Bois to use the term.

To commemorate the 100-year anniversary of the book, Crouch and Benjamin (2002) give an overview of Du Bois' life and critique two essays in the book: (1) "Of Booker T. Washington and Others" and (2) "Of the Training of Black Men." The authors debate subjects such as slavery, the Abolition Movement, the Civil War, Reconstruction, and several other issues that affected and continue to affect African Americans. Although they do not agree with some of Du Bois' thoughts and ideas, they both contend that the book has stood the test of time. They credit Du Bois for offering Whites an insight into the lives and hopes of their Black compatriots. They also argue that the issues Du Bois spoke about and lived through are still very relevant today.

Walker (2004) examines the reconstruction of Black identity in the text and how Du Bois saw the development of Black identity within modernity. The author argues that "In as much as Du Bois articulates a willed Black identity, he also posits a construct of Black identity that is continually shifting, ambivalent and, at times, ambiguous" (Walker, 2004, 83). This ambiguity could cause confusion or a sense of disorder leaving the reader to guess what Du Bois is attempting to communicate. In honor of the centennial anniversary of the publication of *The Souls of Black Folk*, Walker revisits the text as a way to pay homage to Du Bois and the significance and magnitude of his work. The author does criticize Du Bois for what he calls "his blindnesses, biases, and boundaries—particularly with respect to his arrested feminist conscious and underdeveloped class analysis" (Walker, 2004, 84). Walker reexamines two passages in Du Bois' book titled *Of Spiritual Strivings* in order to expound on Du Bois' development of Black identity. The author argues that identity is at the core of progress in such a globalized world where culture, capital and commerce are intertwined. Walker agrees with Du Bois that even at times of interdependence, it is vital to "posit provisional resolutions that privilege diversity, individuality, and fluidity" (2004, p. 91).

Holton (2010) looks at how Du Bois established a matrix for analyzing various social systems. The author first shows how Du Bois' iteration is used in analyzing race. She then speaks about Du Bois' introduction and narrative of institutional racism and inferiority displayed in *The Souls of Black Folk*. Holton shows that Du Bois weaves this theme into the work in a very

obvious, overt, and perhaps subconscious manner as follows:

The story of the "souls of Black folk" for Du Bois is not a singular, unified, or consistent narrative, but a multifaceted and fragmented story that demands to be told and retold in "many ways." In *Souls*, this iterative approach allows Du Bois to explore the complexity of double consciousness, to represent the various experiences of life within the veil, and to give weight to the experiences of the community as well as the individual (2010, 23).

Holton also notes that in order for state-sanctioned racism to succeed, there had to be scientific explanations as to why Blacks were inferior. These "explanations" and stereotypes had to be flexible enough to work in various contexts. This flexibility or making up stories as to why Blacks were to be discriminated against in different scenarios led to inconsistency and instability (Holton, 2010). Due to the unstable and inconsistent message of why Blacks are less than Whites, Holton believes that this gave Du Bois the perfect entry point to do his work. Du Bois was able to step in and correct the distortion of what it means to be Black in America. In his text, *Black Reconstruction in America 1860-1880*, Du Bois also made it a point to dispel the misconceptions that all Blacks are lazy, ignorant, dishonest, and extravagant by offering examples that countered these widely-held beliefs by Whites. Du Bois, through critical engagement with the methodology Whites used to justify discrimination, was able to discount their rationale and conclusions that due to biological and or cultural reasons, Blacks were inferior (Holton, 2010). Holton adds that "In addition to exposing the fallacies of racial science, Du Bois also critiques the ways in which historical master narratives of Western cultural progress and U.S. nationhood validate and reproduce the assertions of racial science" (2010, 25). Holton further credits Du Bois' use of non-traditional iterative, employing repetition, reiteration and re-examination as a way to not only challenge his views and beliefs but to also challenge readers to rethink their definitions of race and what it means to be Black.

Shaw (2013) takes a new approach to studying Du Bois' seminal book. Instead of focusing on the concepts Du Bois discusses such as double consciousness, the color line, the Talented Tenth, and other issues, Shaw explores less examined ideas. The author contends that her goal is to view *Souls* as a complete work, a forest if you will, instead of focusing on certain passages, concepts, and ideas, or the trees, as many before have done. In order to do so, Shaw analyzes the history, sociology, economics, politics, religion, music, anthropology, and psychology incorporated in *The Souls of Black Folk* (Shaw, 2013). By taking this holistic approach, Shaw discovers that Du Bois' book can be all things to all people, which is why readers tend to focus on certain passages that they feel speak to them directly. Nonetheless, Shaw contends that the departure of her approach to analyzing the book in this manner is to offer a synopsis of Du Bois' influential book, as well as to demonstrate the need to look at his work through another lens. She believes that by doing so, it offers a fresh perspective of the aims of striving in the souls of Black folk.

The general limitations of these works are that each author (except Shaw) drew from different parts of Du Bois' text; some chose to focus on the literary techniques while others focused on the plight of African Americans then and now. Therefore, the existing literature on *The Souls of Black Folk* is not a cohesive body of work. Shaw is the first, to my knowledge, to view the text holistically. This paper follows her lead as a major systematic analysis of the book. Nevertheless, this research examines *Souls* using an African-centered approach; thus, it fills a

gap in the literature. The hope is that this work challenges the current literature, raises new questions, and inspires others to take an African centered approach when analyzing literature.

Theoretical Framework

W.E.B. Du Bois' work has made a significant contribution to Sociological Theory. It is defined as "a set of interrelated ideas that allow for the systematization of knowledge of the social world. This knowledge is then used to explain the social world and make predictions about the future of the social world" (Keel, 2010, 1).

Zuckerman (2004) examines Du Bois' work from a sociological perspective and emphasizes Du Bois' theoretical contributions. The book is a comprehensive examination of Du Bois' theoretical footprint across many disciplines. Zuckerman notes that although Du Bois is widely praised as a political leader in the African American community, his reputation as a founding sociologist and penetrating social theorist has been distinctly muted (Zuckerman, 2004). Du Bois, Zuckerman highlights, published 20 books and thousands of essays and articles throughout his life, yet his name was neither mentioned in any of his undergraduate or graduate sociology courses nor in the contending books on Sociology. The author states that Karl Marx, Max Weber, and Emile Durkheim are considered the trinity of Sociological Theory. Zuckerman also notes that while they made substantial advances in the study of human behavior and its relationship to social institutions, they are not alone in their contributions. He points out that other scholars such as Du Bois were just as important and groundbreaking (Zuckerman, 2004). Zuckerman argues that not only was Du Bois a literary and political giant during the 20th Century, he was also one of the most influential founders of the Sociology discipline (Zuckerman, 2004).

Zuckerman credits Du Bois for being a pioneer of Urban Sociology, an innovator of Rural Sociology, a leader in Criminology, the first American sociologist of Religion and, most notably, the first great social theorist on race. Zuckerman argues that "What makes Du Bois' astonishing exclusion from the canon of western sociology so disturbing is that he is arguably one of the most brilliant social theorists this country has ever produced, and without question, he is one of the most imaginative, perceptive, and prolific founders of the sociological discipline—American or otherwise" (Zuckerman, 2004, 405). As a pioneer of Urban Sociology, Du Bois' firsthand look and subsequent writings on the urban community and the lives of those in urban areas was groundbreaking. Du Bois for his text titled *Philadelphia Negro* interviewed over 10,000 African American men, women and children in Philadelphia's Seventh Ward examining various issues from education, literacy, labor, employment and income to alcoholism, poverty, crime, religion and more (Zuckerman, 2004). Zuckerman also credits Du Bois as a pioneer of Rural Sociology for his analyses on small southern towns exploring issues on inter/intra-race relations, class divisions, sex, the lingering impact of slavery, and the effects of industrialization on small agricultural communities.

In the book, the author declares Du Bois a one of the nation's first criminologists for his work on crime in Philadelphia; the first American sociologist of religion for editing and writing a significant amount of *The Negro Church* book-length sociological study of religion that was published in America; and the first sociologist of race for his ability to weave how race and race relations affect other social conflicts and institutions. Zuckerman argues that these themes were the cornerstone of Du Bois' work. Zuckerman also contends that race was the most socially significant social construct for Du Bois, similar to what class was for Karl Marx and gender was

for Charlotte Perkins Gilman (Zuckerman, 2004). The author goes on to note that not only was Du Bois a pioneer in these areas and the first great social theorist of race, he did not stop there; he wrote extensively on education, economics, international relations, gender, American and world history, the family structure, art and literature. Du Bois, according to Zuckerman, called for a convergence of theory and practice arguing that it is necessary to properly understand the deeds of humans.

Zuckerman compares Du Bois with other prominent social theorists such as Marx, Durkheim, Weber, Lenin, Gilman, Veblen, Simmel, Mead, and Comte noting the vast similarities between them; however, Zuckerman points out that Du Bois offers an unrivaled distinctive theoretical perspective. His prudence for linking racial analysis with class analysis Zuckerman contends may be the most important theoretical contribution. Zuckerman contends that roughly 100 years prior to hooks (1984) or Collins (2000) discussed connecting systems of oppression, Du Bois methodically connected race and class (Zuckerman, 2004). The author expresses that the most distinctive theoretical conviction was Du Bois' knowledge that race cannot stand alone apart from economic realities. He also notes that while Du Bois linked race and class and appreciated Marxist analysis of class and economic issues, he failed to address the color line. Du Bois was able to correct this limitation by including race alongside class struggles (Zuckerman, 2004).

Although Zuckerman credits Du Bois for his theoretical contributions, he acknowledges some of his shortcomings as well. He notes that Du Bois had poorly constructed surveys and ambiguous sampling methodologies. Du Bois referred to his subjects as "ignorant," "intelligent," or "immoral," which would be inappropriate today. Zuckerman adds: "His theoretical assertions were often stated implicitly, rather than explicitly; that is, his major theoretical insights were often developed and articulated through detailed historical illustrations and ethnographic analyses, rather than succinct statements or exact theoretical declarations" (Zuckerman, 2004, 406). The author further states that although Du Bois was an early supporter of feminism, his work did not always incorporate gender in a way that is expected of social theorists today. Despite these shortcomings, Zuckerman concludes, Du Bois' understanding of the human condition is unmatched.

Research Methodology

The methodology used is a pluridisciplinary methodology which consists of using two or more disciplines or branches of learning to examine a phenomenon, thereby contributing to those disciplines. Bangura (2012) states that Chiekh Anta Diop called on African-centered researchers, as well as others, to become pluridisciplinarians when studying aspects of African history. Bangura explains that "The history of pluridisciplinary methodology can be traced back to the mid-1950s with the works of Diop and Jean Vercoutter" (2012, 1). As Bangura notes, Diop who is recognized as one of the greatest African intellects of the 20th Century studied Egyptology, African History, Anthropology, Sociology, Economics, and Linguistics.

Diop and Vercoutter, a French Egyptologist, argued that in order to accomplish their research goal, they needed to study and integrate several disciplines. Bangura highlights Clyde Ahmad Winters and Alan Anselin as "two major scholars who have advanced the pluridisciplinary approach by combining anthropological, historical, and linguistic methods to explain the heritage of African people, constituting a third school of Africancentric researchers" (Bangura, 2012, 2). Employing various disciplines permits the formation of new ideas and

innovative ways of learning and presenting new concepts. This paper utilizes linguistics and mathematics as the two branches of learning apropos Du Bois' text studied.

The unit of analysis is "linguistic presupposition," which is defined as "an implicit assumption about the world or background belief upon which the truth of a statement hinges" (Bangura, 2012, 3). The linguistic presuppositions for this paper are delineated from Du Bois' *The Souls of Black Folk* vis-à-vis topics, which are denoted as the "a priori features, such as a clear and unquestionable change of subject focus, for defining types of linguistics presuppositions found in an examined text" (Bangura, 2012, 10). The topic changes were recorded as "order" or "disorder" for the purposes of conducting the fractal analysis. *Order* and *disorder*, a two-dimensional ad hoc classificatory system was developed within which the data were categorized. The first of these categories entails the presuppositions of *order*: i.e. presuppositions that suggest a condition of logical or comprehensible arrangement among the separate elements of the topic. The second category encompasses presuppositions of *disorder*: i.e. presuppositions that suggest a condition or place of great confusion.

Bangura states that choosing a writer's topic as the recording unit makes it easier to pinpoint topics and the correspondence between them and the content categories. On the one hand, utilizing a writer's topic as a unit of analysis is appropriate because if the recording unit is too small—such as a word—each case will be unlikely to possess any of the content categories. Additionally, small recording units may obscure the context in which a particular content appears. On the other hand, if the recording units are too large, such as a stanza, it will make it difficult to isolate the single category of a content that it possesses. In this research, two methods were appropriate. First, there is the clear and uncontestable change-of-the subject focus. Second, topicalization was found to have been used to introduce new ideas, events, objects, etc.

A description of the employed fractal methodology is imperative in order for the reader to understand the methodology. The concept of fractal remains a conundrum; nevertheless, Bangura offers a universal definition: A fractal is "a pattern that repeats itself on an ever-diminishing scale" (Bangura, 2012, 13). Clifford Brown and Larry Liebovitch explained fractal methodology and its application in the social sciences in their work *Fractal Analysis*. The authors state that several early applications of fractal mathematics appeared in the social sciences. Some of the works that utilized fractal analysis include Vilfredo Pareto's 1897 study of the distribution of wealth; Lewis Fry Richardson's 1948 and 1960 studies on the intensity of wars; and George Zipf's 1949 studies of the distributions of word frequencies and city size. According to Bangura, "Brown and Liebovitch argue that while these ideas were known by experts in the field, they were isolated, quirky concepts until Mandelbrot developed the unifying idea of fractals in the 1970s and 1980s" (2012, 13). The authors discovered an increase in the use of fractal mathematics by social scientists in their research. As Bangura notes, "They cite examples that fractal analysis had been employed by criminologists to investigate the timing of calls for assistance to police, by sociologists to investigate gender divisions in the labor force, and by actuaries to study disasters" (2012, 13). The array of the applicability of the use of fractal analysis in the social sciences led Brown and Liebovitch to call for further studies to examine the commonality that unites these studies which would lead to a comprehensive overall understanding of their causes and occurrences.

For the purposes of this paper, after calculating the data for the univariate and bivariate statistics for the descriptive and inferential statistical analysis, I plotted the data for oscillations between *order* and *disorder*. This method allowed me to visually illustrate the attractor reconstruction of the text. As can be seen from Figure 1, a log-log plot (or graph) was used to

symbolize the observed units described by the two-dimensional variable encompassing *order* (y) and *disorder* (x) as a scatter plot/graph. The two axes exhibit the logarithm of values of the two dimensions, not the values themselves. If the relationship between x and y is described by a power law,

$$y = x^a;$$

then the (x, y) points on the log-log plot form a line with the slope equal to *a*. Log-log plots are broadly used to represent data that are expected to be scale-invariant or fractal because, as stated before, fractal data usually follow a power law. A logarithm is an exponent. It is illustrated in the following definition.

For $b > 0$, $b \neq 1$ and for $x > 0$,

$$y = \log_b x \text{ if and only if } b^y = x$$

Therefore, since a logarithm is an exponent, it is easy to use exponent laws to ascertain mathematical generalizations.

Table 1: Univariate Statistics by Types of Presuppositions in *The Souls of Black Folk*

Chapter	Presuppositions of Order (N)	Presuppositions of Disorder (N)
Our Spiritual Strivings	34	60
The Dawn of Freedom	75	56
Mr. Booker T. Washington and Others	27	39
The Meaning of Progress	29	33
The Wings of Atlanta	24	18
Training of Black Men	34	37
Black Belt	54	36
Quest of the Golden Fleece	23	41
The Sons of Master and Man	48	33
The Faith of the Fathers	25	39
The Passing of the First-Born	12	7
Alexander Crummell	18	16
The Coming of John	38	46
The Sorrow Songs	23	17
Total = 941 or 100%	463 or 49%	478 or 51%
Mean	33	34
Standard Deviation	16.47	15.23
Range	63	53

Source: Self-generated by the Author

Data Analysis

Before engaging in the fractal analysis of the data generated from Du Bois' text, I begin with a description of the results produced after a thorough inspection of his book. Table 1 reveals that

941 topics were discovered in Du Bois' 14 chapters. Of these, 463 or 49 percent are presuppositions of *order* and 478 or 51 percent are presuppositions of *disorder*. The mean for the *order* category is about 33 and the mean of the *disorder* category is roughly 34; the standard deviation for the presuppositions of order is 16.47 and 15.23 for disorder. The range of presuppositions of order is 63 whereas the presupposition for disorder is 53. The closeness of these figures shows that Du Bois' work is neither orderly nor disorderly in its totality.

Figure 1 is a diagram of the orderly and disorderly presuppositions seen in *The Souls of Black Folk*. Figure 1 starts with signs of order and then takes a sharp turn toward disorder. The figure proceeds into a chaotic frenzy and then takes another sharp turn back towards order. This figure mirrors the way Du Bois wrote throughout the work. He would commence a chapter with clear concise principles; however, as the chapters progressed, Du Bois would take the clearly stated principles and make them extremely complex.

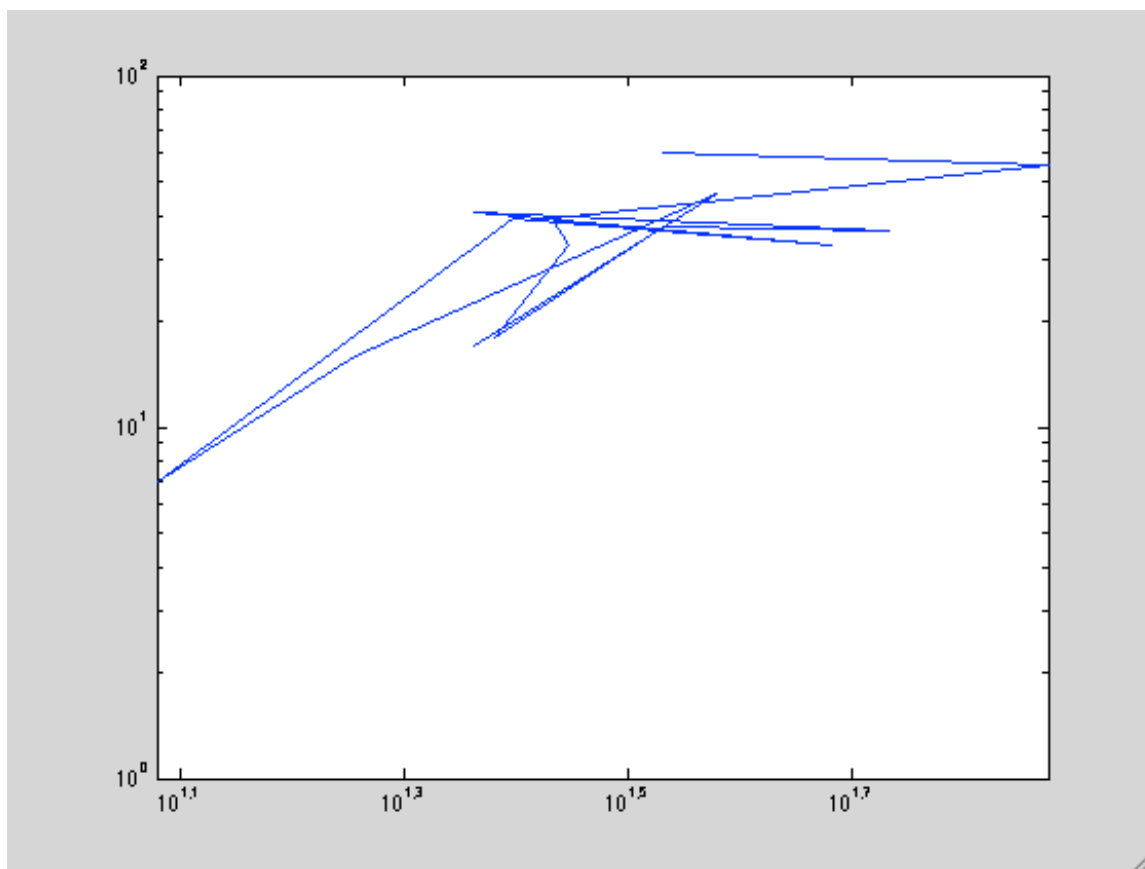


Figure 1: Loglog Plot Order vs. Disorder in *The Souls of Black Folk*

Binary Logistic: $y = .630 + .242x$

$R^2 = 0.397$; $p = .016$

In performing the quantitative analysis, it was necessary to perform a binary regression to evaluate the relationship between the order and disorder (x, y). The binary logistic statistics reveal that the relationship between the two dimensions is statically significant at the 0.05 level.

After evaluating the data, it is imparitive to revists the literature to see if the findings conflicts or coincides with the works. John Daniels' review in the *Alexander Magizine* bodes

well with the findings of this analysis. Daniels states that Du Bois brings meaning to the work using contradicting styles. This is supported by the results: the presuppositions of order are 49 percent of the data whereas the presuppositions of disorder are 51 percent. Du Bois is not clear about how he is dismeninating the ideas through the work. Daniels asks the reader to review *The Souls* as an artwork. As an artist, Du Bois does not commit to an orderly or disorderly writing style; instead, he choses both.

Brodwin seemed to have seen the work to be more disorderly than orderly. He speaks of all the literary techniques Du Bois uses to express the plight and chaotic conditions of Blacks in America during the early 1900s. The use of these techniques assists in defining and itemizing suppositions of disorder. Although Brodwin concentrates more on the disorderly nature of the work, he does acknowledge the order seen throughout the work as well. Brodwin discusses at length the definition of “the veil” as an important and theoretical denotation. The discussion of this definition establishes the order Brodwin observes in the *The Souls of Black Folk*.

Rampersad saw more instances of order than disorder in Du Bois’ work. The writer believed that Du Bois consistently made concise and pointed arguments throughout the work. Du Bois’ critique of Washington was Rampersad’s biggest example. Du Bois’ work comprised a litany of objections to Washington’s theory in *Up from Slavery*. These arguments attacked ideas presented by Washington in a candid fashion. Even though Rampersad characterizes the work as being more orderly, he also acknowledges moments of disorder.

Conclusion

By employing fractal analysis, I was able to discover fractal patterns using two dimensions: (1) *order* and (2) *disorder*. As discussed in the introduction, souls, Black, and folk were themes found throughout the entire 14 chapters of the work. The substantive findings, as stated earlier, displayed a work that was slightly more disorderly than orderly. The complexity of the ideas discussed by Du Bois has a tendency to be confusing. This was the first time these ideas were gathered and expressed in one work. The binary statistics utilized to determine the strength of the relationship between *order* and *disorder* in the data was statistically significant, and rightly so, in that Du Bois did not commit to expressing himself in either of the dimensions.

The findings also demonstrate the life of Blacks in the early nineteen 1900s. Blacks as a race were united in feelings of helplessness. Their souls cried out for answers as they found themselves caught between being either African or American. This feeling was captured in a theory that Du Bois coined as “double consciousness.” This work has become a revered text among African American scholars and others as it captures what it meant to be Black then and what it means to be Black now in America. The data evaluated support the twoness Du Bois labored to capture and express.

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