Covert Order in the 'Audrey Niffenegger Set': Chaos Theory in the Content and Structure of *The Time Traveler's Wife*

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ABSTRACT

This paper focuses on the subject of N. Katherine Hayles's complex forms in Audrey Niffenegger's *The Time Traveler's Wife* as a postmodern work. In 2003, Niffenegger published her famous novel, *The Time Traveler's Wife*. The novel is a romance and science fiction which tells the love story of Henry DeTamble – a time traveler – and his artist wife, Clare Anne Abshire – who has to deal with his absence and dangerous experiences. Since it is the complexity of Henry's mind which causes him to time travel unwillingly and appear in different time and places, the main questions of this research are to what extent the complexity of Henry and Clare's mind leads them to different apprehensions about the world around themselves and how it defines the characteristics of individuals in 21th century. To answer these questions, N. Katherine Hayles's Chaos theory in literature can be applicable. Hayles believes that complex form (of human mind) is one of the main characteristics of chaotic systems which does not allow the subject to have certainty and authority over his actions and leads to multiple recognitions of an individual's identity. One of the major findings of this research is that different and apparently unrelated events in man's life can affect and in some cases change the perspectives of human beings toward the way man used to see the world.

1. Introduction

Henry DeTamble and Clare Abshire are the two main characters of *The Time Traveler's Wife.* Henry is a librarian at the Newberry Library in Chicago and his wife, Clare is an artist who creates sculptures with paper. The author starts the narration of the story from 1991; the 28-year-old Henry works in a library. Suddenly he meets a girl named Clare Abshire who claims she knew him since she was six. Henry is completely confused because he is seeing this girl for the first time in his life. Soon he realizes that this event might be one of the consequences of his random time travels. Since the author starts the story from the middle of events, she narrates the events from two different point of views (Henry's and Clare's) with various and random flashbacks to their past. It provides explicit explanations for characters' actions and attitudes. In general, the complex forms of characters' minds show the change in human thoughts and attitudes. Then, the role of complex mind in defining the world in Henry and Clare's story would be explained in the framework of Hayles's literary theory of Chaos.

2. Theoretical Framework

Many scientists, working on chaos, speak of the need to develop their perception of the world around themselves. They emphasize on this point that most textbooks believe that linear systems were the common in nature. Students expect that nature has to follow the rules of linearity. When it does not, they tend to see nonlinearity as an exception. But nonlinearity is everywhere in nature and consequently in mathematical models too. Despite its commonness, it has been ignored because nonlinear differential equations do not provide explicit and single answers.

In order to solve this difficulty, human beings need to develop

microcomputers, which led mathematics to a new style. Commonly, one does mathematics by stating a theorem and developing a proof. But with computers, a new style of mathematics is possible. The operator does not need to know in advance how a mathematical function will behave when it is iterated. Rather, she can set the initial values and watch its behavior as iteration proceeds and phase space projections are displayed on a computer screen. Then, she can see how the display modulates as she changes the parameters. The resulting dynamic interaction of operator, computer display, and mathematical function is remarkably effective in developing a new kind of intuition. It is perhaps the scientific equivalent of performance art. Whereas Ford saw the computer as purveying inhuman complexity, one could argue that computer displays of fractals and dynamic systems make complexity intuitively meaningful (1990, pp. 163-164).

The main follower of a new nonlinear mathematics is Mandelbrot. In *The Fractal Geometry of Nature* (1983), he argues that thinking that nonlinearities are strange is itself strange, since complex figures or forms appear regularly in nature. He compiles adjectives that other mathematicians have used to describe nonlinear geometry- "monstrous," "counterintuitive," "pathological," "psychopathic" (p. 38). Mandelbrot insists that on the contrary, highly complex and irregular forms are entirely compatible with our intuition and as beautiful as Nature herself. This beauty has been misperceived as "monstrous" (1982, p. 35) because traditional geometry cannot deal with these complexities. Mandelbrot in his remarkable book which was mentioned above writes that, "many patterns in Nature are so irregular and fragmented, that, compared with *Euclid* . . . Nature exhibits not only a higher degree but an altogether different level of complexity" (p. 2).

To deal with the complexities of these forms, Mandelbrot invented fractal geometry. At its heart is the idea of a fractional dimension. Whereas Euclidean shapes can be represented very well by the familiar integer dimensions of a Cartesian space, irregular forms cannot. The corrugations that mark their surfaces give them, in effect, an added fraction of a dimension.

Mandelbrot coined the word "fractal" from the Latin adjective *fractus* (meaning "broken") and fractional; it connotes both fractional dimensions and extreme complexity of form. An important difference between fractal and Euclidean geometry is the scale-dependent symmetries of fractal forms. In Euclidean geometry, and in classical physics generally, Nature is considered "comfortable to itself," of uniform consistency, so that what is true on one level is also true on another. For example, in Euclidean geometry one equilateral triangle is taken to be similar to any other equilateral triangle, regardless of their relative sizes. But in fractal geometry the emphasis on recursive symmetries makes their orbits to appear natural, because they are created by iteration of the same form over and over.

The complex couplings between scales of different lengths which are at the center of fractal geometry are found everywhere in nature – in cloud forms, mountain contours, tree grains, and human beings. For these and many other natural forms, Mandelbrot explains, "the number of scales of length . . . is for all practical purposes infinite." Hence the importance of a geometry designed to elucidate transitions between levels lies in investigating and describing the symmetry operations that male them possible. Hayles in *Chaos Bound* (1990) suggests that one of the notable findings of Mandelbrot is that "all chaos theory really required was an inclination to look at things from a different perspective," and the key is in the time to spare (p. 168). Therefore, paradigms toward which a situation was about to be analyzed, change. She believes that one of the remarkable changes is in human beings.

Hayles-an American literary critic-and Alan Kirby-a British literary critic-believe that since 2000 the postmodern era has been finished. *Chaos Theory* led them to this idea that 21th-century man grows and acts according to the technologies which are around him. The end of postmodernism or *digimodernism* emerges from the complexity of human minds. Hayles explains this phenomenon through chaos theory and Niffenegger portrays this complex characteristic of human beings with Henry and Clare in *The Time Traveler's Wife*.

3. Denaturing the Human in *The Time Traveler's Wife*

Dealing with the complex form of human minds lead to one of the important

waves of postmodernism: the denaturing of the human. Haraway in "Manifesto for Cyborgs" (1985) talks about the complexities of the fourth wave of postmodernism. She believes that information technologies are bringing comprehensive changes in the way boarders are understood and constituted. And also argues that information technology has made it possible for us to think of entities (including human mind) as conglomerations-mass-that can be taken apart, combined with new elements, and put together again in ways that violate traditional boundaries (1990, pp. 282-283).

Hayles in *Chaos Bound* (1990) comes to this understanding that the reality we understand about this world is not fixed and absolute. Human mind has this capability to create multiple understandings from a single phenomenon. She believes that recent technologies such as the Internet, social networks, television, smart phone, and etc. have made the human mind more complex. Hayles and Kirby suggest that since 2000, individuals have entered into a new period of time-period of *digimodernism* (2006, p. 1).

Before examining the complex form (of human mind) in *The Time Traveler's Wife*, let us to have a brief look at the emergence of time travel stories. Nahin in *Time Machines: Time Travel in Physics, Metaphysics, and Science Fiction* (1999) and *Time Travel: A Writer's Guide to the Real Science of Plausible Time Travel* (2011) writes that Well's *The Time Machine* (1895) introduced the concept of time travel to the world. In general, time travel stories are about an individual who time travels to the past or future. Most of the time the author narrates the story which its main character attempts to change the history. Hawking in "Space and time wraps" says that time travel stories emerged from the scientific theory of general relativity; of course they contain the characteristics of chaotic systems such as complex forms.

Nahin suggests that although the science of physics proved that the past is unchangeable, but writers have took advantage from the idea of time travel to present complexities of 21th-century man through interesting stories (1999, p. 267). Therefore, science fiction writers started to take concepts from chaos theory and general theory of relativity and narrate stories around these phenomena. Dizikes in "The meaning of the butterfly" in Boston Globe writes that the concept of time travel became very popular in literature and cinema. In literature one can refer to H. G. Wells's The Time Machine (1895), Kurt Vonnegut Jr.'s Slaughterhouse-Five (1969), Diana Gabaldon's Outlander (1991) and Voyager (1993), and Niffenegger's The Time Traveler's Wife (2003). In Cinema and television shows we have Time Machine (2002), the trilogy of The Butterfly Effect (2004, 2006, 2009), About Time (2013), The Edge of Tomorrow (2014), DC's Legends of Tomorrow (since 2016) and Timeless (since 2016).

In Niffenegger's *The Time Traveler's Wife* (2003), the reader does not face with good/bad guys and never gets to any fixed truth about the story. The author refuses to permit the reader a binary view of life where anything can be so simplistically considered as divided, and the identification and the meaning of these marks is no clearer than in the rest of life. While the reader is reading the novel, he/she learns that the story is not written in a traditional form of narration. One should not look for coherent meaning or a solution. For instance, Henry finds Doctor Kendrick to cure his genes but despite his enormous attempts, Kendrick cannot find the reason behind Henry's time travels and cannot find any cure for him. The author does not give this answer to her readers that whether Dr. Kendrick would be able to cure time travel genes of Alba or not. Henry: It won't work because my immune system is all fucked up. And because I'm old. And because there are too many genes involved . . . What about Alba? Would it work for her? Kendrick: We'll never know, will we? (p. 458)

The audience learns that some questions would always remain unanswered. Base on chaos theory, in contemporary society there is no core and fixed meaning in any structure or image. During reading *The Time Traveler's Wife*, the reader finds out that the beliefs and thoughts of characters change with time and by experiencing new phenomena. For instance, when Henry time travels for the first time to the childhood of Clare, she did not believe that Henry is really a time traveler. She says, "People only time travel in movies" (p. 36) but when he disappears in front of her, she changes her mind and believes in Henry's being a time traveler. Another significant example happens when Clare is 13 and Henry is 35 years old. They talk about their beliefs to God and Henry's ideas challenges Clare's faith to Christianity. Clare says, "You're forgetting about God – why can't there be a God who makes it mean something?" Henry

answers, "To me things seem too random and meaningless for there to be God" (pp. 74-75).

At this point, Henry learns Clare gains different perspectives toward the world base on her experiences. Time and various experiences shape and reshape the mind of individuals. Henry says,

The choices we're working with here are a block universe, where past, present and future all coexist simultaneously and everything has already happened; chaos, where anything can happen and nothing can be predicted because we can't know all the variables; and a Christian universe in which God made everything and it's all here for a purpose but we have free will anyway, right? (2003, p. 75)

When Henry challenges both ideas about life, he learns that he cannot persuade Clare to change her mind right now because one's faith to a specific phenomenon only changes with time. He specifically mentions to the fact that,

Clare is silent. Her pragmatism and her romantic feelings about Jesus and Mary are, at thirteen, almost equally balanced. A year ago she would have said God without hesitation. In ten years she will vote for determinism, and ten years after that Clare will believe that the universe is arbitrary, that if God exists he does not hear our prayers, that cause and effect are inescapable and brutal, but meaningless. And after that? I don't know (p. 75).

Throughout the reading of *The Time Traveler's Wife*, the reader does not find out what was the reason behind Henry's time travels. We only know that he has time travel genes. Also, the final chapter of the novel, "Always Again" raises questions to the mind of the readers too that whether the story of Henry and Clare has a conclusion or still continues. This complexity emerges from the fact that Niffenegger uses the frame tale – stories within stories – which is the outcome of complex forms of contemporary fiction. While reading the novel, one can say that it is not dedicated completely to the relationship between Clare and Henry. At some points, Henry narrates his own life (his childhood and his several experiences), Clare has her own story, and even Alba creates her own kind of experiences. Even the reader faces the story of Kimy (one of Henry and Clare's close friends). Although, the characters narrate their stories, the reader is not able to achieve an absolute closure with given information. Although the novel uses recent theories of physics – chaos theory and general theory of relativity – in the story, it also employs classical narration

and reminds Homer's *Odysseus* to its readers.

Sexton in "Backwards and foreplay" suggests that another important complex form that Niffenegger presents to her readers is when she organizes the novel like the Homeric episodes (Par. 10). For instance, Clare describes her situation as Penelope, the wife of Odysseus who waits for her husband to come back to her, "The magic I can make is small magic now, deferred magic. Every day I work, but nothing ever materializes. I feel like Penelope, weaving and unweaving" (p. 280).

Penelope, the wife of Odysseus was originally told by Homer and retold by Clare who contains an important point. After Odysseus has left for Troy, Penelope, a creative and enterprising woman, begins to weave to keep her mind and hands occupied and to delay the suitors who are forcing her to marry them, because everyone thought Odysseus is dead. At another hand, Clare is an artist and has to wait for Henry to return from his time travels. Whenever Henry time travels, Clare does not know that what dangerous situation he might face. Therefore, she occupies herself with creating artistic sculptures from papers which makes her the postmodern representation of Homer's Penelope.

Both stories have been divided into three main parts: The first part of Odysseus depicts the story of their life together from their courtship in Sparta through Odysseus's departure on that ill-starred military expedition to Troy; the first part of *The Time Traveler's Wife* narrates the childhood of both Henry and Clare, their meeting till they get married. The second part, turned out to be another seven years in the loom and recounts the ten years of the Trojan War; and the second part of *The Time Traveler's Wife* presents the married life of Henry and Clare, their attempts to have a baby and finishes with Henry's death. The third part shows the principal Greek soldiers returning from the war. Penelope never finishes weaving the third panel because she did not want to marry. In *The Time Traveler's Wife*, Clare never accepts the death of Henry and tries to make herself busy with creating artistic paper sculptures in order to see Henry in future.

Aside from the fact that creating art enables Penelope and Clare to wait for their husbands, both tales suggest that all art is a summarization in miniature of the stories and acts in great world outside and of the

artist's own mind. Like the world itself, the artistic acts of both Penelope and Clare continues to change with the events of their life and their interpretations of them. For instance, when Clare married Henry and moved to a new phase of her life, she felt as if she is trapped in this life, therefore, she only creates small sculptures. She describes herself as follows,

> I am having a hard time, in my tiny back bedroom studio, in the beginning of my married life. The space that I can call mine, that is not full of Henry, is so small that my ideas have small. I am like a caterpillar in a cocoon of paper. (p. 280)

And also when Clare gives birth to a baby girl named Alba, she starts to draw babies and creates sculptures from her baby girl. Therefore, Clare's art becomes a scaled-down version of larger events and concerns. Moreover, Clare describes Henry as another sort of artist, "a disappearing artist" (p. 281). Henry and Clare discover that even the shortest time travel of Henry would have its complexity and significant value. The sense of complexity is seen everywhere in the novel. For instance, when Henry and Clare think about bringing a baby into this world, they are aware of its difficulty, complexity, and seeming threat of annihilation evident in this present age, but they are also aware that death of whatever kind is, and has always been, part of the process of life at every level:

> A baby that looked sort of like Henry, black hair and those intense eyes and maybe very pale like me . . . my body wanted a baby. I felt empty and I wanted to be full. I wanted someone to love who would stay: stay and be there, always. And I wanted Henry to be in this child, so that when he was gone he would not be entirely gone, there would be a bit of him with me . . . . Insurance, in case of fire, flood, act of God (pp. 320-321).

Both Henry and Clare know that Henry is not going to have a long life therefore they try to have a baby; a baby that would resemble Henry and sooths Clare when he is gone. One can conclude that a baby can act as another form of Henry for Clare. Here, it stands as a complex form – the baby can be another person and also Henry at the same time.

As one has seen in almost every page of *The Time Traveler's Wife*, Niffenegger used the presence of complex forms and situations that explore the idea of minor changes in initial conditions as having a major, unpredictable impact on life and suggest that iteration and recursion across scale (strange attractors) are perhaps the fundamental technique in the construction of narrative. First, the narrative seems to have no order but little by little both the readers and the characters find meaning and direction. Once the narrative moves toward a certain goal, the major plot movements, titles, chapter divisions, characterizations, and the tiniest descriptive details are all of a piece and can be expected to carry similar messages. In other words, the features of narrative form and meaning are evident at every level of the story.

Hayles believes that according the general theory of relativity, everything at every level is finally related. Whether there is divine design or only fictional ordering, though, is another matter. Niffenegger in the narration of *The Time Traveler's Wife* suggests that today literature is still recursive of writing that began long, long ago and that human activity also tends to follow a similar pattern across the ages. Niffenegger's point, however, has more to do, first, with the need for writers to position themselves within the ideas of their age and, secondly, with the simultaneous novelty and antiquity of human dilemmas – and of writing itself – than it has to do with originality and great traditions of literature. Niffenegger in Author's note in *The Time Traveler's Wife* writes,

> I knew when I began to write that their story was simple, universal; the things that happen to Henry and Clare happen to us all, though the rest of us are thankfully allowed to experience these events in the customary order, not randomly (p. xii).

After Niffenegger emphasizes on the universality of her novel – despite the fact that her characters contain supernatural powers like ability to time travel – she explains why she has chosen the notion of time travel while she did not intended to write a science fiction. Niffenegger writes "The device of time travel allowed me to tell the story of a good marriage in a way that made ordinary things worthy of special attention. In the face of obstacles, normal life is a triumph" (2003, p. xii). She artfully focuses on human relationships and does not entangle herself with scientific notions. Also she simply emphasizes on her idea that writers should write about the problems of people in their own period. Therefore, the result of the contemporary literature presents the complexities of human beings, their relationships, and situations which any individual deals with them in his/her own way of understanding. It can be said that their complexities emerge from their own

mind because an individual's mind is cable of creating multiple realities and understandings from a single event. Each person can be a chaotic system with the characteristic of complexity in forms.

4. The Broken Contract of Fairy Tales

Throughout the reading of *The Time Traveler's Wife*, the reader would find similarities between this novel and fairy tales. The story develops as popular fantasy because its aim is to employ fantastical images and supernatural figures for entertainment. The novel is about a new kind of tale and all the readers are not familiar with it but it is narrated in a fashion easily accessible to a wide audience. *The Time Traveler's Wife*, like many fairy tales, starts with the introduction of two main characters of the story, Henry and Clare. The first chapter of the novel presents a series of strange events which happen in ordinary routine life in Chicago – Henry who is a time traveler and works in Chicago's Newberry Library, confronts with Clare who declares to him that she knew him since she was six.

Zipes in his *Breaking the Magic Spell* and Bettelheim in *The Use of Enchantment* rest their arguments on this assumption that the earliest form of story which most of us experience and become familiar in fairytales. For the mentioned critics, understanding fairy tales involves an understanding of how each of us first came to give meaning to the world around us. Because of their popular application within our culture, we all have to come to recognize certain thematic and structural features in fairy tales that function as definitive aspects of the genre. According to Gillespie, they are stories of fantastic events, experienced by figures whose characters are defined by one or more associated attributes (such as courage, honor, duplicity, or jealously), and played out in a fashion that leads to a clear-cut and generally successful conclusion for those characters delineated as good (2003, pp. 47-48).

In traditional fairy tales, good fights with evil. The concepts of good and evil allows separation of characters into one category or another. In another word, the reader labels the actions of the characters with approval or disapproval. However, this approach cannot satisfy the readers of Niffenegger's novel. *The Time Traveler's Wife* has complexities within its narrative that the programmatic response outlined above cannot begin to comprehend. Four decades ago, Lévi-Strauss had already noted a significant drawback in the application to folklore of conventional cause-and-effect approaches:

The study of myths raises a methodological problem, in that it cannot be carried out according to the Cartesian principle of breaking down the difficulty into as many parts as may be necessary for finding the solution. There is no real end to mythological analysis, no hidden unity to be grasped once the breaking-down process has been completed. (1962, p. 5)

Therefore, the open-ended approach for which Lévi-Strauss calls suggests many of the attributes of chaos/complexity theory, and these ideas lead to alternative forms of reading that offer much richer interpretive options.

Niffenegger's *The Time Traveler's Wife* suggests a narrative structure which is different from traditional fairy tales. In this novel, events occur as much randomly as through the efforts of the hero. Indeed, when we move from the linearity of a Newtonian system to the divergence of post-Einsteinian thinking, the free-will of the individuals vanishes. The randomness of the characters' lives gives the main characters (Henry and Clare) much less control over events. Henry in Prologue describes his situation as follows, "Is there a logic, a rule to all this coming and going, all this dislocation? Is there a way to stay put, to embrace the present with every cell? I don't know" (p. xvii).

Throughout the story, Henry can never prevent his time travel. He has no choice but to deal with this nonlinearity. Both characters and the readers only learn to cherish the present. Niffenegger in Author's note writes,

The husband and the wife become intensely aware of the present moment. In the present they are free; free to make decisions, free to experiment. They learn to savor their lives because everything is uncertain, and at the same time some things are already too certain. (2003, p. xii)

This novel implicitly invites alternative conclusions regarding what activities lead to the formation of a heroic nature or, for that matter, when a particular character attains the status of hero. This condition then invites the reader to perceive more complexity in the dynamics of the story's society.

Various speakers or points of view blur the distinctions between events set in

the past or future and action unfolding in the present. In the novel, researcher recognizes that there are many present time for Henry. When the 43-year-old Henry time travels to 1994, he appears in Ingrid apartment and remembers that she is going to kill herself in that night. Despite Henry's attempts to save her, Ingrid shot herself with a gun. Henry comes back to 2006 – his present – but Clare could not understand his grief because Ingrid's suicide had happened long time ago. In this novel, nonlinearity and time jumps weaken the notions of control and individual choice, and instead suggests inevitability. Henry and Clare do not live in a world which can be mastered or even modified.

Henry and Clare live in a world that will present recurring challenges that they will meet only as long as fate has decreed it. This gives everything the feel of a continuous present tense, with no regard for what has occurred and no expectations for what is to come. Neither the past nor the future can change or reshape the inevitability of events already determined by fate. Although Henry knows that he is about to be shot and killed, he moves inevitably toward that fate. Therefore, fate always has the dominant role in the way events unfold and characters have less control over the events in their lives. In *The Time Traveler's Wife*, Henry finds out that he has to find a particular person as his doctor, because it is his fate. When Henry finds Kendrick, he tries to explain his situation and why he has to be his doctor. Henry says to Kendrick "Because I had to come to you. It was not a matter of choice. Fate? Call it whatever you want. Things get kind of circular, when you are me. Cause and effect get muddled." (p. 310)

One concludes that the dominant fate over the lives of characters, ultimately determines an individual's success or failure but more importantly, it shapes their actions and move them forward. The elements already highlighted demonstrate that within the narrative of *The Time Traveler's Wife* less structure and less inevitability exist. The randomness which is present in most of the events, gives the title characters (Henry and Clare) much less control over events. In another word, fate has more control over the lives of characters. Clare and especially Henry do not shape their life to conform to a particular ideal, although they certainly wish to do so. It means that Henry and Clare cannot be defined as absolute good or evil figures. Henry steals money and clothes to survive, and Clare has to lie to people in order to keep Henry safe.

The Time Traveler's Wife has similarities with fairy tales. It uses fantastic and supernatural events to entertain the reader but at the same time, the characters have major differences with the traditional fairytale's characters. Although in traditional tales the main character achieves victory with his/her own efforts, the contemporary character can only reach to a happy ending by fate and chance, and it does not matter how much he/she attempts to get that. Therefore, complexity and randomness plays a crucial role in the lives of contemporary men. Niffenegger in Author's note to *The Time Traveler's Wife* says:

Time travel can be read as a metaphor for memory: We are all time travelers in our own minds, if not in our bodies. Like Henry, we jump back to moments of humiliation, loss, joy; we find ourselves flung seemingly at random to ordinary days, small unnoticed pleasures. Our present is created and shadowed by our past. We live in the present, blissfully innocent of our future (2003, p. xii).

Therefore, according to the author herself, the novel is not intended to be a science fiction, or a story about a hero who saves the world. The novel simply employs scientific notions to narrate a romance. A kind of story which happens to Henry and Clare has universality and at the same time contains the features of chaos and notions of postmodernity.

5. Sum Up

The complex form of Henry's mind is one of the many forms in nature which are difficult to measure. Hayles believes that the complex form of human mind causes him to understand the world around himself different than others. In another word, each person's mind is capable of creating multiple realities and understandings from a single event or phenomena. Then, one can say that mind acts as a chaotic system which has the characteristic of complexity in forms. This perspective which has emerged from contemporary theories of physics such as chaos theory, the general theory of relativity and quantum theory, introduced a new kind of thinking to the world: Nonlinear thinking.

The changed perspective toward the world can be seen perfectly through fairy tales. For most critics, understanding fairy tales involves a comprehension of how each individual first came to give meaning to the world around his. Each individual knows that fairy tales contain three main

characteristics: First, they are stories of fantastic events, second, they are experienced by figures whose characters are defined by one or more associated attributes (such as courage, honor, duplicity, or jealousy), and third, they are played out in a fashion that leads to a victory and happy ending of the good characters.

In reading *The Time Traveler's Wife*, one sees that the story is full of fantastic events and supernatural figures like Henry who is a time traveler; however, one cannot define the characters as absolute good or evil. The main characters of the story, Henry and Clare, try so hard to have a normal life, but despite all their attempts, the unseen forces and a complex system of causes control their lives. Henry knows when and how he is about to be killed but he is not able to change it. The story does not present a happy ending to its readers and the final chapter of the novel raises many questions about the fate of the characters. It can be said that the open-ended novel of Niffenegger, *The Time Traveler's Wife*, increases complexity and therefore leads to infinite understandings from the story.

In *The Time Traveler's Wife*, one can see that Henry and Clare are the representations of 21th-century man and woman who try to adopt with the complexities of their own and those which have surrounded them. It is significant to mention that recent discoveries and theories of physics such as chaos theory, general theory of relativity, and quantum theory led all fields of knowledge to introduce another kind of thinking: Nonlinear thinking. Nonlinear thinking which stands in opposite to linear or Newtonian thinking reshapes everyone's perspectives toward the world. This reconfiguration in thinking transforms human beings – especially their mind – into chaotic systems with complexity of forms as one of their main characteristics.

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