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QUIJANO AS QUIJOTE: DECODING MADNESS THROUGH PSYCHOLOGICAL THEORY

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QUIJANO AS QUIJOTE: DECODING MADNESS THROUGH PSYCHOLOGICAL THEORY

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Arts

in

The Department of Foreign Languages and Literatures

by
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ABSTRACT

This thesis approaches Alonso's Quijano's conversion into Don Quijote from the point of view of a psychologist. The aim of this thesis is to explain the cognitive and psychological experiences that move Alonso Quijano to become Don Quijote and its impact in the development of our current studies of the mind.

Thus, one specific question will direct my project although this question will be addressed using a multidisciplinary psychologist approach. The research question is "How can Alonso Quijano's psychological experiences and interpretations of the real world be explained today?" This question will be addressed by referencing five episodes in the novel which, in conjunction with psychological theory, will provide support for the argument of this thesis.

My own academic formation and my course work in the graduate program in Hispanic Studies have shown me that there are various concepts that can be used to analyze and study the main character of this novel in terms of its futurities, that is, as a path to explore and trace the genealogy of many of our contemporary questions in regard to the human mind and its cognitive development. Therefore, the aim of this research is to contribute to Alonso Quijano's studies by providing a behavioral and cognitive psychologist approach to the dichotomous Alonso Quijano/Don Quijote state of mind and, in this way, to provide another bridge of conversation between the humanities and the social sciences.

Chapter 1. Introduction

Since its publication Miguel de Cervantes's *Don Quijote* (1605) has captured the attention of its “desocupados lectores” and beyond. Indeed, the popularity of the story of the old man named Alonso Quijano whose judgement was dried because of so many long periods of readings without eating and sleeping has had a strong impact on literary studies since it was created by Miguel de Cervantes Saavedra. Certainly, the novel has been approached from different areas of expertise and not only from cultural, linguistic and/or literary fields. This Cervantine work has captured the attention of fields beyond the humanities. For example, the story of Don Quijote has served as a point of departure to illustrate many different studies developed inside the history of science, physiology and psychology, and more recently, in neuroscience and cognitive science, which is certainly how the novel caught the attention of Sigmund Freud and other scientists before him. Moreover, each of those fields has brought a new perspective in the analysis of aspects of the novel such as, for example, the analysis of the events and adventures experienced by Alonso Quijano, the characters who accompany his journeys, their development, and references to the real world.

In this regard, I am in particular interested in approaching Alonso's Quijano's conversion into Don Quijote from the point of view of a psychologist. My own academic formation and my course work in the program have shown me that there are various concepts that can be used to analyze and study this story in terms of its futurities, that is, as a path to explore and trace the genealogy of many of our contemporary questions in regard to the human mind and its cognitive development.¹ Specifically, this thesis will present three theories that, applied to the protagonist of the novel, show that this Spanish Golden Age novel illustrates real contemporary problems in terms of the development of the human psyche. Therefore, the aim of this research is to

contribute to Alonso Quijano's studies by providing a behavioral and cognitive psychologist approach to both Alonso Quijano's and Don Quijote's state of mind and, in this way, to provide another bridge of conversation between the humanities and the social sciences.

1.1. Rationale and Research Questions

As it can be inferred from above, the research scope of this project demands an interdisciplinary approach in order to explain the cognitive and psychological experiences that move Alonso Quijano to become Don Quijote and its impact in the development of our current studies of the mind. Thus, one specific question will direct my thesis, although this question will be addressed using a multidisciplinary psychological approach. The research question is "How can Alonso Quijano's psychological experiences and interpretations of the real world be explained today?" I stressed my interest in approaching this topic from a contemporary perspective because bibliography on the subject of how his symptoms reflect or not the depictions of those conditions in the medical literature of Cervantes time is nowadays abundant.

The research question will be addressed by referencing five episodes in the novel which, in conjunction with psychological theory, will provide support for the argument of this thesis. All episodes referenced will come from the edition of the novel prepared by the Real Academia Española to celebrate the 400th anniversary of the publication of Don Quijote (2005). The English version of Part I of the novel, *The History of that Ingenious Gentleman Don Quijote de La Mancha*, translated by Burton Raffel.

An interdisciplinary approach to the interpretation of *Don Quijote* will be proposed as a novel contribution to the existing literature. The interdisciplinary approach will incorporate three modern theories from the fields of psychology, neuroscience, and cognitive science that, it is argued, can be applied to the protagonist as a means of decoding his behavior. This argument is

made, interestingly, despite the fact that the character was introduced three centuries before the development of the modern theories. In doing so, the combination of the three modern theories will show that this Spanish Golden Age novel is able to illustrate real contemporary issues regarding the human experience.

1.2. Organization of the Chapters

In chapter two, a justification for the novel approach of the thesis will be presented within the context of previous literary and theoretical approaches to interpreting *Don Quijote*. In the first section, an overview of traditional theoretical approaches applied to the novel will be presented. These works will include interpretations from the themes of madness, sanity, melancholy, chivalry, realism, and existentialism. This will serve to put into perspective the unique contribution of the thesis in comparison to the traditional approaches.

In chapter three, an overview of specific episodes in the novel will be provided in order to limit and highlight those experiences this research will explore further. In order to present the novel as it relates to the thesis, a summary will not be provided, but instead, the episodes relevant to analyses for the argument of the thesis will be spotlighted and the importance of each scene elucidated within the context of the three supporting theories. A concluding statement tying the five scenes together and relating them to a central argument will mark the end of chapter three.

The first *Don Quijote* episode to be used in the analysis of the novel comes from chapter 1 and will be the depiction that Alonso Quijano gives of his trusty steed, Rocinante, and the lady to whom he can display his knightly skills and fall in love with, Dulcinea. This episode will set the foundation for the interpretation of Alonso Quijano's perceived experiences through psychological theory.

The popular windmill scene from chapter 8, in which Alonso Quijano encounters windmills that he perceives as monstrous giants that must be defeated, will be the second episode I expound in relation to my research question. This episode will serve to bolster the main argument of the thesis supported by psychological theory.

The third episode to be analyzed will also come from chapter 8. In this episode, Alonso Quijano encounters two Benedictine monks traveling alongside a woman in a carriage. Misinterpreting her as a prisoner to the monks, Alonso Quijano attacks the monks in an attempt to free the woman, which allows us to put into a wider perspective Quijano's own conflict between his wishes and the perception of reality.

The fourth episode to be included will come from chapters 23, 27, and 28. In this episode, Cardenio learns that his love, Lucinda, has been betrothed to Ferdinand and he becomes immensely angered and saddened. This episode will serve as a metaphor for the lack of romantic fulfillment Alonso Quijano experiences with regard to his own life.

The last part of the novel to be included in the analysis will be the conclusion to the first novel. The novel is concluded with the narrator stating that Alonso Quijano is forced back home because of his madness and instability. The narrator follows this up by informing the reader that he has acquired more texts about Alonso Quijano's further expeditions following the first novel. This conclusion will be used to offer the potential for further inquiry into the psyche of Alonso Quijano in part two of the novel using psychological theory.

In chapter four of this thesis, in order to explain Alonso Quijano's behavior using psychological theory, I will incorporate the theory of psychosocial development by Erik Erikson. This theory proposes an ordered sequence of eight developmental stages that humans encounter throughout the life span, from infancy to death, that influence and shape one's personality and

sense of self in the world. At each of the developmental stages, one is confronted with a psychosocial crisis that is psychological in nature, as it relates to the psychological needs of the individual, and social as it relates to a conflict with the needs of society. Managing to overcome each psychosocial crisis results in the continuous development of a psychologically healthy personality and sense of self in the world. In contrast, failing to overcome a crisis results in a less psychologically healthier personality and a more insecure sense of self in the world.

After explaining the developmental stages and how they function in Erikson's theory, I will argue that Alonso Quijano is in the sixth stage of psychosocial development and that he faces a psychological challenge that determines whether he believes his life has been meaningful and impactful or if his life has been ultimately meaningless and will not be remembered by humanity. I believe these challenges that are psychological and developmental in nature play a role in driving Alonso Quijano's mental processes and behaviors in his conversion into Don Quijote.

Nonetheless, in the novel we do not only read about Alonso Quijano's desire to become a knight but also of his alternate identity, Don Quijote and his constant effort to establish a parallel between what he does and what he read in his books. Thus, chapter five of this thesis introduces the field of neuroscience and gives a brief description of the field and basic concepts and in particular discusses the concept of mirror neurons. It is argued that mirror neurons are a special type of neuron because they respond to both sensory (e.g., visual, tactile, olfactory, etc.) and motor (e.g., movement of hands, eyes, etc.) information from the external and internal (the body) environments. Normally, neurons are classified as either afferent or efferent neurons, responding only to either sensory or motor information, respectively. The concept of mirror neurons will serve to offer potential insight into how Alonso Quijano came to form memories or networks of

information related to knight-errantry which may have subsequently biased his perceptions of his surroundings.

In chapter six, I will introduce the last theory, schema theory, in further support of the main argument of the thesis to elucidate on Alonso Quijano's perceptions of his environment. Schema theory explains that individuals make sense of the world by constructing cognitive frameworks of various aspects of the environment and that, by doing so, an individual will be able to more easily and efficiently make sense of information in the environment. When an individual creates a schema, it allows for future reference for aiding in making sense of information in the environment. A schema, for example, will allow an individual to distinguish between different types of animals by comparing and contrasting various physical and behavioral features. Five different types of schema will be expounded on in chapter four and used as a basis for explaining the behavior of Alonso Quijano.

I will conclude the thesis by reviewing the main points of the argument and explaining how this thesis can contribute to the field of literary analysis by relating modern psychological theory to descriptions of mental conditions in this masterpiece of the Spanish Golden Age literature. I will also underline the importance of incorporating interdisciplinary studies in literary analysis including psychology, neuroscience, and cognitive science and show that these studies together can offer unique and novel perspectives on the interpretation of one of the most studied works of literature in the world.

Chapter 2. Don Quijote's Madness

2.1. The Traditional Theoretical Approaches to Understanding *Don Quijote*

Of the many traditional theoretical approaches that have been applied to the vast themes and content in the novel, an important number have focused on Alonso Quijano's state of mind in his assumed identity of Don Quijote. They have studied his behavior in relation to madness, sanity, melancholy, chivalry, realism, and existentialism. To better put into perspective the novel approach of this thesis, a brief overview of the literature examining the novel from the traditional approaches will be presented and discussed.

The first article to be presented provides commentary on how Quijano's insanity can be understood in his assumed identity of Don Quijote and within the sociohistorical context of life in the seventeenth century. In "Quixote's Insanity and Sancho Panza's Wisdom", Ignacio Arellano calls attention to the well-supported notion that Alonso Quijano developed a mental disorder as a result of reading "foolish books of chivalry" (71). This is established in chapter 1 of the novel in which the protagonist is introduced as an insatiable reader of knighthood and chivalry that has lost his wits. Arellano agrees that Quijano's behavior qualifies as foolish and makes the additional claim that his behavior is a peculiar kind of insanity.

Arrellano references two grave fundamental mistakes that Quijano makes which are detailed in Martin de Riquer's edition of the novel. The first is that Quijano assumes the novels of chivalry that he reads represent historic truth and real actual events (73). This assumption has rendered him unable to distinguish between fictional accounts and reality. The second is that Quijano believed it possible to reestablish the social norms of times past during the age of knighthood and chivalry in a time period that no longer normalized those types of behaviors (74). Together, these grave errors position Quijano as a character who is "unable to understand the

immediate reality in which he lives, and that he observes the world from a dislocated perspective through his chivalric obsession” (74).

In considering the kind of life that Quijano was living, “a poor hidalgo with a skinny horse...in a place of La Mancha” (72-73), the argument is made that such intense consumption of books about chivalry confuses Quijano’s understanding of reality and subsequent behaviors (76). This can be observed in numerous scenes such as the scene in which Quijano attacks Benedictine monks that he mistakes as the captors of a maiden and the famous windmill scene in which Quijano misinterprets a plain of windmills as ferocious giants. Arellano also makes the connection between this disconnect with reality and the underlying motivations for such a disconnect with the assertion that Quijano desires recognition through eternal fame and by becoming renowned (72), an argument also purported by this thesis. This theme of Quijano seeking out recognition from the world and making a positive and meaningful contribution has been expounded in other interpretations of the novel as well.

In her article, “Modernity, Madness, Disenchantment: Don Quixote’s Hunger.” Gould draws attention to the desires of Quijano to establish his heroic legacy. Gould asserts that Quijano, in his assumed role of Don Quijote, is experiencing insanity which is the consequence of his modernity (46). Her discussion of the psychological and existential state of Quijano supports the notion that he is experiencing a crisis of sorts with himself and that his disconnect with reality is a manifestation of this crisis that he is attempting to resolve. She argues that one of the most persistent motifs in the novel is Quijano’s steady progression towards madness (37). This madness is illustrated by his constant refusal to accept others’ clarification of reality and the duality of his alternate identity Don Quijote as being intelligent and foolish at times.

Gould also asserts that the novel serves as “a very different moment in the history of human desire” (36) that alludes to commentary on the temporal constraints of lived experiences in the seventeenth century. In particular, it is asserted that Alonso Quijano’s disconnect with reality and submersion in his alternate reality as a knight-errant is an ultimate reflection of the human desire to transcend the disenchantment of age. In reaching a state of transcendence, Quijano would be able to break the barrier of social norms that shackle him to abject reality. His attempts to establish a legacy for himself as a knight-errant, though, are perceived as acts of madness. Although Quijano is presented as steadily progressing towards madness, it has been argued that the concept of madness was interpreted differently during the seventeenth century.

The theory of melancholy, which explains how some aspects of human behavior were interpreted in the sixteenth and seventeenth centuries, has also been considered with respect to the novel. The theory of melancholy explains that human behavior can be studied in an objective manner that can be supported by, for example, documents describing typical human behavior (medical texts, autobiographies, historical works, novels based on real life, etc.) A seeding work in this direction was Soufas’s *Melancholy and the Secular Mind in Spanish Golden Age Literature*, where she argued that Alonso Quijano’s melancholic condition explains his manic condition as Don Quijote (35).

For Carrera, it was believed during the sixteenth and seventeenth centuries that melancholia, a term used to refer to “groundless fear or extreme sadness” (3), could lead to irreversible madness if left untreated. Indeed, in “Madness and Melancholy in Sixteenth- and Seventeenth-Century Spain: New Evidence, New Approaches”, Carrera asserts that melancholy meant different things in the sixteenth and seventeenth centuries (2). It could mean a very deep sadness like depression, and it was also associated with intelligence. It was a concept that was

also considered fashionable between elite groups and politicians. Thus, it can be supported that there was a range of ideas for what it meant to be affected by melancholy during the era in which the story of Alonso Quijano is portrayed. This is an important idea to consider because Cervantes crafted his novel in a sociohistorical context much different from that of modern-day life and that would thus be interpreted differently in comparison to the modern social norms of society.

In her book *Don Quixote in the Archives: Madness and Literature in Early Modern Spain*, Dale Schuger also explores the concept of madness asserting that Cervantes used a popular brand of madness for the construction of madness within the novel. Her account of early modern forms of madness is based on early modern archival records from the Spanish inquisition, which provide a diverging account from Foucault and Bakhtin's madhouse and carnivalesque theories. The sociohistorical approach that Schugar employs suggests a more nuanced view of madness and suggests that Cervantes creates his own novel treatment of madness, which is not strictly based on that seen in his world, but simply a modification, critique, and expansion of said madness. In doing so, Schuger makes the argument that "Cervantes uses the tools of fiction to explore madness as lived experience, and how he uses madness as lived experience to create—and to meditate on the nature of—literature" (70).

In her article "Don Quixote as an Existential Hero", Gervin presents a similar argument to that of this thesis in her claim that the seventeenth century work of *Don Quijote* illustrates many of the "pervasive qualities of the existential era in modern literature" (188). She argues that Alonso Quijano is an existential hero, and that the adoption of his alternate identity Don Quijote is indicative of his conflict with his own self. Gervin asserts that, in the beginning of the novel, Alonso Quijano thinks of himself as a nobody as a result of reading incessantly about the valorous deeds of others. This, she posits, makes him aware of his nothingness and subsequently,

his desire to establish his legacy. Gervin provides examples from the novel that support this notion such as his conceptualization of Aldonza Lorenzo as Lady Dulcinea del Toboso, an innocent and pure maiden for whom he can display his knightly skills, and his misinterpretation of a plain of windmills as monstrous giants.

2.2. Don Quijote's Madness and New Directions in Psychology

It is interesting to consider the arguments of Gervin in particular within the context of the thesis as a similar argument is made from the perspective of psychological theory. Specifically, the theory of psychosocial development will be used as a basis for explaining the behavior of Alonso Quijano. Given the age of Quijano as mentioned in chapter 1, it will be argued from the perspective of this theory that he may in fact be experiencing an age-related existential crisis that could have been influenced by his overconsumption of stories about knighthood.

The inclusion of the theory of psychosocial development as a basis for arguing that Quijano is experiencing an existential crisis presents a novel approach in the literature to understanding his behavior. This argument will be bolstered by the inclusion of two more theories—the theoretical notion of mirror neurons and schema theory—which will also be related to how Quijano's overconsumption of books may have influenced his perceptions of his surroundings and subsequent behavior. In combining these three modern theories, this thesis will offer new directions for interpreting the novel and show to what extent this Spanish Golden Age novel can illustrate real contemporary problems regarding the human experience.

Chapter 3. Reading *Don Quijote*

3.1. Alonso Quijano, Don Quijote, Rocinante and Dulcinea

In chapter 1, Alonso Quijano introduces two characters, Rocinante and Dulcinea, into the novel, as they relate to his newly formed identity, Don Quijote. After collecting the items necessary to piece together his traditional suit of armor, Quijano shifts his focus on acquiring a trusty steed to accompany him on his adventures and add to his ensemble as a knight-errant of times past. In the description given of the steed, the narrator states, “Fue luego a ver su rocín, y aunque tenía más cuartos que un real y más tachas que el caballo de Gonela, que tantum pellis et ossa fuit, le pareció que ni el Bucéfalo de Alejandro ni Babiaca el del Cid con él se igualaban”² (31).

Although this description of the horse is not one of youth, strength and vigor, Quijano perceives a steed of great superiority and promise stating that “no era razón que caballo de caballero tan famoso, y tan bueno él por si, estuviese sin nombre conocido”³ (32). The narrator continues of Quijano, “al fin le vino a llamar Rocinante, nombre, a su parecer, alto, sonoro, y significativo de lo que había sido cuando fue rocín, antes de lo que ahora era, que era antes y primero de todos los rocines del mundo”⁴ (32).

It is clear from the descriptions of Rocinante given in the previous example that Quijano is presented with a rather objective experience of his environment; however, his interpretations of those experiences are in complete misalignment with what the narrator presents from the text from which the story originates, the chivalric romances. Critics have pointed out that Quijano’s willingness to assign desirable knightly characteristics to the old and feeble steed exemplifies the types of delusions that he creates for himself as a knight-errant in a time period that no longer normalizes knighthood (De Armas 2006, 2006, 2015; Friedman 2005; Gonzalez Echevarria 2005, and others). Although it appears that Rocinante is not ideally fit to accompany him on the

kinds of journeys he is seeking, Quijano decides to take the steed along regardless. In doing so, Quijano is able to further establish his identity as a knight-errant as well as his reality of knighthood and thus seek out opportunities to validate this identity.

To further set the foundation for his newly established identity, Quijano envisions a beautiful lady for whom he can display his knightly skills and with whom he can fall in love. Of this desire, the narrator states, "...se dio a entender que no le faltaba otra cosa sino buscar una dama de quien enamorarse, porque el caballero andante sin amores era árbol sin hojas y sin fruto y cuerpo sin alma⁵" (32-33). The comparison of a knight-errant without a mistress to a body without a soul speaks to the degree of gravity and seriousness that Quijano places into creating and shaping his alternate reality.

Although such a lady does not exist in his actual reality, he creates the opportunity for himself in his alternate reality:

...en un lugar cerca del suyo había una moza labradora de muy buen parecer, de quien él un tiempo anduvo enamorado, aunque, según se entiende, ella jamás lo supo ni le dio cata de ello. Llamábase Aldonza Lorenzo, y a ésta le pareció ser bien darle título de señora de sus pensamientos; y, buscándole nombre que no desdijese mucho del suyo y que tirase y se encaminase al de princesa y gran señora, vino a llamarla Dulcinea del Toboso porque era natural del Toboso: nombre, a su parecer, músico y peregrino y significativo, como todos los demás que a él y a sus cosas había puesto.⁶ (29)

Quijano, thus further creates his own personal reality by creating a female figure that must be cared for and protected, typical of those he has read about in his books about chivalry.

Each of these passage shows that Quijano is willing to look beyond the reality of what he is actually experiencing to create his own interpretations of what he is perceiving. This is how he has behaved since the moment his brain dried (se le secó el cerebro). Thus, it could be argued that Alonso's madness described in the novel recreates the intention of an old man for creating meaning and purpose for himself in life, thus validating his existence. He adopts the identity of a knight-errant so that he can partake in adventures, which will make him a well-known and

impactful figure in the world. From the perspective of the theory of psychosocial development, Alonso Quijano's madness can be studied as his attempt to create meaning in his life in order to resolve a failed psychological conflict; in particular to resolve his internal state of despair and reach a state of ego integrity.

3.2. Alonso Quijano's *Quixotic* Adventures

This argument is further supported by the popular windmill episode in chapter 8 of the novel. In this episode, Quijano, along with his partner Sancho Panza, encounters a plain of thirty to forty windmills.⁷ Turning to Sancho, Quijano offers his interpretation of what he perceives:

La ventura va guiando nuestras cosas mejor de lo que acertáramos a desear, porque ves allí, amigo Sancho Panza, donde se descubren treinta o pocos más desaforados gigantes, con quien pienso hacer batalla y quitarles a todos las vidas, con cuyos despojos comenzaremos a enriquecer, que ésta es buena guerra, y es gran servicio de Dios quitar tan mala simiente de sobre la faz de la tierra.⁸ (75)

Quijano interprets the scene as an opportunity to display his knightly skills and combat the giants. He sees it as a way to prove his capabilities and show that he is brave and can overcome deadly challenges.

The degree to which Alonso Quijano misinterprets the windmill scene exemplifies the importance that he places in finding meaning in his alternate reality. When confronted by Sancho with the reality of what he is experiencing, Quijano rejects Sancho's reasoning and insists that the windmills are giants which must be defeated. He becomes so absorbed in the reality that he has created that he then proceeds to rush towards the windmills on Rocinante and strikes them with his lance. As a result, Quijano and Rocinante suffer a violent blow that leaves them unable to move momentarily.

It can thus be observed again that, based on the descriptions of his environment given by the narrator, Quijano appears to be presented with a rather objective experience of the environment, yet the perception that he develops of that experience is quite in contrast to those

around him. Where Sancho perceives the environment for what it actually consists of, a plain of windmills, Quijano creates an alternate perception, a plain of dangerous giants, that fits into the narrative of his newly formed identity.

The third episode to be spotlighted also comes from chapter 8 and occurs directly following the windmill episode. In this episode, Don Quijote takes notice of a group of travelers on the road, which among them includes a lady riding in a coach. Don Quijote misinterprets the lady in the coach as being held captive by the travelers, who in actuality are Benedictine monks who happen to be travelling in the same direction. The following passage illustrates the presented reality of what is actually occurring in comparison to the imaginative reality that is manifested by the madness of Alonso Quijano:

Venía en el coche, como después se supo, una señora vizcaína que iba a Sevilla, donde estaba su marido, que pasaba a las Indias con un muy honroso cargo. No venían los frailes con ella, aunque iban el mismo camino; mas apenas los divisó don Quijote, cuando dijo a su escudero: “O yo me engaño, o ésta ha de ser la más famosa aventura que se haya visto, porque aquellos bultos negros que allí parecen deben de ser y son sin duda algunos encantadores que llevan hurtada alguna princesa en aquel coche, y es menester deshacer este tuerto a todo mi poderío”⁹ (79).

When Sancho presents Quijano with the reality of what is likely happening, pleading with him “Mire, señor, que aquellos son frailes de San Benito, y el coche debe de ser de alguna gente pasajera”¹⁰ (79). Quijano replies to Sancho, “...sabes poco de achaque de aventuras: lo que yo digo es verdad, y ahora lo verás”¹¹ (79). It is evident from this scene that Quijano is again presented with an objective reality that is communicated and clarified to him through Sancho, yet he still refuses to acknowledge objective reality and instead creates an imaginary situation that places him as a hero who must intervene and save the day. Even as the Benedictine friars explain to him “no somos endiablados ni descomunales, sino dos religiosos de San Benito que vamos nuestro camino, y no sabemos si en este coche vienen o no ningunas forzadas princesas”¹² (80).

Quijano denies the veracity of that reality and instead attacks the monks, charging at them with his lance.

Quijano further embellishes his fantasy as a knight-errant by declaring to the lady in the carriage that, as her savior, she has been liberated from capture:

La vuestra ferrosura, señora mía, puede facer de su persona lo que más le viniere en talante, porque ya la soberbia de vuestros robadores yace por el suelo, derribada por este mi fuerte brazo; y por que no penéis por saber el nombre de vuestro libertador, sabed que yo me llamo don Quijote de la Mancha, caballero andante y aventurero, y cautivo de la sin par y hermosa doña Dulcinea del Toboso; y, en pago del beneficio que de mí habéis recibido, no quiero otra cosa sino que volváis al Toboso, y que de mi parte os presentéis ante esta señora y le digáis lo que por vuestra libertad he fecho.¹³ (81)

As a result of his actions, Quijano is engaged in a deadly sword fight by a squire who is accompanying the coach. To Quijano, this sword fight serves to further validate his perceptions of the world that he is in fact a knight-errant whose duty it is to bring good about in the world.

Alonso Quijano's alternate perception of the environment around him that is in quite contrast to what Sancho and the other perceive repeats throughout, the novel. Indeed, it is what provokes new adventures, like when he fights with the Biscayne man (chapter 9), his encounter first the mob of Yanguas (chapter 10), and later with the men of Yanguas (chapter 15). Those as well as the one with the "encamisados"¹⁴ (167-168) [...] con sus hachas encendidas"¹⁵ (168), who were carrying a corpse to bury in Segovia, but whom Quijano sees as part of a "grandisima y peligrosisima aventura, donde sera necesario que yo muestre todo mi valor y esfuerzo"¹⁶ (167). Moreover, when Quijano encountered the barber carrying a basin he thought was the Yelmo de Mambrino, he tells Sancho

¿Como me puedo engañar en lo que digo, traidor escrupuloso...Dime, ¿no ves aquel caballero que hacia nosotros viene, sobre un caballo rucio rodado, que trae puesto en la cabeza un yelmo de oro? Lo que yo veo y columbro -respondió Sancho- no es sino un hombre sobre un asno pardo, como el mío, que trae sobre la cabeza una cosa que relumbra.¹⁷ (188)

However, we will not see Quijano altering his environment in that way in the next chapters following the Sierra Morena adventures, and when we learn of the interpolate stories, the meeting of Zoraida and the tale of the captive.

It is clear that Quijano is determined to live out his fantasy as a knight-errant. Thus, the previous three passages provide support for the main argument of this thesis. It is through the brave and noble challenges that Quijano encounters in his alternate reality that he can come to develop a sense of fulfillment with his life. He is reliant on proving himself as a capable and heroic figure to prove his worth to himself and to the world. By doing so, he will relieve his psychological state of despair and move to a healthy psychological state in which he feels as though his life has meaning, and he will have a lasting positive impact on the world.

3.3. Parallel Madness: Cardenio and Don Quijote

The fourth episode to be spotlighted in support of the argument of the thesis comes from chapters 23, 27 and 28 and, in comparison with the previous three episodes, offers a different avenue from which to explain the behavior of Alonso Quijano. The previous episodes have served to provide support to the claim that Alonso Quijano is seeking to leave a lasting mark on the world to bear his name which would give him a fulfilling sense of contribution.

The inclusion of the fourth episode differs in that it serves as a metaphor for the pursuit of, and ultimately, failure to obtain, romantic fulfillment that, in addition to leaving his mark, is also driving the psychosocial crisis that Alonso Quijano is experiencing. In this episode, Quijano meets a young man named Cardenio who has suffered from the loss of opportunity to marry the love of his life, Lucinda, and has fallen into a state of utter despair.

It can be argued that there is quite the parallel between the behaviors of Alonso Quijano and Cardenio in terms of madness and insanity. Cardenio is spoken of by a goatherd telling of his

encounters with him to Quijano. The goatherd initially describes Cardenio as “un mancebo de gentil talle y apostura...dejándonos a todos contentos de su buen talle”¹⁸ (218). The goatherd, however, warns Quijano of the state of madness exhibited by Cardenio recounting that, during an encounter with a shepherd, Cardenio “sin decille nada, se llevo a el y le dio muchas punadas y coces, y luego se fue a la borrica del hatu y le quito cuanto pan y queso en ella traia; y con extrana ligereza, hecho estro, se volvio a emboscar en la sierra”¹⁹ (219). Although coming from a background that is wealthy and of a noble social class, Cardenio exhibits behavior that is impulsive, drastic and unreasonable.

The descriptions of Cardenio in chapter 23 by the goatherd further exemplify the great degree of madness and insanity that can be paralleled with that of Alonso Quijano as his assumed identity, Don Quijote. Although initially grief-stricken over the assault and begging for forgiveness when confronted by the goatherd and shepherds, Cardenio suddenly snaps and is thrown into a fit of rage. The goatherd describes of his last encounter with Cardenio to Quijano:

...en lo mejor de su plática, paró y enmudecióse; clavó los ojos en el suelo por un buen espacio, en el cual todos estuvimos quedos y suspensos, esperando en qué había de parar aquel embelesamiento, con no poca lástima de verlo, porque, por lo que hacía de abrir los ojos, estar fijo mirando al suelo sin mover pestaña gran rato, y otras veces cerrarlos, apretando los labios y enarcando las cejas, fácilmente conocimos que algún accidente de locura le había sobrevenido. Mas él nos dio a entender presto ser verdad lo que pensábamos, porque se levantó con gran furia del suelo, donde se había echado, y arremetió con el primero que halló junto a sí, con tal denuedo y rabia, que si no se le quitáramos, le matara a puñadas y a bocados; y todo esto hacía diciendo: "¡Ah, fermentido Fernando! ¡Aquí, aquí me pagarás la sinrazón que me heciste, estas manos te sacarán el corazón donde albergan y tienen manida todas las maldades juntas, principalmente la fraude y el engaño!" Y a éstas añadía otras razones, que todas se encaminaban a decir mal de aquel Fernando y a tacharle de traidor y fermentido. Quitámossele, pues, con no poca pesadumbre, y él, sin decir más palabra, se apartó de nosotros y se emboscó corriendo por entre estos jarales y malezas, de modo que nos imposibilitó el seguille.²⁰ (219-220)

Based on the madness and irrationality of his behavior, it can thus be argued that Cardenio may serve as a parallel character to that of Quijano in his assumed identity of Don Quijote.

The character of Don Fernando is introduced in chapter 23. He quickly befriends Cardenio after learning of his desire to marry Lucinda, but eventually betrays Cardenio and leaves him scorned over the loss of Luscinda. Don Fernando tricks Cardenio by assuring him that he will not pursue Lucinda's hand in marriage and that he will help in arranging the wedding between them. Cardenio is summoned by Duke Ricardo and in his absence, Don Fernando takes advantage of the opportunity to pursue Lucinda. In his betrayal of Cardenio, Don Fernando obtains permission to marry Lucinda and a secret marriage is arranged to be held two days later.

Cardenio receives news of the wedding in a letter from Luscinda and manages to watch the ceremony in hiding. Luscinda informed him in the letter that if her parents would not listen to her and allow her to be with him, that she planned to kill herself with a knife. When asked during the wedding ceremony if she agrees to marry Don Fernando, Luscinda agrees and faints shortly afterwards. Seeing this throws Cardenio into a fit of rage and jealousy and ultimately, "...se salio de la ciudad desesperado, dejandole primero escrita una carta, donde daba a entender el agravio que Luscinda le habia hecho, y de como el se iba adonde gentes no le visen" (286).²¹

The loss of a partner, a figure of significant importance to the healthy psychological development and stability of an individual, can be a debilitating experience for the human psyche. According to Erikson's theory, a romantic partner is of utmost importance during stage six of psychosocial development, "Intimacy versus isolation." Because the presence of a healthy romantic relationship in this stage typically results in offspring and thus, a greater likelihood of success in stage seven, "Generativity versus Stagnation," it can be further argued that the psychological conflict experienced by Cardenio is directly related, potentially as a precursor to that of Alonso Quijano.

The degree to which Cardenio responds emotionally and erratically to the conflict in his relationship with Luscinda is indicative of a failure to respond positively to and overcome the psychosocial crisis that he is experiencing. It can thus be argued that Cardenio, as a result of his failure, is in a state of isolation. This state in psychosocial development is characterized by the thought that one will likely not be loved romantically and intimately by another and that one will be alone in life. Failure in stage six of psychosocial development, the stage of Cardenio's development, leads to an increased risk of failure in stage seven, the stage of Alonso Quijano. Thus, the parallel between the behavior of these two characters provides support for the use of this episode as a metaphor for the lack of romantic fulfillment Alonso Quijano experiences with regard to his own life, which is also expressed through the theme of madness.

3.4. Don Quijote Returns Home

The final episode to be spotlighted comes from chapter 52 and is the conclusion to part I of the novel. This episode provides further support for the argument of this thesis that Quijano is seeking to contribute positively to the world in order to leave his mark; however, this final episode also alludes to the idea that, despite his valiant efforts throughout part I of the novel, Quijano has failed to achieve a state of generativity and has remained in a state of stagnation.

Because of his possible failure to achieve a state of generativity, the conclusion to part I of the novel, thus, may also allude to the idea that Quijano may face an additional psychosocial crisis in the final stage of psychosocial development, which more or less is suggested by Sancho Panza's description of Don Quijote as the knight of the Sorry Face or Triste Figura (184-185). In this regard, the fact that Quijano conceives his last adventure as one with demons (470) expresses well his own awareness about failure and stagnation. That is to say, his failure to

achieve a state of generativity in stage seven could potentially lead to his impending failure in the eighth and final stage of psychosocial development, “Ego integrity versus despair.”

Finally, it is also important to note that in this chapter, the narrator informs the reader that, following the exploits of part I of his saga, Don Quijote has been returned to his house by Sancho Panza and reunited with his niece and housekeeper:

Mirábalas él con ojos atravesados y no acababa de entender en qué parte estaba. El cura encargó a la sobrina tuviese gran cuenta con regalar a su tío y que estuviesen alerta de que otra vez no se les escapase, contando lo que había sido menester para traelle a su casa.²² (528)

It is clear from this description that Alonso Quijano has endured a great deal of defeat in his attempts to assume the identity of a knight-errant; however, the precautions expressed of the priest indicate the great deal of determination and madness that is expected of Alonso Quijano despite his physical condition.

The narrator concludes the chapter and marks the end of part I of the novel by informing the reader that additional texts from the unknown author have been discovered that recount more of the adventures of Don Quijote:

Ni de su fin y acabamiento pudo alcanzar cosa alguna, ni la alcanzara ni supiera si la buena suerte no le deparara un antiguo médico que tenía en su poder una caja de plomo, que, según él dijo, se había hallado en los cimientos derribados de una antigua ermita que se renovaba; en la cual caja se habían hallado unos pergaminos escritos con letras góticas, pero en versos castellanos, que contenían muchas de sus hazañas y daban noticia de la hermosura de Dulcinea del Toboso, de la figura de Rocinante, de la fidelidad de Sancho Panza y de la sepultura del mismo don Quijote, con diferentes epitafios y elogios de su vida y costumbres.²³ (529)

Given that the exploits of Alonso Quijano do not appear to end with his return back to home at the end of part I of the novel, it can thus be further argued that Alonso Quijano had not satisfied his desire to contribute meaningfully to the world and leave a lasting impact. Because Alonso Quijano continues his adventures following part I of the novel, this provides further support for the argument that he is still in a state of stagnation, but that he has the will and the desire to

continue to attempt to achieve a state of generativity. Given this reasoning, it can also be argued, then, that Alonso Quijano faces an additional psychosocial crisis in stage eight of psychosocial development if he does not resolve the crisis that he is confronting in stage seven.

Chapter 4. Theory of Psychosocial Development

In this chapter, I will introduce and explain the theory of psychosocial development, developed by Erik Erikson, and relate the theory to the behaviors of the protagonist, Alonso Quijano, in the novel *Don Quijote*. My aim is to incorporate the theory as a means of decoding Quijano's perceptions of his surroundings, his interactions with other characters, and the behaviors he exhibits as a result of his perceptions. In doing so, I aim to provide support for the inclusion of the theory of psychosocial development as a tool in literary theory that can offer a unique perspective in the interpretation of literary figures.

4.1. The Origins of the Theory of Psychosocial Development

As a psychologist specializing in developmental psychology and psychoanalysis, Erik Erikson sought to explain the role of the ego in the construction of one's identity and how the ego developed throughout the life span (Erikson 47). He was heavily influenced by the dominant ideas of Sigmund Freud's psychoanalysis at the time and eventually came to form his influential theory of psychosocial development (Hoare 63). Before introducing the theory, it is important to understand the branch of psychology from which the theory was developed as this influences the perspective that psychologists take in their attempt to explain behavior.

Originating from the Greek word "psyche," meaning soul and spirit, and "logia," meaning study of, the field of psychology seeks to explain the innerworkings of the mind and to explain behavior. Psychoanalysis is one the most well-known disciplines within the field of psychology. Established by Freud in the early 1890s, psychoanalysis is a well-known discipline in psychology concerned with understanding the unconscious influences of the mind and how this may be applied to treatments for mental disorders. It's influenced in literature does not need further explanation although I want to notice that the interest on Quijano's madness in relation to

psychoanalysis received large attention thanks to the groundbreaking volume edited by Ruth Anthony El Saffar and Diana de Armas Wilson, *Quixotic Desire, Psychoanalytic Perspectives on Cervantes*. However, only 3 essays in that volume focused on *Don Quijote's* episodes.

The original psychoanalytical theory holds four main assumptions which state that (1) the unconscious mind plays a dominant role in influencing conscious behavior; (2) human sexuality is a powerful influencer on the development of the self; (3) early childhood experiences play a significant role in identity formation and social development; and (4) knowledge of these elements can be used in the treatment of mental disorders (Shirayev 104-112). Adopting some of the key views of psychoanalysis, Erikson was influenced by Freud's ideas about the human psyche.

Erikson was additionally influenced by developmental psychology, which is a branch of psychology that seeks to explain the changes that humans experience over the life span. Originally focused on the development of infants and children, the field has come to fully encompass the entire life span and seeks to explain various aspects of development including biological, social, and cognitive (King 307). Developmental psychology is generally concerned with how and why certain changes occur over the human life span. These changes can be related to aspects of one's self such as intelligence, cognitive ability, sociability, and personality.

As a psychologist interested in the formation and development of identity and the ego, Erikson naturally took interest to how these constructs change with time. Because developmental psychology is concerned with changes in humans over time, Erikson took to the prominent ideas of the time within this subfield to inform his own theories related to the development of the ego in relation to the social environment in which one is raised (King 307).

Focusing on how the human psyche interacts with and is related to the social environment, Erikson also incorporated concepts from social psychology in the conceptualization of his theory. Social psychology is the study of how human thought and behavior are influenced by the presence of others, whether the presence is real, imagined, or implied (Baron et al. 79-101). Thus, this branch concerns itself with influence from the social environment on human behavior. Erikson sought to relate these social environments to the development of the ego (Stevens 48-50). Having been influenced by psychoanalysis, developmental psychology, and social psychology, Erikson proposed the theory of psychosocial development.

4.2. Arguments of the Theory of Psychosocial Development

The theory posits that humans advance through eight stages in their psychological development from infancy into late adulthood and that at each stage, a psychosocial crisis—that is, a psychological challenge related to the social environment—is encountered. Depending on how the crisis is dealt with, each stage will result in a success or a failure. Each of the eight stages is age-related and thus, are typically experienced in an ordered fashion; however, it is possible to return to stages to resolve previous conflicts.

Continued success in the developmental stages gives an individual a greater likelihood of healthy psychological development. Similarly, continued failure at each stage presents greater challenges for healthy psychological development and, if left unresolved, will typically manifest later in life as problematic and unhealthy behavior. Erikson believed that this system guided the psychological maturity of humans (Erikson 56).

Each of the eight stages of psychosocial development will be identified and discussed in order to better understand the age-related crises that humans encounter. The discussion on the

stages in psychosocial development will conclude by relating to the thesis argument the stage of development that is most relevant to the thesis. A direct connection will then be made to the character of interest, Alonso Quijano, as portrayed in the novel *Don Quijote*.

The first stage that humans experience sets the stage for the relationship between the individual and the world. Occurring from birth to age 2, the first stage is “Trust versus mistrust.” Infants are born into the world with a set of basic needs that must be met in order to survive—needs which they are unable to fulfill on their own and thus require the attention of a caregiver. The psychosocial crisis encountered in this stage is concerned with developing the trust that one’s needs will be fulfilled. For example, a caregiver who provides physical affection, feeds their baby regularly and responds appropriately to the baby’s cries will foster healthy psychological development which will result in a state of comfort and trust in the baby. Conversely, a caregiver who is absent, does not respond appropriately to cries, or does not provide nourishment will foster a sense of mistrust. This would indicate that the individual does not view the world as a trustworthy place and is uncertain if their basic needs will be met.

The second stage in psychosocial development is “Autonomy versus shame and doubt,” which occurs between the ages of 2 and 3. In this stage, toddlers learn to exercise their own will and begin to do things for themselves such as navigating their bodies around their environment and manipulating tools and objects. For example, a toddler may begin to climb onto furniture on their own and hone the fine motor movements necessary to feed themselves with a utensil. Those who are able to successfully carry out these types of tasks or receive positive feedback from their caregiver will develop a sense of autonomy. Conversely, a toddler will develop a sense of shame and doubt if they are unable to perform these tasks or if their caregiver is not supportive of the

toddler's efforts. Success in this stage is associated with greater independence as the toddler develops their own sense of identity in the world separate from the caregiver.

The third stage in psychosocial development is "Initiative versus guilt," which occurs between the ages of 3 and 5. In this stage, the individual learns to initiate tasks and carry out plans in a continuing effort to become more independent from the caregiver. The child, for instance, may begin to pick out clothes to wear and dress themselves without direction from the caregiver. Children who receive positive feedback and praise from their caregiver for their efforts will develop a healthy view of initiative and be confident in their ability to complete tasks, indicative of a success in this stage. Conversely, children who are scolded or punished for their failed efforts will learn to feel guilty about taking initiative and will develop an unhealthy sense of confidence, indicative of a failure.

The fourth stage in psychosocial development is "Industry versus inferiority," which occurs between the ages of 5 and 12. In this period of development, the child learns the pleasure of applying themselves to tasks deemed important by society. Children at this age typically spend much of their time in a school environment learning new skills surrounded by their peers who are often viewed as a point of comparison. A child who is able to acquire and employ these academic skills will come to develop a healthy sense of competence. Those individuals who face greater difficulty acquiring these skills may come to view themselves as inadequate or inferior and thus, develop feelings of incompetence.

The fifth stage in psychosocial development is "Ego identity versus role confusion," which is ongoing during adolescence from ages 12-18 and is associated with fidelity. In this stage, the individual works at refining a sense of self by testing out different roles that they can integrate into a single form of identity. The converse outcome to this stage results in confusion as

to who one is and what qualities make up oneself. Those who are able to confidently navigate themselves in the social world typically develop a healthy ego identity and are able to avoid unhealthy personality features that may be promoted by their peers, such as engaging in drug use and cheating.

The sixth stage in psychosocial development is “Intimacy versus isolation,” which is ongoing during young adulthood from ages 18-40 and is associated with feelings of love. In this stage, the young adult continues to navigate the social world and is confronted with desires for intimate love. The young adult attempts to form close relationships with others in an effort to gain the capacity for intimate love. It is in this stage that, in the event of a success, the individual comes to believe that they are capable and worthy of intimate love from another. In the event of a failure, the individual believes the opposite—that they are incapable of obtaining intimate love and thus, begin to feel socially isolated.

The seventh stage in psychosocial development is “Generativity versus stagnation,” which is ongoing during middle adulthood from ages 40-65 and is associated with feelings of care. In this stage, the adult seeks to obtain a sense of contribution to the world that will allow them to leave their own personal mark. A question asked of oneself in this stage is, “How can I contribute positively to the world?” The desire to have a sense of contribution to the world is usually realized through typical life experiences such as parenting children, mentoring others to contribute to the next generation, developing healthy relationships with others, and contributing meaningfully through work. Those who are unable to resolve the crisis at this stage will result in stagnation and feel as though they lack purpose in life.

The “Generativity versus stagnation,” stage is the most relevant to the argument of the thesis because it is the stage that the character Alonso Quijano would be in based on the

description of him in the novel. In chapter 1, a description is offered of him that includes a reference to his age as bordering upon fifty. Given that the stage of “Generativity versus stagnation” is experienced during middle adulthood between the ages of approximately 40 and 65, according to the theory of psychosocial development, Alonso Quijano may be confronting a psychosocial crisis in which he seeks to save himself from erasure by making a positive and lasting contribution to the world.

The eighth and final stage of psychosocial development is “Ego integrity versus despair,” which is also relevant to the argument of this thesis. This stage is experienced in late adulthood from age 65 until death. This stage is concerned with having had a purpose in the world and feeling satisfied with the life that one has lived. The individual, when reflecting on their life, will either feel a sense of fulfillment and purpose in the world which would be indicative of ego integrity, or they will feel unfulfilled with their experiences and relationships and believe that their life was ultimately not meaningful.

Those who have overcome the crisis associated with the final stage of psychosocial development do not fear death because they are satisfied with the impact they have had on the world and the relationships fostered with others. Conversely, those who have not overcome the final crisis fear death because they believe they have not had a meaningful impact on the world and will likely be forgotten with the passage of time.

The psychological conflict that characterizes Quijano places him in a state of uncertainty and doubt with regard to his lasting impact in the world and sense of fulfillment in life. Having failed to overcome this psychosocial crisis, Quijano finds himself in a state of stagnation. In his efforts to resolve the failed conflict and achieve a state of generativity, Quijano chooses to create meaning in his life so that he can develop a sense of fulfillment and have a lasting impact on the

world. The challenges that Quijano encounters, which are psychological and developmental in nature, play a role in driving Quijano's mental processes and resulting behaviors.

4.3. Applications of the Theory to the Novel

The introductory chapter of the novel directs the reader's attention to the psychological state and subsequent intentions of Alonso Quijano as he begins his conversion to Don Quijote. The descriptions additionally imply that Quijano has a drive, or perhaps need, to perform meaningful and impactful deeds in the world which could arguably be to satisfy a lack of some fulfillment, whether he is consciously aware of this or not. The following passage provides support for the psychosocial state of Quijano by which his perceptions and behaviors will be observed and decoded:

En efeto, rematado ya su juicio, vino a dar en el más estraño pensamiento que jamás dio loco en el mundo, y fue que le pareció conveniente y necesario, así para el aumento de su honra como para el servicio de su república, hacerse caballero andante, y irse por todo el mundo con sus armas y caballo a buscar las aventuras y a ejercitarse en todo aquello que él había leído que los caballeros andantes se ejercitaban, deshaciendo todo género de agravio y poniéndose en ocasiones y peligros donde, acabándolos, cobrase eterno nombre y fama. Imaginábase el pobre ya coronado por el valor de su brazo, por lo menos del imperio de Trapisonda; y así, con estos tan agradables pensamientos, llevado del estraño gusto que en ellos sentía, se dio prisa a poner en efeto lo que deseaba.²⁴ (30)

Going beyond simply conceptualizing his newfound role as a knight-errant, Alonso Quijano begins to create a tangible reality that will allow him to live out his fantasy. Quijano further adopts his role by gathering a suit of armor and helmet—traditional identifiers of a knight-errant. Although the suit of armor and helmet are essential components of a knight's ensemble, as they are critical for protection, Quijano chooses a suit of armor that is rusted and moldy and, for a helmet, a steel cap that lacks a protective visor and is in poor condition. Failing to restore the helmet to a condition that can withstand and protect him against heavy blows, Quijano decides that he is well-equipped to continue with his adventures.

Y lo primero que hizo fue limpiar unas armas que habían sido de sus bisabuelos, que, tomadas de orín y llenas de moho, luengos siglos había que estaban puestas y olvidadas en un rincón. Limpiólas y aderezólas lo mejor que pudo; pero vio que tenían una gran falta, y era que no tenían celada de encaje, sino morrión simple; mas a esto suplió su industria, porque de cartones hizo un modo de media celada que, encajada con el morrión, hacían una apariencia de celada entera. Es verdad que, para probar si era fuerte y podía estar al riesgo de una cuchillada, sacó su espada y le dio dos golpes, y con el primero y en un punto deshizo lo que había hecho en una semana; y no dejó de parecerle mal la facilidad con que la había hecho pedazos, y, por asegurarse deste peligro, la tornó a hacer de nuevo, poniéndole unas barras de hierro por de dentro, de tal manera, que él quedó satisfecho de su fortaleza y, sin querer hacer nueva experiencia della, la diputó y tuvo por celada finísima de encaje. (31)²⁵

The fact that Quijano does not possess adequate equipment to protect himself for the dangerous adventures he is seeking and that he still chooses to embark on these adventures underlines the degree to which he is willing to overlook actual reality and instead continue to create his alternate reality of knighthood. This willingness, it can be argued, is driven by Quijano's presumably subconscious desire to find purpose and meaning in his life. Without the necessary garments to give himself the appearance of that which he seeks to become, Quijano would not be able to truly embody his role as a knight-errant and live in his alternate reality. Thus, to Quijano, procuring the ensemble of a knight's armor is instrumental to his newly established identity and purpose.

It can be seen from the examples highlighted in the novel that Alonso Quijano is indeed experiencing some type of psychological conflict or distress based on his disconnect with reality. His desire to be lauded as a savior exemplifies his need to make a meaningful and positive impact in the world. From the perspective of the theory of psychosocial development, Quijano is in a state of stagnation, which indicates that he is dissatisfied with his lasting impact on life and, as he enters late adulthood and the final stage of psychosocial development, will likely be afraid of his impending death. Having failed to resolve this psychosocial crisis, Quijano creates his alternate reality of knighthood and his new identity in order to give himself the opportunity to

find and create meaning in life. It is through his adventures as Don Quijote that Quijano attempts to overcome his psychosocial crisis and reach a state of generativity, which would indicate a sense of fulfillment and completeness in life and, ultimately, acceptance of death without fear.

In addition to the theory of psychosocial development, the theoretical notion of mirror neurons, a concept in the field of neuroscience, will be used to further elucidate the quixotic behavior of Alonso Quijano. The theory of psychosocial development provides a segue into the next chapter by providing a psychological backdrop from which the motivations and intentions of Quijano's behavior can be decoded. Specifically, the argument of the following chapter can be furthered bolstered taking into account the psychosocial crisis that Quijano is experiencing. The concept of mirror neurons will also add another novel approach to the thesis argument by providing a neurological basis from which Alonso Quijano's perceptions may have been influenced. This approach will be directly related to Quijano's obsession with reading books about knighthood and his resulting disconnect with reality.

Chapter 5. Neuroscience and Mirror Neurons

In his initial description of Alonso Quijano in chapter 1, Cervantes draws attention to the impact that both reading and sleep deprivation have had on the condition of Quijano's brain and, subsequently, his behavior: "...él se enfrascó tanto en su lectura, que se le pasaban las noches leyendo de claro en claro, y los días de turbio en turbio; y así, del poco dormir y del mucho leer, se le secó el cerebro de manera que vino a perder el juicio"²⁶ (29-30). It is important for the purpose of the arguments of this thesis to highlight this description as it illustrates the idea that Quijano is likely experiencing some form of mental impairment or disturbance as a result of sleep deprivation and physical changes to his brain.

But what types of changes in behavior are expected to be exhibited from someone such as Quijano who has experienced such a drastic change to the physical structure of the brain and a great amount of sleep deprivation? Although the details of Quijano's brain in the novel are limited to only a brief description, the field of neuroscience can offer some insight into just how his brain may have changed and adapted based on the types of experiences Quijano exposed himself to and created for himself. Additionally, the field of neuroscience may be able to offer insight into the behavioral consequences of such structural changes to the brain as well as the effects of sleep deprivation.

5.1. The Field of Neuroscience in Literature

Neuroscience is an area of study that has enjoyed continuous expansion in recent decades and has been well-established as an interdisciplinary field. Stemming from a branch of biology, neuroscience is the study of the nervous system, which includes the central and the peripheral nervous systems. It aims to understand the fundamental properties of neurons, which are basic cellular units of the brain designed to transmit information, and neural circuits, which are

populations of neurons that are interconnected to form a network. Having been described as the ultimate challenge of the biological sciences is the aim to understand the biological basis of consciousness, perception, behavior, memory, and learning (Kandel 19).

As an increasingly interdisciplinary field, neuroscience has been incorporated into many fields such as anthropology, psychology, linguistics, and cognitive science. For example, from the lens of cognitive neuroscience, mental processes are studied as they relate to the underlying system of neural circuits, also called neural networks, and neurological activity in the brain. The aim of the field of cognitive science is to help understand the biological bases for various mental faculties such as perception, language, emotion, reasoning, attention, and memory (Thagard). Because neurological activity occurs as a function of behavior, including mental operations such as information processing, neuroscience has also naturally come to be incorporated into the field of literature.

Neuroscience has been incorporated into research in literature in very interesting ways; for example, neuroscience has been used as a basis for helping to explain the role of previous experiences in interpreting new experiences. The study of neuroscience has contributed to research into the interpretation of the protagonist, Alonso Quijano, by exploring the visual system and how it relates to actual events and experiences in comparison to how those experiences are interpreted. For example, in an article by Connor-Swietlicki, she presents information that explains the relationship between the visual system and perception. She explains that the circuits of the visual cortex respond to the visual information that is experienced and that the network of neurons that has been established by previous experiences can influence how visual information is perceived (Connor-Swietlicki 254).

What is being argued, essentially, is that previously experienced information from the environment may influence how subsequent information from the environment is interpreted. The accumulation of our individual experiences leads to the formation of neural networks that aid in processing future experiences. For example, if someone encounters a new type of snake, but they have seen many other types of snakes before, they will have previously established neural networks that will be activated upon seeing the new type of snake and that will aid in interpreting the stimulus as a snake. In contrast, if someone encounters a new animal that is not similar to animals they have previously seen, the details of the new animal may not be well-remembered because neural connections to decode physical traits and traits related to their behavior have not been sufficiently developed. Therefore, the formation of neural networks and establishing strong networks through recurring activation is essential for interpreting information from the environment. These networks, then, can in turn influence how both old and new information from the environment is interpreted.

Raichle says of perception with respect to the mind:

Most of the energy used by the brain to attend to incoming visual information comes from already established or 'intrinsic' brain circuits unrelated to any external visual event. That means that *memory* provides 60%-80% of what *we think we are* seeing (most in other words). At best, what is really *out there* may contribute no more than 20% to 40%. (12730)

This quote illustrates the striking influence that previous experiences and memory can have on an individual's interpretation of the world and highlights the degree of subjectivity with which people make sense of reality.

The misinterpretation of the world created by Quijano, thus, may be related to the subsidiary experiences he has accumulated from his books. Because many of his experiences come from stories about knights, they are the experiences and memories on which his behavior is based. Also, because the content of the books Quijano read were about the adventures of knights,

it is highly likely that he would have created neural networks associated with the identity of a knight and knighthood, such as how a knight looks, including attire and physical fitness, and the types of behaviors associated with being a knight, including rescuing others and defending oneself in battle.

Given that he absorbed himself in his books, his neural networks related to knights and knighthood would have been constantly activated and strengthened as he continued to consume his stories. These well-established neural networks, according to Connor- Swietlicki and Raichle, could subsequently influence how Quijano interprets and makes sense of his experiences in the environment. But because his experiences of knighthood were acquired through readings, it could be argued that they are essentially vicarious or second-hand experiences, which may be inadequate experiences for Quijano in his goal of behaving like and being perceived as a heroic knight.

5.2. Neurons and Their Function

In our exploration of Quijano’s behavior with respect to neuroscience and brain development, it is important to shift attention to the function of neurons and the types of neurons that are housed in the brain and body. Of particular importance for the purposes of this thesis is a specific type of neuron called a “mirror neuron.” However, in order to understand the importance of mirror neurons as they relate to the arguments of this thesis, two other types of neurons—afferent neurons and efferent neurons—must be understood. First, a detailed description of the neuron and the purpose of neurons in general will be presented after which each of the three types of specific neurons will be explained in greater detail.

Neurons, also referred to as nerve cells, are the basic elements of the nervous system that communicate with other cells and, in doing so, transmit information sometimes across relatively

long distances within the body (Feldman 54-55). There are over one trillion neurons throughout the body that are involved in the processing of information and the control of behavior (Feldman 54), and a group of neurons that are connected to one another form what are known as neural networks or neural circuits.

The purpose of neurons and neural networks is to enable humans and other animals to perceive information such as visual, auditory, and other sensory information, from both the external environment and the internal environment (the body), as well as enable motor movements necessary to perform actions such as grasping, walking, climbing, swinging a bat and driving a car (King 62). The communication process of neurons and neural networks is partly electrical and partly chemical. The transmission of information *within* an individual neuron occurs via electrical activity; that is to say, sensory and motor information is transmitted through a single neuron as an electrical impulse (Feldman 2019). The transmission of information *between* neurons occurs via chemical exchange; that is to say, an individual neuron transfers information to a neighboring neuron via chemical exchange. The chemicals that are exchanged between neurons are called neurotransmitters. Thus, the transmission of information within the nervous system occurs as a function of electrochemical communication (King 63).

The two main types of neurons of the nervous system that are typically discussed are afferent neurons and efferent neurons. Although both are involved in the processing of information, they are different in the types of information that they process. Afferent neurons are associated with the processing of sensory information from the environment and are responsible for carrying signals from the environment to the brain (Hall & Guyton 2006). This includes sensory information such as visual, tactile, and auditory stimuli. For example, when someone touches a scorching hot surface with their hand, afferent neurons responsible for sensing

stimulation in that part of the body will receive the sensory information and transmit the message of “scorching hot sensation” to the brain. Within milliseconds upon arrival, the brain will then process the sensory information and register the sensation as scorching and dangerous to the body. The transmission of this sensory information to the brain via afferent neurons, and the subsequent processing of this information in the brain occurs within milliseconds (Feldman).

Efferent neurons, in contrast, are associated with the processing of motor movements and are responsible for carrying signals from the brain to the body, in order to interact with the environment (Mader 42). This includes motor movements of the body such as grasping of the hands and turning of the head as well as more coordinated movements such as running and swimming. For example, when afferent neurons transmit sensory information to the brain, such as the sensation of a scorching hot surface, efferent neurons send information from the brain to the body directing the body how to physically react. In the previous example, efferent neurons would in response send information from the brain to the body directing the hand to retract from the hot surface in order to prevent further damage to the body. The transmission of this motor information to direct the hand via efferent neurons occurs within milliseconds.

One key piece of information to highlight when discussing afferent and efferent neurons is that both types of neurons act as one-way streets in the nervous system (King 64). That is to say, afferent neurons are only active in the transmission of sensory information from the body to the brain, and efferent neurons are only active in the transmission of motor movements from the brain to the body. This brings us to a third type of neuron, mirror neurons, which differ markedly from afferent and efferent neurons in how they are involved in information processing in the brain and body.

5.3. Mirror Neurons

Mirror neurons are a type of neuron with a different classification from other neurons in the brain. Normally, neurons only respond to one of two types of information: either information from the environment to the brain to be interpreted such as temperature and smell or information from the brain and spinal cord to direct the body to interact with the environment such as moving towards something to inspect it or fleeing from a threat. Mirror neurons, interestingly, respond to both sensory and motor information, which is what makes them unique in comparison to afferent and efferent neurons. Mirror neurons, then, fire both when an organism performs an action or observes another performing that same action. It is especially important for the arguments of this thesis to highlight that thus the mirror neuron essentially mirrors or mimics the behavior of the organism being observed as though the observing organism itself were acting.

Mirror neurons have been linked to the perceived experiences one has and how those perceived experiences come to influence one's behavior (Connor-Swietlicki 233). It has been argued that the presence and firing of mirror neurons is what allows for the learning of new skills by imitation (Kosonogov 499-502). For example, when observing someone perform an action—that is, taking in visual sensory information from the environment—both afferent and mirror neurons are activated. Additionally, when performing that same action—that is, coordinating motor movements of the body—both efferent and mirror neurons are activated. Mirror neurons, then, code the representation of action and allow an organism to simulate the observed action.

As indicated by Kosonogov (499-502), the more frequently a neural network is activated, as in the activation of mirror neurons from reading about the behavior of knights for example, the stronger that network becomes. In the case of Alonso Quijano, it could be argued that the overconsumption of stories about knighthood and performing heroic acts caused such intense

firing of the mirror neurons that his behavior was subsequently influenced by that high degree of stimulation.

5.4. Consequences of Sleep Deprivation on Neurological Functioning

In addition to the physical changes to Quijano's brain, it is also mentioned by Cervantes, that he suffered from sleep deprivation. It has been well-established that sleep plays an important role in restoring the brain's ability to function at optimal capacity as well as aids in the consolidation of memories of information encountered in the environment (Boonstra et al 1994-1996; Verweij et al.). Given that Quijano experienced a great amount of sleep deprivation because of his obsession with books, it could be argued that this had a negative impact on his brain functioning, specifically the connectedness and overall functioning of his neural networks, and, as a result of this impediment, his interpretations of the environment.

In a study conducted by Verweij et al., it was shown that sleep deprivation was associated with a reduction in the functional connectivity of the prefrontal cortical areas of the brain, which are associated with working memory as well as executive functions such as planning, decision making, and self-control. Participants in this study completed a series of visuo-motor computer tasks while their neural activity was measured using an electroencephalogram. The participants completed the same tasks during two different sessions in which they performed under one of two types of sleeping conditions. For one of the sessions, the participants had previously slept a normal amount of sleep. For the second session, participants were fully deprived of sleep and had been instructed to stay awake overnight. The order of the two conditions was randomized across participants to rule out the order of the conditions as a confounding variable.

The results indicated that sleep deprivation changes the structure of neural networks in prefrontal brain regions and negatively impacts functional connectivity, which may result in

network functioning that is in a less optimal state for information processing (Verweij et al.). The authors' study, thus, provides support for the notion that sleep may have a restorative effect specifically related to the maintenance of functional connectivity of prefrontal brain regions.

It is interesting to consider these elements in the perceptions of Alonso Quijano. Because it can be argued that Quijano is facing a crisis in his psychosocial development and that he is motivated to live a meaningful life, the life of a knight-errant, his perceptions, then, are likely maladjusted to form an accurate experience of what he actually encounters in his real life. The tendency to misunderstand people and the events that are experienced may depend on the experiences one has accumulated in life and, therefore, the availability of neural connections which aid in perception.

This relates to Quijano because he has accumulated a wealth of vicarious experiences through his readings and, as a result, comes to believe that he is a knight-errant, although he has not accumulated the lived experiences necessary to become an effective and capable knight. Thus, the memories he has, that is, the neural networks he has developed in his brain from his readings, are not very useful for his goal of perceiving the world through the eyes of a knight because they are strictly second-hand experiences and not direct, first-hand experiences. It is possible then, that the formation of neural networks, which are based on vicarious experiences, coupled with the effects of sleep deprivation contribute to the perceptions that Quijano has of his environment.

5.5. Assessing Alonso Quijano's Neurological Functions

One example from the novel that arguably illustrates the concept and recurrent theme of mirror neurons is a scene from Chapter 24 involving Cardenio. In this scene, Cardenio recounts how Don Fernando double-crossed him in an attempt to marry Lucinda:

...vi yo luego a Luscinda, tornaron a vivir (aunque no habían estado muertos ni amortiguados) mis deseos, de los cuales di cuenta, por mi mal, a don Fernando, por parecerme que, en la ley de la mucha amistad que mostraba, no le debía encubrir nada. Alabéle la hermosura, donaire y discreción de Luscinda, de tal manera que mis alabanzas movieron en él los deseos de querer ver doncella de tantas buenas partes adornada.²⁷ (227)

Of importance to note here is that, in his description of Lucinda to Don Fernando, Cardenio stirs up arousal and excitement in him even though Don Fernando had not yet met Lucinda. This relates to the concept of mirror neurons in that Don Fernando is observing another individual who is recounting their experiences, and he himself becomes emotionally stirred by their recounted experiences even though he had not had those experiences first-hand. It could thus be argued that similar to Alonso Quijano, an overactivation of mirror neurons could have potentially influenced the behavior of Don Fernando.

It is evident that the activation of these mirror neurons is associated with behavioral changes in both Alonso Quijano and Don Fernando. Whereas Quijano's behavior was influenced by his desire to be a knight, Don Fernando's behavior, in this case, was influenced by his desire to pursue and marry Lucinda. The behavioral consequences of such influence can be seen as Cardenio continues explaining of Don Fernando:

Cumplíselos yo, por mi corta suerte, enseñándosela una noche, a la luz de una vela, por una ventana por donde los dos solíamos hablarnos. Viola en sayo, tal, que todas las bellezas hasta entonces por él vistas las puso en olvido. Enmudeció, perdió el sentido, quedó absorto y, finalmente, tan enamorado cual lo veréis en el discurso del cuento de mi desventura.²⁸ (227)

Don Fernando convinced Cardenio to let him see Lucinda so that he could experience her beauty and magnificence first-hand. Thus, it can be argued that through a vicarious experience relayed to him by Cardenio, an overstimulation of mirror neurons may have influenced the behavior of Don Fernando.

Another scene that illustrates the concept and theme of mirror neurons in the novel is the windmill scene in chapter 8, in which Alonso Quijano misinterprets windmills as dangerous giants. Given that his accumulated experiences, albeit second-hand, are highly formed by and geared towards knighthood and knight-errantry, Quijano is arguably susceptible to a biased misinterpretation of his environment. His neural networks related to knighthood have been well-established because of his overconsumption of books, which indicates that he will likely rely on these neural networks for making sense of information in his environment. This, coupled with the debilitating effects of sleep deprivation on neural functional connectivity and cognitive impairment, could have potentially influenced Quijano's perception of the windmills as dangerous giants.

It could be argued that, given the movement of the fans on the windmill, Quijano related this movement to the sentience of a living being and thus assumed that the windmill was a living creature. Furthermore, it could be argued that, due to the gargantuan size of the windmills, Quijano associated their massiveness with a monstrous figure. Given that his books on knighthood likely included stories about knights getting into battles with giants, Quijano may have subconsciously referenced these stories when making sense of his perceptions of the environment; in this case, seeing a windmill as a giant. Because he is motivated to embody the heroic figure of a knight and establish his legacy, this positions him to see the giants as adversaries that he must defeat.

A similar type of scenario regarding Quijano's misinterpretation of the real world can be seen at the beginning of the novel when he assembles the pieces to his suit of armor and when he recruits his trusty steed, Rocinante. In chapter 1 of the novel, after deciding to set out in the world as a knight-errant, Quijano locates a suit of armor and helmet to don during his adventures.

The suit of armor, however, is described as “tomadas de orín y llenas de moho, luengos siglos había que estaban puestas y olvidadas en un rincón”²⁹ (31). Nevertheless, “Limpiólas y aderezólas lo mejor que pudo”³⁰ (31). The narrator continues of Quijano explaining that:

... vio que tenían una gran falta, y era que no tenían celada de encaje, sino morrión simple; mas a esto suplió su industria, porque de cartones hizo un modo de media celada que, encajada con el morrión, hacían una apariencia de celada entera.³¹ (31)

Quijano notices that he is missing a helmet and a visor or face covering to fully protect his head.

The elements of a knight's attire would have been a common description in his books about knighthood, which provides support for the idea that Quijano may have been referencing these stories as he prepared himself for his adventures.

The following quote further illustrates the degree to which Alonso Quijano misinterprets the real world in his attempt to solidify his identity as a knight-errant:

Es verdad que para probar si era fuerte y podía estar al riesgo de una cuchillada, sacó su espada y le dio dos golpes, y con el primero y en un punto deshizo lo que había hecho en una semana; y no dejó de parecerle mal la facilidad con que la había hecho pedazos, y, por asegurarse deste peligro, la tornó a hacer de nuevo, poniéndole unas barras de hierro por de dentro, de tal manera que él quedó satisfecho de su fortaleza; y, sin querer hacer nueva experiencia della, la diputó y tuvo por celada finísima de encaje.³² (31)

Despite the poor conditions of the suit of armor and helmet, Quijano resolves to see an ensemble fit for a knight that will protect him on his adventures. It is thus argued that the overstimulation of neural networks, as a result of his excessive reading, coupled with the effects of sleep deprivation influenced Quijano to see that which he has read about in his books.

This recurring theme of misinterpreting the environment due to the overstimulation of neural networks associated with knighthood can be further examined in the following scene in which Quijano recruits his trusty steed, Rocinante:

Fue luego a ver su rocín, y, aunque tenía más cuartos que un real y más tachas que el caballo de Gonela, que tantum pellis et ossa fuit, le pareció que ni el Bucéfalo de Alejandro ni Babieca el del Cid con él se igualaban.³³ (31)

Attention is drawn to the bony structure of the steed to explicitly indicate that Rocinante was quite skinny with little muscle mass. The steed is then further described by being compared to the horse of Gonela, a popular figure of Renaissance culture depicted as a skinny clown accompanied by an equally skinny horse (Mancing 34). It is clear that Quijano's interpretation of the steed is in contrast to reality. It is argued that this is influenced by the overactivation and stimulation of neural networks and accrued memories associated with knighthood as well as the effects of sleep deprivation.

This chapter has elucidated the potential role of neuroscience in our understanding of literature and literary figures. Specifically, this chapter has presented an argument for the role of neurons, neural networks, and mirror neurons in the behavior of the protagonist, Alonso Quijano. By relating the accumulation of Quijano's subsidiary experiences of knighthood via books to the formation of neural networks that influence information processing, it has been shown how these networks could potentially bias his interpretations of the environment. His interpretations are arguably biased in a manner that favors perceptions of the environment that will position him as a heroic knight.

The next chapter will extend the argument of neural networks and mirror neurons as an explanation for Quijano's behavior by introducing another psychological theory, schema theory, that can be related to and understood within the context of neuroscience. One important relationship between the arguments of this chapter and the following is that both are related to the formation of memories and the influence of previous experience on the interpretation of new experiences. It has been established in this chapter that neural networks are formed as a result of experience and that the activation of these neural networks aid in the interpretation of information from the environment. Neural networks thus are related to the formation and

recollection of memories. A similar relationship will be expounded on in the next chapter between schema theory and the formation of memories, which will serve as a segue into the next part of the thesis argument.

Chapter 6. Schema Theory

The idea that the activation of neural networks may contribute to the construction and reconstruction of memories can also be linked to the formation of schema (plural *schemata* or *schemas*), a psychological construct that, in essence, conceptualizes how multiple pieces of information from the environment are organized in a cognitive framework, which subsequently aids in the organization and interpretation of additional information from the environment. The concept of schemata and the formation of schemata, thus, provide another avenue from which to decode and offer potential explanations for the reality in which Alonso Quijano appears to immerse himself.

A connection between mirror neurons and the formation and use of schemata will serve to bolster the main argument of the thesis regarding Quijano's state of psychosocial crisis and his attempts to overcome the psychological crisis. Additionally, schema theory will serve to argue that the schemas that Quijano formed from his overconsumption of readings bias his perceptions of the environment and, subsequently, his behavioral responses in light of his state of psychosocial crisis.

6.1 Schema as a Psychological Construct

Rooted in cognitive psychology, schema theory was first introduced by British psychologist Frederic Bartlett in his book "Remembering: A Study in Experimental and Social Psychology." Bartlett introduced the notion that memory is based on constructive processes, processes in which memories are influenced by the meaning we give to events (Feldman, 218).

In his book, Bartlett describes schema as:

An active organization of past reactions, or of past experiences, which must always be supposed to be operating in any well-adapted organic response. That is, whenever there is any order or regularity of behavior, a particular response is possible only because it is

related to other similar responses which have been serially organized, yet which operate, not simply as individual members coming one after another, but as a unitary mass (3).

Schemata can be more succinctly described as “organized bodies of information stored in memory that subsequently bias the way new information is interpreted, stored, and recalled” (Feldman 218). Bartlett considered our memories to be a reconstruction of previous experiences due to the referencing of existing schemata and the process of reconstruction as we remember something or encounter additional information from the environment.

Some of the first types of schema children develop are those related to animals. A child will, for example, come to develop a schema for ‘horse’; that is to say, the child may come to understand that a horse has certain features that are consistent such as being a large animal that has a tail and that stands on all four legs. Upon seeing a cow for the first time, the child may incorrectly identify it as a horse because the cow shares similar features (e.g., large animal, has a tail, stands on all four legs.) With correction, however, the child will come to distinguish more concretely between the two animals and modify the schema for ‘horse’ and establish a separate schema for ‘cow.’ The child will continue to further modify the schema for ‘horse’ if, for example, s/he sees a miniature horse for the first time. In this instance, the child will adjust the schema for ‘horse’ to allow for animals of smaller sizes to be classified under that same schema (King 298).

Although first introduced by Bartlett as schema theory, the concept of schemas was widely popularized by Swiss psychologist Jean Piaget, who was a prominent psychologist known for his work in child development and cognitive development. He is most well-known for his theory of cognitive development, which posits that all children advance through a series of four stages in a fixed order and that each stage differs in the amount of information that the child takes in as well as the degree of knowledge and understanding that the child can achieve

(Feldman 392). In Piaget's view, children actively construct their understanding of the world through multiple cognitive processes and that they use schemas to more easily make sense of their experiences (King 298).

What is the practical meaning or significance, then, of the potential existence of schemas as a cognitive mechanism and the consequences of human nature to rely on such a psychological construct? Considering the previous arguments presented in response to research question one, schemas are of considerable importance in relation to the theoretical notion of mirror neurons and the behavioral implications of overstimulated neural networks. Additionally, schemas are also important in that they are related to the construction and reconstruction of acquired memories, including those acquired vicariously, such as from reading of the experiences of others, which as has been argued, may influence an individual's behavior.

6.2. Schemas and Memory in Alonso Quijano as Quijote

Schemas can influence memory in specific ways; notably, they can: influence what we pay attention to (Alba and Hasher 203-207; Brewer and Treyens 207-211; Desimone and Duncan 193-222), help simplify the world around us (Alba and Hasher 207-221; Brewer and Treyens 211-225; Nishida 35), allow us to think quickly, and impact how quickly we learn (Alba and Hasher 221-231; Brewer and Treyens 225-230; Kleider et al. 1-20). Each of these elements influence the initial perception of information from the environment, as well as how memories are initially constructed and later reconstructed when recalled. The importance of this section, thus, is to elucidate the ways in which the schemas that Alonso Quijano has formed bias his perceptions of the world. Subsequently, it will be argued that these biased perceptions influence his behavioral responses and reactions to the environment.

Previous research has demonstrated that, when taking in information from the environment, people are more likely to pay attention to things that fit into their current schemas and overlook unusual or conflicting information. This concept was demonstrated in a study by Brewer and Treyens (1981), in which participants were placed into an office for 35 seconds and then relocated to a different room, where they were then instructed to list items they had just seen in the office.

The results showed that the participants were able to better recall items in the office that fit into the typical schema for 'office,' such as a desk and chair. Many of the participants, however, also reported seeing items typical of an office but that were not actually in the room, such as different books. Given that books are commonly found in different types of offices, it is expected that they would be a typical component of many people's schema for 'office.' Additionally, many of the participants did not report noticing certain items that were placed in the room but that were not typically associated with an office such as a skull. The researchers argued that items not typically associated with a certain schema, such as a skull not fitting in with the schema of 'office,' were overlooked possibly because they are not included in that specific schema (Brewer & Treyens 1981).

This example demonstrates how schemas can influence the type of stimuli that we direct our attention to and how well an event is initially encoded in memory and later reconstructed when recalled. More specifically, the study shows that people notice and remember things that more easily fit into their schemas and often overlook and/or forget things that do not. Additionally, when recalling a memory that activates a certain schema, it is possible that the memory being recalled could be adjusted to better fit the schema that is activated. This thus

presents the possibility for biased interpretations of the environment based on previous experiences.

The potential influence of schemas on perception and memory can also be observed in a study conducted by Bargh et al. (230-244) which consists of a series of three experiments examining stereotype and prejudice behavior. In the first experiment, participants were subliminally primed with words that activated one of three psychological constructs; either the construct *rude* or *polite* or, in a third condition, priming neither construct (a neutral priming condition). To prime the construct in each condition, a sentence scramble task was given to participants where, over 30 trials, they were instructed to form a sentence from five different sets of words. In each of the 3 conditions, half of the words were related to the construct (e.g., *aggressively*, *bold*, and *impolitely* for the rude condition; *respect*, *honor*, and *cordially* for the polite condition; and *flawlessly*, *occasionally*, and *practiced* for the neutral condition) and the other half were control words kept the same across groups.

Following this task, the researchers executed a coordinated plan where they intentionally put the participant into an inconvenient position. Specifically, the participant approached a researcher, who was occupied talking to another individual, and the participant had to address the researcher. The dependent variable was the amount of time it took the participant to interrupt the conversation between the researcher and the other individual. The results showed that participants in the rude priming condition took a significantly shorter amount of time to interrupt the conversation than either the polite or neutral conditions. The researchers also reported that there was not a statistically significant difference between the polite and neutral conditions in the amount of time it took participants to interrupt the conversation.

In a second experiment, participants completed a sentence scramble task similar to that in experiment one, but that contained different priming conditions: an elderly priming condition and a neutral priming condition. In the elderly condition, the sentence scramble task contained words related to the schema of 'elderly' including *old*, *lonely*, and *bingo*, whereas the neutral control condition instead contained neutral words that were unrelated to the elderly stereotype such as *thirsty*, *clean*, and *private*. Following the completion of the sentence scramble task, the researcher thanked the subject for their participation and directed them to the exit down a hallway. The dependent variable was then recorded which was the amount of time it took participants to walk and reach a pre-marked distance down the hallway.

The researchers hypothesized that those in the elderly priming condition would unconsciously be influenced by the elderly stereotype which would potentially manifest as a slower walking time (i.e., a behavioral characteristic of the elderly) in comparison to a neutral priming condition. Inferential test statistics supported the claim yielding a significantly slower walking time for those in the elderly priming condition than those in the neutral priming condition. The results of experiments one and two suggests that being exposed to a series of words that are linked to a certain stereotype can influence behavior unconsciously (Bargh et al. 235-240). These experiments also showed that automatic activation of a schema has direct and unconscious effects on behavior in accordance with that of the stereotype. Bargh et al. (236-240) also note that it is not the stimulus words presented that influence behavior per se but the content of the activated stereotype itself.

A third experiment investigates the impact of priming in relation to ethnic stereotypes. In a third experiment, participants completed a computerized assessment, which was intended to be tedious and boring, that involved making decisions in regard to a visual task. Throughout trials,

different target pictures flashed on a computer screen for 2 to 3 seconds and participants were given a recall task (i.e., indicate if there were an even or odd number of objects). On experimental trials, participants were exposed subliminally in between the presentation of target pictures to photographs of African American or Caucasian faces for between 13 and 26 milliseconds.

Following the completion of the task, a message was displayed on the computer notifying the participant that their data was not saved correctly and that they would have to complete the task again. Unbeknownst to the participants, they were being videotaped by a hidden camera near the computer with a clear view of their facial expressions. The dependent variable was the degree of hostility displayed by the participant in response to having to complete the computerized task again. The hostility ratings for each participant were completed by two coders who were blind to the experimental conditions and the average of the ratings were used for analyses.

The results were in line with the researchers' hypotheses which is that the hostility ratings were significantly higher for participants primed with photographs of African American faces compared to those primed with Caucasian faces. The researchers further support this claim by establishing that there was no statistically significant difference between the hostility ratings between the two coders across conditions. Bargh et al. (240-244) concluded that the activation of a stereotype such as those formed through schemas, could result in behavior consistent with that stereotype in subsequent unrelated contexts. Additionally, the priming techniques used add further support for the idea that the formation of impressions is partly based on previous experiences.

The studies presented have demonstrated that schemas can contribute to the development of stereotypes, generalized ideas about whole groups of people. Because schemas are readily accessible when taking in information from the environment and have been used reliably in the past, whenever we encounter an individual from a certain group that we have a stereotype about, we will expect their behavior to fit into a certain schema (Alba and Hasher 203-231; Nishida 32; Kleider et al. 13-2). This can lead us to misinterpret the actions and intentions of others (Kleider et al. 1-12; Nishida 34). Interestingly, the types of schemas that an individual forms also plays a role in how information is taken in from the environment and subsequently interpreted, stored, and recalled.

6.3. Types of Schemas in Alonso Quijano as Quijote

There are several types of schemas that individuals typically develop such as object schemas, person schemas (Aronson et al. 118), self-schemas (Lemme 2006; Dozois and Rnic 98-100), social schemas (Crocker et al. 197-226), and event schemas (Barnett et al. 158-181; Bower et al. 177-220). Each of these five types of schemas will be expanded on and connected to Alonso Quijano in relation to his state of psychosocial crisis and desire to overcome the conflict.

The first type of schema to be introduced is an object schema. An object schema provides the cognitive framework for making sense of inanimate objects and how they function (Kumar et al.). One object schema that children typically develop is the schema for a ball. The initial schema may be based on one type of ball, such as a soccer ball; however, upon seeing other types of balls, such as a basketball, a golf ball, or a beach ball, the child will adjust the object schema to account for all of the variations of the object. By continuously developing and modifying object schemas, an organism can more effortlessly and efficiently make sense of

inanimate objects encountered in the environment and decide how to respond to or interact with them.

Alonso Quijano demonstrates that he has developed many different object schemas related to knights and knighthood in chapter I of the novel. In assuming his identity of Don Quijote, Quijano arguably references schemas for certain objects related to knighthood such as a suit of armor, a sword, and a helmet. Upon further inspection of his helmet, for example, Quijano notices that the helmet is missing a visor. By referencing his object schema for 'helmet,' which was largely influenced by his overconsumption of books, Quijano is able to know that a visor is a necessary component of a knight's helmet because it protects the face from attacks during battle. In his effort to fix the helmet by attaching a visor to it, it is argued that Quijano is attempting to manipulate the object based on the specifications of his schema so that it may align with that schema.

The second type of schema to be introduced is a person schema. A person schema is a cognitive framework that organizes information about people which serves as a reference for interpreting others and deciding how to respond to others in various situations (Aronson et al. 116). For example, a child may develop the person schema for 'scientist' (i.e., the most common and salient features of a scientist), which consists of frequently encountered descriptions such as a person in a white lab coat wearing glasses. Person schemas such as this assist in interpreting the behaviors of others and in deciding how to respond (Aronson et al. 121, Crocker et al. 197-226), which makes interacting with the environment less cognitively taxing.

In the case of Alonso Quijano, the concept of a 'mistress' is an example of a person schema, which appears to consist of features of a female figure such as beautiful, vulnerable, pure, and in need of protection. Thus, the memories that Quijano has constructed, which come

from the stories he has read in his books, largely influence and bias his perceptions of the environment as well as drive his behavioral responses through the activation of overstimulated neural networks, which has been expanded on in the previous chapter.

Another type of schema is a self-schema which consists of a framework of information related to the self. This consists of information such as one's likes and dislikes, personality features, and outward physical appearance. Children, for example, will develop a self-schema consisting of knowledge of their physical body and consistent features of their personality. As children continue to age, their self-schema is modified as they learn more about themselves and come to identify with specific traits and attributes. For example, a self-schema could include beliefs about oneself such as that one is patient, giving, and funny.

The self-schema of Alonso Quijano is highly comprised of information obtained from obsessively reading his books on knighthood. He has learned, for example, that common attributes of a knight include being brave, strong, faithful, and merciful. Thus, the self-schema for 'knighthood' that is embodied by Quijano positions him to regard himself as a knight in multiple aspects, such as his outward knightly appearance, his bold and daring personality features, and an idealized image of self as a highly regarded and admired knight.

A fourth type of schema that will be introduced is a social schema. A social schema is a framework of information regarding the social norms within group contexts, such as large societal groups. Social schemas provide behavioral guidance, for example, when interacting with those in a formal versus informal context or for distinguishing appropriate behavior between cultures. A common social schema that children develop is a schema for interacting with adults which dictates the dynamics of the power structure. For example, children learn that they should

address adults using a formal title such as Mr. or Ms. and that they should not interrupt an adult while they are speaking.

For Alonso Quijano, his social schema for the appropriate forms of interaction between a man and woman is largely informed by his readings on knighthood. For example, it is the social expectation that women be treated as delicate and with respect by men. Additionally, women should not be the target of an attack by a knight-errant but should instead be protected and saved from harm. This social schema influences Quijano's numerous interactions with women whom he mistakenly interprets as damsels in distress. Thus, it could be argued that this tendency to incorrectly assess the role of an individual in a given context may be attributed to the reliance on pre-constructed social schemas that are based on outdated notions of knighthood and chivalry.

Lastly, an event schema is a cognitive framework of information related to appropriate or expected behavior during the occurrence of a certain event. Event schemas serve as a script for informing the individual of their role—how they should or should not act. For instance, a child may come to develop an event schema for 'eating at a restaurant.' In this schema, the child may come to learn the overall experience as a consistent pattern of sequential events that each call for a specific response. For example, upon entering the restaurant, the child will come to know that they will be greeted by a host who will then walk them to a table and seat them. Following this, the child will expect the waiter to arrive to take their order. The child will also reference other similar schema that fit into the event. For example, the child will reference the event schema for 'eating a meal' and know that a meal is consumed in a specific order, with appetizer dishes eaten first, followed by main dishes, and lastly, dessert. The child will be able to rely on this event schema when eating at different restaurants which will aid the child in knowing how to conduct themselves in those situations.

An event schema that Alonso Quijano has displayed in the novel is the schema for a 'sword fight' or a 'dual.' For example, in chapter VIII, in his misinterpretation of the event, Quijano antagonizes a group of travelers and is engaged in a deadly sword fight by a squire. Quijano demonstrates his preparation for and familiarity with the event by brandishing his weapon and positioning himself to take action. Although he had no first-hand experience in knight-errantry before the start of his adventure, Quijano showed that he still was able to form the schema for events typically encountered by a knight such as a sword fight and reference that schema in conducting himself. Each of these four types of cognitive frameworks (person schemas, self-schemas, social schemas, and event schemas) presented serves as a reference and a guide, often unbeknownst to humans, for navigating through various types of interactions within one's environment.

Given the previous information regarding the four types of schemas, it can be further argued, thus, that in processing information from the environment, including events and other people, Alonso Quijano's perceptions and behaviors are highly influenced by the multiple types of schemas he has constructed for 'knighthood.' Of particular importance to the argument regarding schemas as further support in decoding Quijano's madness is the degree to which individuals could be resistant to modifying an existing schema when confronted with information that is contradictory to or in conflict with the existing schema.

6.4. The Modification of Existing Schemas in Alonso Quijano as Quijote

According to Padesky (267), schemas tend to be easier to change during childhood, when a wealth of foundational knowledge of the world is being taken in but can become increasingly rigid and difficult to modify as an individual continues to age; furthermore, schemas will often persist even when people are presented with evidence that contradicts their beliefs, in which case

they may possibly dismiss the veracity of the evidence or redirect the information to a different schema in an effort to retain the belief that one's understanding of the world is accurate. For example, when an individual is confronted with negative information about a political group with which they identify, the individual may dismiss the information or attribute the information to a political group other than their own. It is possible that schemas may become resistant to change in part because of the cognitive effort required to process and consider new information as well as the cognitive effort required in the modification of existing schema (Padesky 267-278).

Two psychological processes that are involved in the modification of schema are referred to as assimilation and accommodation, which were introduced by Piaget in his expansion on the work of Bartlett. According to Piaget, these are two processes that are responsible for the manner in which schema are developed and modified as an individual continues to encounter additional information from the environment. These two processes are directly related to the development of schemas and work in conjunction with one another to continuously make sense of information more accurately from the environment. As a result of these processes, an individual will be able to navigate themselves through their environment more effortlessly and efficiently.

Assimilation is the process by which an individual incorporates new information into existing cognitive schemas and knowledge (King 298). For example, a child who has developed a schema for 'horse' may, upon seeing a cow for the first time, identify them both as animals. In this case, the child is assimilating the concept of cow and incorporating it into the category of animal, along with the concept of horse. The process of assimilation indicates that, when faced with new information from the environment (e.g., people, objects, events), people will rely on information they have already obtained (i.e., similar previous experiences) to make sense of the new incoming information. One important notion to highlight is that beliefs and understanding of

the world do not always change as a result of new information; rather, in the case of encountering new information that is uncomfortable or in conflict with an existing schema, the new information may be ignored or simply redirected to already existing similar schema.

The process of accommodation is different in that a schema is adjusted in order to fit in new information from the environment (King 298). Accommodation is notably different from assimilation in that it does lead to a change in schemas. For example, when seeing a cow for the first time, a relationship between cow and horse will be made indicating that they have a shared category as animals. Through the process of accommodation, however, the child will adjust the schema for 'horse' to exclude cows based on specific physical and behavioral differences between the animals. The child will additionally create a separate schema for 'cow,' excluding horses based on specific physical and behavioral differences. This will allow for greater distinction between the two animals and will also serve as an additional source of reference for subsequent encounters with animals in the future. Thus, through the process of accommodation, the reliability of schemas is improved so that they may serve as a more accurate source for referencing.

Of particular interest to this chapter are the types of schemas mentioned that Alonso Quijano has developed from his readings as well as the content of the readings that informs each of the types of schemas. It is made clear in the novel that the role of a knight-errant is an outdated figure that is no longer typical of the time period. Quijano, thus, has developed and come to rely on schemas that are obsolete and unreliable for conforming to the social norms of his time. Given that schemas become increasingly more resistant to change as an individual ages (Padesky 267-278), it could be argued that Quijano's failure to perceive reality for what it is may be in part due to a high degree of rigidity associated with old age. Because of this, Quijano is

either unable, or possibly unwilling, to undergo the process of accommodation to change his schemas and adjust his perceptions to better match that of reality.

Taking into consideration schema theory, the theoretical notion of mirror neurons and the theory of psychosocial development provides a uniquely integrative approach to decoding and attempting to understanding the behavior of Alonso Quijano. The three theories also work in conjunction with one another in offering a framework from which to give Quijano's motivations and behaviors meaning. It can be argued that Quijano's state of psychosocial crisis places him in a psychologically vulnerable position in which he questions the meaning of his life. Perhaps in light of this crisis, Quijano's perceptions of reality are distorted to align with those he has read about in his books about chivalry. The theoretical notion of mirror neurons, it is argued, may play a role in the formation of memories which can influence one's perceptions of the environment and resulting behavior. Together with schema theory, it is posited that Quijano's formation of memories and subsequent construction of various schema related to knighthood influenced his quixotic interpretation of his world.

Conclusion

To conclude the thesis, a summary of the main arguments will be provided as well as a clarification of what the thesis contributes in conjunction with psychological theory to the existing literature on *Don Quijote*. In doing so, the importance of incorporating multidisciplinary studies in literary analysis will be underlined as a means of offering unique and novel perspectives on our interpretations of literature and literary figures.

The first theory introduced in support of the thesis argument was Erikson's theory of psychosocial development. Erikson theorized that humans advance through an ordered sequence of eight stages in their psychological development from infancy into late adulthood and that at each stage, a psychosocial crisis (i.e., a psychological challenge related to the social environment) is encountered. Each stage will result in either a success or a failure depending on how the crisis is dealt with. Continued success in the developmental stages will result in a greater likelihood of healthy psychological development. Similarly, continued failure at each stage presents greater challenges for healthy psychological development and, if left unresolved, will typically manifest later in life as problematic and unhealthy behavior.

It is argued that Quijano is in stage seven, the second to last stage, in his psychosocial development and that he is attempting to resolve a failed crisis. He is specifically attempting to resolve a state of stagnation, which indicates that Quijano does not believe he has made a lasting and meaningful impact in the world. In order to do so, he creates a fantasy world based on knighthood. Through his adventures, Quijano is seeking to make a positive and meaningful contribution to the world which, according to Erikson's theory, would result in a state of generativity. Reaching a state of generativity is indicative of a resolved psychological crisis and means that an individual believes they have made a positive contribution to the world and have

nurtured things in their life that will outlive him. The theory therefore provides support for explaining possible motives for Quijano's irrational behavior.

It can further be argued that Alonso Quijano faces an additional failed psychosocial crisis in stage eight, the final stage of psychosocial development, which is "Ego integrity vs Despair." It is argued specifically that Quijano has failed to make a lasting and meaning contribution to the world by the end of part 1 of the novel, which is evidenced by his forced return to home as well as the continuation of his saga in part 2 of the novel. Thus, the theory of psychosocial development can provide further commentary on Quijano's behavior by arguing that he does not see his life as meaningful and impactful and as a result, fears his impending death.

The second theory introduced in support of the thesis argument was the theoretical notion of mirror neurons. It was argued that, because of the changes to Quijano's brain, such as the fact that it was dried up and diminished in size, and sleep deprivation, he is likely experiencing some form of neurological and cognitive impairment. It is also argued that because he obsessively overconsumed books about knights and knighthood, his perceptions of the environment were largely influenced by the overactivation of mirror neurons. This is a type of neuron that fires in response to both sensory and motor information which is what makes them unique.

As indicated by Kosonogov, the more frequently a neural network is activated, as in the activation of mirror neurons from reading about the behavior of knights for example, the stronger that network becomes. Regarding Alonso Quijano, it is argued that the overconsumption of stories about knighthood and performing heroic acts caused such intense firing of the mirror neurons that his behavior was subsequently influenced by that high degree of stimulation. His perceptions of the environment, therefore, are biased towards the stories he has read, which influences his misinterpretations of other people and his surroundings.

The final theory in support of the thesis argument was schema theory, which posits that information from the environment is continuously organized in a cognitive framework, which subsequently aids in the organization and interpretation of additional information from the environment. Schema theory is used in support of the thesis argument by claiming that Alonso Quijano's perceptions and behaviors are highly influenced by the multiple types of schemas he has constructed for 'kighthood.' Given that the types of schemas we develop, and the content of those schemas, are highly influenced by the experiences we are exposed to, Quijano's schemas are likely greatly informed by his books about knights and kighthood. Therefore, schema theory can offer another potential avenue for explaining the behavior of Quijano.

It is of particular interest to consider that the three supporting modern theories can be applied to a character created three centuries before their conceptualization. Although Alonso Quijano and Don Quijote are characters of fiction, products of the mind of Cervantes, Quijano's conduct corresponds and fits with a precise mental illness for which there exists in modern day an explicative narrative, and a profilaxis. It is in this sense that Quijano and Quijote function as "futurities"; that is to say, as descriptions that can become the object of the interdisciplinary studies of psychology, neuroscience, and cognitive science.

In conclusion, studies in psychology and neuroscience can offer us different perspectives to the interpretation of the story of Don Quijote. Erikson's theory explains the psychosocial development of humans and adds to the interpretation of what may motivate Quijote's behavior. Neuroscience gives us a scientific perspective on the development of memories based on the activation of mirror neurons. Neuroscience also offers explanations for the role of previous experiences in interpreting new experiences. These fields of study can together offer very

interesting perspectives on the interpretation of one of the most studied novels and literary characters in the world.

ENDNOTES

Notes to Chapter 1.

¹ . My academic background consists of a BS and MS in Psychology and a BA in Modern Languages with a concentration in Spanish. My specializations within psychology include experimental research design, data analysis, cognitive neuroscience, and second language processing.

Notes to Chapter 3.

² Then he went to have a look at his skinny old horse, whose hide had more cracks than a flipped coin and more blemishes than Gonela's nag... but in his eyes neither Alexander's Bucefalo, nor El Cid's Babieca could match it. (11)

³ it would be wrong for the steed of such a celebrated knight, a horse with such merit of its own, not to bear a famous name. (11)

⁴ he finally decided to call the animal Rocinante [...]; which struck him as a truly lofty name, resonant and also meaningful, because an old horse was exactly what it had been, before, while now it had risen to be first and foremost among all the old horses in the world. (11)

⁵ ...he realized that all he needed and had to Hunt for was a lady to be in love with, since a knight errant without love entanglements would be like a tree without leaves or fruit, or a body without a soul. (12)

⁶ ...not too far from where he lived there was a very pretty peasant girl, with whom he was supposed, once upon a time, to have been in love, although (as the story goes) she never knew it nor did he say a word to her. Her name was Aldonza Lorenzo and he thought it a fine idea to bestow on her the title of Mistress of his Thoughts. Hunting for a name as good as the one he'd given himself, a name that would be appropriate for that princess and noble lady, he decided to call her *Dulcinea del Toboso*...since Toboso was where she came from. To him it seemed a singularly musical name, rare, full of meaning, like all the others he'd assigned to himself and everything that belonged to him. (12)

⁷ Although these adventures are always identified as Don Quijote's, I will talk of Don Quijote as Alonso Quijano since it is his madness and mind transformation that I intend to explain. Also, it is ultimately the psychological state of Quijano that is of interest and relevance to the three modern theories.

⁸ Destiny guides our fortunes more favorably than we could have expected. Look there, Sancho Panza, my friend, and see those thirty or so wild giants, with whom I intend to do battle and to kill each and all of them, so with their stolen booty we can begin to enrich ourselves. This is noble, righteous warfare, for it is wonderfully useful to God to have such an evil race wiped from the face of the earth. (38)

⁹ The coach contained, as it became clear later on, a Basque lady on her way to Seville to join her husband, who was sailing for the Indies to take up a post of some distinction. The friars were not her traveling companions, although, though they were on the same road, but as soon as Don Quijote saw them, he said this to his squire, "If I'm not mistaken this is going to be the most famous adventure ever heard of, for those black forms over there must be, and indeed they are, there's no doubt about it, magicians who are spiriting away a princess in that coach, so I need to exert every bit of my strength to undo such wrong-doing. (41)

¹⁰ Now look, your grace, those are Benedictine friars, and the coach has got to belong to some well-bred lady. (41)

¹¹ ...you don't know anything about adventures...What I tell you is the truth, as you'll see in a moment. (41)

¹² ...we're not masked devils nor are we monsters, we're just two Benedictine monks riding down the road, and whether or not there are any kidnapped princesses in that coach, we have no idea. (41)

¹³ My lady, your beauty is now enabled to dispose of yourself exactly as you most please since your proud kidnappers in the dust, overthrown by this strong arm of mine. And lest you worry yourself about the name of your liberator, know that I am called Don Quijote de la Mancha, knight errant and soldier of fortune, and captive to the matchless and most beautiful lady, Dona Dulcinea del Toboso; In acknowledgement of the kindness I have extended to you, I ask only that you direct yourself to Toboso and present yourself to that lady on my behalf, telling her what part I have had in your liberation. (42)

¹⁴ white-robed men (98)

¹⁵ with burning torches (98)

¹⁶ ...the greatest and most dangerous of all adventures, and I must show all my courage and strength. (98)

¹⁷ How can I be wrong, you punctilious traitor [...] tell me: don't you see that knight riding towards us upon his dappled grey horse, wearing a golden helmet on his head? What I can see, answered Sancho, is just a man on a donkey, a drab one like my own, who's wearing on his head something that glitters. (112)

¹⁸ A young man...good-looking and well-spoken (132)...we were all pretty well struck at how good-looking he was. (133)

¹⁹ without saying a word just punched and kicked him something fierce, and then he went after the pack mule and took all the bread and cheese it was carrying, after which, with that strange quickness, he ran back and hid in the mountains. (133)

²⁰ ...having gotten to the heart of what he was saying, he suddenly stopped and fell silent, staring down at the ground for a good long time, while we all just stayed quiet and waited, thinking some inward rapture had caught him up, and feeling very sorry to see him like that, because the way he was staring down at the ground, so round-eyed, even his eyelids frozen still, and then sometimes closing his eyes, squeezing his lips together and knitting up his brows, it wasn't hard to understand that some fit of madness had taken hold of him. And then, pretty soon, he showed us just how right we were, because, after first throwing himself to the ground, he jumped up in a great fury and attacked the shepherd who happened to be nearest him, punching and biting him so fiercely and wildly that, if we hadn't pulled him off, he'd have killed that man. And all the time he was saying, "Ah, treacherous Fernando! Now, you'll pay me back for the injustice you did me - with these hands I'll tear out your heart, the laid and hiding place of all your evil deeds, and especially your lying and cheating!" And he went on like that, everything addressed to this same Fernando, accusing him of being a faithless swindler. We finally dragged him off, though it wasn't easy, and then, without saying another word, he ran off and hid himself in these thickets and brambles, so it was impossible to follow him. (133-134)

²¹ ...fled from the city in despair, after first writing a letter in which he explained the wrong done him by Luscinda, and then declared he would go where no one would ever see him again. (179).

²² He just squinted up at them, trying to understand where he was. The priest instructed the niece to take extremely good care of her uncle, and to watch out that he didn't escape again, telling her all they'd had to do to bring him home. (343)

²³ Nor was our historian able to learn how Don Quijote came to die, nor would he have known a blessed thing if, by sheer good fortune, he hadn't gotten hold of an old, old doctor who happened to have in his possession a lead strongbox, which, as he explained, had been found in the rubble of an ancient hermitage, which was being rebuilt, and in this strongbox they'd found some mouldy sheets of parchment, covered with Gothic letters that turned out, however, to be Spanish

poems, which poems contained a good deal about Don Quijote's glorious deeds and also about the beauty of Dulcinea del Toboso, and what Rocinante looked like, and how faithful Sancho Panza had been, and even about Don Quijote's funeral, along with a number of epitaphs and eulogies on his life and ways. (343)

Notes to Chapter 4.

²⁴ In fine, his mind was so tattered and torn that, finally, it produced the strangest notion any madman ever conceived, and then considered it not just appropriate but inevitable. As much for the sake of his own greater honor as for his duty to the nation, he decided to turn himself into a knight errant, travelling all over the world with his horse and his weapons, seeking adventures and doing everything that, according to his books, earlier knights had done, righting every manner of wrong, giving himself the opportunity to experience every sort of danger, so that, surmounting them all, he would cover himself with eternal fame and glory. The poor fellow already fancied that his courage and his mighty sword-arm had earned him, at the least, the crown of the Emperor of Trebizond. And in a transport of joy over such pleasant ideas, carried away by their strange delightfulness, he hurried to turn them into reality. (10-11)

²⁵ The first thing he did was polish up his great-great grandfather's suit of armour, which for a century of so had been lying, thrown in a corner and forgotten, covered with mildew and quietly rusting away. He got it as clean and bright as he could, but saw that it had a major deficiency: the helmet was gone, and all that was left was a metal headpiece that would cover just the top of his skull. So he put together, ingeniously, a kind of half-helmet of cardboard that, fitted into the headpiece, looked very much like the real thing. True, when he wanted to test its strength and see if it could stand up under a slashing stroke, he pulled out his sword and gave it a couple of whacks, and the very first blow undid in a second what had taken him a week to put together. He couldn't help but think it a poor sign that he'd destroyed it so easily, so to safeguard himself against that risk he went back to work, lining the inside with iron bars until he was satisfied it was strong enough, after which, not wanting to make any further experiments, he declared it a perfect, finished helmet, ready for use. (11)

Notes to Chapter 5.

²⁶ Don Quijote so buried himself in his books that he read all night from sundown to dawn, and all day, from sunup to dusk, until with virtually no sleep and so much reading he dried out his brain and lost his sanity. (10)

²⁷ ...I soon got to see Luscinda, and my own desires, which had never been either muffled or dead, sprang back to life, and though it cost me dear I told everything to Don Fernando, for the friendship he showed me was such that I did not think I could conceal anything from him. I extolled her beauty to him, and her grace, her good sense, until my praise for a damsel so wonderfully endowed made him want to see her for himself. (138)

²⁸ I arranged that - and much good it did me - pointer her out to him, one night, sitting with a lighted candle at a window where we use to talk, she and I. He saw her in a loose, flowing gown, and all the beautiful women he'd ever seen were forgotten in a moment. He was speechless, he lost all sense of where he was, entranced and then lovestruck - as you will see in the course of this miserable tale of mine. (138)

²⁹ ...covered with mildew and quietly rusting away. (11)

³⁰ He got it as clean and bright as he could. (11)

³¹ ... saw that it had a major deficiency: the helmet was gone, and all that was left was a metal headpiece that would cover just the top of his skull. So he put together, ingeniously, a kind of half-helmet of carboard that, fitted into the headpiece, looked very much like the real thing. (11)

³² True, when he wanted to test its strength and see if it could stand up under a slashing stroke, he pulled out his sword and gave it a couple of whacks, and the very first blow undid in a second what had taken him a week to put together. He couldn't help but think it a poor sign that he'd destroyed it so easily, so to safeguard himself against that risk he went back to work, lining the inside with iron bars until he was satisfied it was strong enough, after which, not wanting to make any further experiments, he declared it a perfect, finished hemlet, ready for use. (11)

³³ Then he went to have a look at his skinny old horse, whose hide had more cracks than a flipped coin and more blemishes than Gonela's nag... but in his eyes neither Alexander's Bucefalo, nor El Cid's Babieca could match it. (11)

List of Works Cited

- Alba, Joseph W, and Lynn Hasher. "Is Memory Schematic?" *Psychological Bulletin*, vol. 93, no. 2, 1983, pp. 203-231. <https://doi.org/10.1037/0033-2909.93.2.203>
- Amodio, David M, and Kyle G Ratner. "A Memory Systems Model of Implicit Social Cognition." *Current Directions in Psychological Science*, vol. 20, no. 3, 2011, pp. 143-148.
- Arellano, Ignacio. "Quixote's Insanity and Sancho Panza's Wisdom". En Maurya, I. y Arellano, I. (eds.), *Cervantes and Don Quixote: Proceedings of the Delhi Conference on Miguel de Cervantes: held in Delhi during 31 January. 1 and 2 February 2005*, Hyderabad: EMESCO, 2008, pp. 67 – 89. <https://hdl.handle.net/10171/20565>
- Aronson, Elliot, et al. *Social Psychology*. New York, Pearson Education, 2010.
- Bargh, John A. et al. "Automaticity of Social Behavior: Direct Effects of Trait Construct and Stereotype Activation on Action." *Journal of Personality and Social Psychology*, vol. 71, no. 2, 1996, pp. 230-244. <https://doi.org/10.1037/0022-3514.71.2.230>
- Barnett, D. W. et al. "Preschool Intervention Scripts: Lessons from 20 years of Research and Practice." *Journal of Speech-Language Pathology and Applied Behavior Analysis*, vol. 2, no. 2, 2006, pp. 158-181. ISSN 1932-4731
- Baron, Robert A. et al. *Exploring Social Psychology*. Boston, Allyn and Bacon, 1989, pp. 79-101.
- Bartlett, Frederic C. *Remembering: A Study in Experimental and Social Psychology*. Cambridge, University Press, 1932.
- Boonstra, Tjeerd W et al. "Effects of Sleep Deprivation on Neural Functioning: An Integrative Review." *Cellular and Molecular Life Sciences*, vol. 64, no. 934, 2007.
- Bower, Gordon H et al. "Scripts in Memory for Texts." *Cognitive Psychology*, vol. 11, no. 2, 1979, pp. 177-220. doi:10.1016/0010-0285(79)90009-4

- Brewer, William. F., and James C Treyens. "Role of Schemata in Memory for Places." *Cognitive Psychology*, vol. 13, no. 2, 1981, pp. 207-230. [https://doi.org/10.1016/0010-0285\(81\)90008-6](https://doi.org/10.1016/0010-0285(81)90008-6)
- Carrera, Elena. "Madness and Melancholy in Sixteenth- and Seventeenth-Century Spain: New Evidence, New Approaches." *Bulletin of Spanish Studies*, vol. 87, no. 8, 2010, pp. 1-15. DOI:10.1080/14753820.2010.530832
- Cervantes Saavedra, Miguel de. *El ingenioso hidalgo Don Quijote de la Mancha*, edición de Francisco Rico, RAE y ASALE, 2004.
- Cervantes Saavedra, Miguel de. *El ingenioso hidalgo Don Quijote de la Mancha*, translated by Raffel Burton and Diana de Armas Wilson, W. W. Norton & Company, Inc., 1996 .
- Connor-Swietlicki, Catherine. "Beyond Cognition: Alonso Quijano and Other Embodied Minds." *Cervantes*, vol. 32, no. 1, 2012, pp. 231-261.
- Crocker, Jennifer et al. "Schematic Bases of Belief Change." *Attitudinal Judgment. Springer Series in Social Psychology*, New York, Springer, 1984. https://doi.org/10.1007/978-1-4613-8251-5_10
- De Armas, Frederick. A. "Dancing with Giants: Philostratus." *Quixotic Frescoes: Cervantes and Italian Renaissance Art*, 2006, pp. 134-152.
- De Armas, Frederick. A. *Quixotic Frescoes: Cervantes and Italian Renaissance Art*. University of Toronto Press, 2006.
- De Armas, Frederick A. "Windmills of the Mind: The Devilish Devices of Don Quixote, Part 1, Chapter 8" in *Approaches to Teaching Cervantes's Don Quixote*. edited by James A. Parr, Lisa Vollendorf. MLA, 2015.
- Desimone, Robert., and John Duncan. "Neural Mechanism of Selective Visual Attention." *Annual Review of Neuroscience*, vol. 18, 1995, pp. 193-222.
- Dozois, David. J A, and Katerina Rnic. "Core Beliefs and Self-Schematic Structure in Depression." *Concurrent Opinion in Psychology*, vol. 4, 2015, pp. 98-100.

- El Saffar Ruth Anthony and Diana de Armas Wilson. *Quixotic Desire, Psychoanalytic Perspectives on Cervantes*, Cornell University Press, 1993.
- Erikson, Erik. *Identity: Youth and Crisis*. New York, Norton, 1968.
- Erikson, Erik. *Childhood and Society*. New York, W. W. Norton & Company. 1993. ISBN 978-0-393-31068-9.
- Erikson, Erik and Joan M Erikson. *The Life-Cycle Completed*. New York, W. W. Norton & Company, 1998.
- Fernández-Morera, Darío. "Chivalry, Symbolism, and Psychology in Cervantes' Knight of the Green Cloak." *Hispanic Review*, vol. 61, no. 4, 1993.
- Friedman, Edward H. "Quixotic Pedagogy; Or, Putting the Teacher to the Test." *Hispania*, vol. 88, no. 1, 2005, pp. 20-31. *JSTOR*, www.jstor.org/stable/20063072. Accessed 16 Feb. 2021.
- Gervin, Mary A. "Don Quixote as an Existential Hero." *College Language Association Journal*, vol. 31, no. 2, 1987, pp. 178-188. *JSTOR*, www.jstor.org/stable/44321968. Accessed 7 Mar. 2021.
- González, Echevarría R. *Cervantes' Don Quixote: A Casebook*. New York: Oxford University Press, 2005.
- Gould, Rebecca. "Modernity, Madness, Disenchantment: Don Quixote's Hunger." *Symploke*. vol. 19, no.1, 2011, pp. 35-53.
- Harkey, Joseph H. "The Don Quixote of the Frontier: Brackenridge's Modern Chivalry." *Early American Literature*, vol. 8, 1973, pp. 193-203.
- Hessel, Stephen. *Horrifying Quixote: The Thin Line between Fear and Laughter. At the Interface: Probing the Boundaries*, 2010, pp. 23-41.

- Hoare, Carol Hren. *Erikson on Development in Adulthood: New Insights from the Unpublished Papers*. New York, Oxford University Press, 2002.
- Jaen, Isabel. "Cervantes and the Cognitive Ideas of His Time: Mind and Development in Don Quixote." *Cervantes*, vol. 32, no. 1, 2012, pp. 71-98.
- Kandel, Eric R et al. *Principles of Neural Science*. McGraw-Hill Education. 2012.
- King, Laura. *The Science of Psychology: An Appreciative View*. New York, McGraw Hill Education, 2017.
- Kitayama, Shinobu. "Attitudes and Social Cognition." *Journal of Personality and Social Psychology*, vol. 112, no. 2017, 2017, pp. 357-360.
- Kleider, Heather M et al. "Schema-Driven Source Misattribution Errors: Remembering the Expected From a Witnessed Event". *Applied Cognitive Psychology*, vol. 22, no. 1, 2008, pp. 1-20. doi:10.1002/acp.1361
- Klein, Sherwin. "Don Quixote and The Problem of Idealism and Realism in Business Ethics." *Business Ethics Quarterly*, vol. 8, no 1, 1998, pp. 43-63.
- Kosonogov, Vladimir. "Why the Mirror Neurons Cannot Support Action Understanding". *Neurophysiology*, vol. 44, no. 6, 2012, pp. 499-502. doi:10.1007/s11062-012-9327-4
- Kumar, Suresh et al. "Developing Hierarchical Schemas and Building Schema Chains Through Practice Play Behavior." *Frontiers in Neurorobotics*, vol. 12, no. 33, 2018. <https://doi.org/10.3389/fnbot.2018.00033>
- Leahy, Robert L. *Emotional schema therapy*. In N.C Thoma & McKay (Eds.) *Working with emotion in cognitive-behavioral therapy: Techniques for clinical practice*. New York, Guilford Press, 2015.
- Lemme, B. H. *Development in Adulthood*. Boston, Pearson Education, 2006.

Lichtenberg, Joseph. "Cervantes and Don Quixote." *Psychological Inquiry*, vol 30, 2010, pp. 267-275. doi: 10.1080/07351690903206231

Macho, Carlos. "La construcción de un personaje: de Alonso Quijano a don Quijote." *Anales Cervantinos*, vol. 40, 2008, pp. 107-118.

Mader Sylvia. S. *Human Biology.*, New York, McGraw-Hill, 2000.

Mancing, Howard. "Embodied Cognitive Science and the Study of Literature." *Cervantes*, vol. 32, no. 1, 2012, pp. 25–59.

Mancing, H.. *The Cervantes Encyclopedia: A-K*. Westport, Greenwood Publishing Group, 2004.

Maravall, José A. *Culture of the Baroque: Analysis of a Historical Structure*. Manchester, Manchester University Press, 1986.

Nishida, Hiroko. *Cultural Schema Theory*: In W.B. Gudykunst (Ed.), *Theorizing About Intercultural Communication*, Thousand Oaks, Sage Publications, 1999.

Padesky Christine A. "Schema Change Processes in Cognitive Therapy." *Clinical Psychology and Psychotherapy*, vol. 1, no. 5, 1994, pp. 267-278. doi:10.1002/cpp.5640010502

Piaget, J. *The Origins of Intelligence in Children*. New York, Oxford University Press, 1952.

Pridmore, Saxby and Celeste Pridmore. "Suicidal Thoughts in the Novel Don Quixote." *Malaysian Journal of Medical Sciences*, vol. 23, no. 2, 2016, pp. 65-69.

Raichle, Marcus E. "Two Views of Brain Function." *The Journal of Neuroscience*, vol. 29, no. 41, 2009, pp. 12729-34.

Ramirez, Alvaro. "Counterdefinitions of Reality: Translating the World in Alonso Quijano de la Mancha." *Comparative Literature Studies*, vol. 43, no. 4., 2006, pp. 414-427.

Shirayev, Eric.. *Personality Theories: A Global View*. California, Sage Publications, 2017.

- Shuger, Dale. *Don Quixote in the Archives: Madness and Literature in Early Modern Spain*. Edinburgh University Press, 2012.
- Soufas, Teresa S. *Melancholy and the Secular Mind in Spanish Golden Age Literature*. Columbia, University of Missouri Press, 1990.
- Stevens, Richard. *Erik Erikson: An Introduction*. New York, St. Martin's Press, 1983. pp. 48–50.
- Thagard, Paul. *Cognitive Science*. The Stanford Encyclopedia of Philosophy, 2008.
- Thiher, Allen. *Revels in Madness: Insanity in Medicine and Literature*. Ann Arbor, University of Michigan Press, 1999.
- Triplette, Stacey. “Chivalry and Empire: The Colonial Argument of the Princess Micomicona Episode in Alonso Quijano Part I.” *Cervantes*, vol. 30, no. 1, 2010, pp. 163-186.
- Triplette, Stacey. “Death and Ritual in Don Quixote.” *Cervantes*, vol. 39, no. 1, 2019, pp. 201-217.
- Verweij, Ilse M. “Sleep Deprivation Leads to a Loss of Functional Connectivity in Frontal Brain Regions.” *BMC Neuroscience*, vol. 15, no. 88, 2014.
- Vidakovic, Milan. “Irony Called into Question: Don Quixote’s Alazon and Eiron.” *Papers on Languages and Literatures*, 2017, pp. 167-190.
- Wellman, Henry. *Developing a Theory of Mind*. *Wiley-Blackwell Handbook of Cognitive Development*. New York, Wiley-Blackwell, 2010.
- Ziolkowski, Eric J. “Alonso Quijano’s Windmill and Fortune's Wheel.” *Modern Language Review*, 1991, pp. 894-897.

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Following the completion of the Hispanic Studies program, Cristian will continue his studies in the fall of 2021 at Cornell University where he will enter the Ph.D. program in Psychology with a focus on perception, cognition and development. Cristian is the son of Kathy Marie Rivera and Antonio Rivera Alvarez and the first member of his family to graduate from college. He is happy that he could make his parents proud.