European Journal of Literary Studies
ISSN: 2601–971X
ISSN-L: 2601–971X
Available on-line at: http://www.oapub.org/lit

DOI: 10.46827/ejls.v3i2.354 Volume 3 | Issue 2 | 2022

MAPPING THE BRAIN AND THE BODY: THE EXAMPLE OF GREEK AESTHETE NIKOLAOS EPISKOPOPOULOS

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Abstract:
This article concentrates on the neurological condition of epilepsy in the short story "Mavra" by Greek author Nikolaos Episkopopoulos. An attempt is made to see the condition via the lens of social preconceptions, those who support degeneration, as well as neurological beliefs, through the identification and analysis of the themes that make up the protagonists' epileptic identities. The reflection of the scientific atmosphere of the 19th century in fin-de-siècle literature is visible through the methodological prism of cognitive literary historicism. The socio-cultural makeup of the epileptic self eventually seems to be captured by the narrator's body. The narrator's brain functions are examined using introjection, visual perception, and the most recent finding of mirror neurons, indicating the particular and subjective experience of the illness.

Keywords: aestheticism, cognitive literary historicism, degeneration, modern Greek literature, Nikolaos Episkopopoulos

1. Introduction

In the context of the interdisciplinary encounter of literature and cognitive neuroscience, one can come in contact with cognitive literary historicism. Richardson's concept of "*cognitive literary historicism*," a branch of *"cognitive literary criticism,"* not only focuses on the ways in which literary texts simply reflect the scientific atmosphere of their time, but furthermore examines the common vocabulary they share, to frame the project of developing and demarcating innovative scientific discoveries. The ideological context, as well as the way that scientific and literary advancements can support or refute prejudices, stereotypes and beliefs within the purview of literature, is also endlessly fascinating. Two fundamental demands motivate the inclusion of cognitive scientific history in literary works. The first seeks to correct "*what is fast receding from common memory;*" while the

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second focuses on "*the conscious interpretation of past events in the light of present-day concerns*" (Fludernik 1996, p. 18).

The primary objective of this study is to investigate the connections between three different disciplines: cognitive neuroscience, literature, and the history of neurology. The neurocognitive factor, which deals with the combination of neurology with cognitive psychology and biology, comes to invest in explaining how the protagonists' brain processes work, while the historical parameter penetrates in a way that detects various discourses and theories about neurological illness, during the period examined, as developed by the respective sciences concerning the brain.

The 19th century, as a period of tremendous scientific advances and production of significant literary works, is the suitable *"ground"* for the application of cognitive literary historicism. More precisely, texts belonging to the Aesthetic Movement are chosen to be analyzed, as in them the illness is imprinted in the brain and constitutes an internal process, in contrast to the naturalistic texts, where the illness occurs and is recorded solely in the biological body. The literary work of the fin de siècle emphasizes immense dynamism with many facets, which propose the novel model of "S-C-R." Aesthetes not only respond to each stimulus (Stimulus), but their cognitive system filters the stimuli (Cognition), altering their behavior in a related way (Response) (Mpoumi 2012, p. 194).

In Modern Greek literary contexts, the coupling of the three fields is studied in the aesthetic work of Nikolaos Episkopopoulos. The author adopts a mediating position and hardly pursues the sterile transfer of real-life experience. Episkopopoulos masterfully portrays the human experience of illness and transforms into this historical subject who is aware of scientific advances, while trying to capture the ambiance of his time. History and neurology are integrated into each other in such a way that is not immediately apparent, thus contributing to the execution of a process that leads to the construction of the socio-cultural self and is completed during the creation of the literary work. In this context, it gives rise to the existence and support of the cognitive literary study, and furthermore to the integration of the cognitive factor in the historical imperative, in order to examine the synchronic and diachronic dimensions of the texts. In other words, historical criticism studies the history of the human body and brain alongside with cultural textures and social timbres.

2. Social stigma and degeneration

The social and cultural history of epilepsy, which frames Episkopopoulos' short story "Mavra," can also be read as an examination of the "*social stigma's*" endurance in the face of time. The "*stigma*" is a distinguishing feature of the individual that precludes him from "*social acceptance*" (Vaja 2017, p. 21). The term, which was derived from ancient Greek, was used to describe a mark on the body, usually of slaves or criminals that served as a symbol of notoriety and shame. According to Erving Goffman, the term, in today's contexts, is defined more by a sense of shame, and it places less emphasis on physical characteristics (Katz 2014, p. 2; Thomas & Nair 2011, pp. 158-159). During the 19th century, supporters of degeneration debated stigmas. Episkopopoulos presents Max Nordau's

magnum opus, the so-called work *Degeneration* (Germ. > *Entartung*), in his article "Εν περίεργον βιβλίον" (Eng. > "A Strange Book," 1893), addressing the debate of degenerative theories in the spotlight. **[1]**

The degeneration process seems to activate the so-called "*social stigma.*" At the time, the doctors proposed a list of anatomical "*deformations*" or "*malfunctions*" of the human body caused by punitive forces that are indicative of malice, criminal behavior, and insanity. Asymmetries of the face and skull, deformity and abnormal development of the ears, squint eyes, congenital defects that cause cleft lip and other such stigmas exist (Nordau 1898). With the publication of his treatise *Traité des dégénérescences physiques, intellectuelles, et morales de l'espèce humaine* in 1857, Benedictin Augustin Morel (1809-1873) would refer to degeneration as a pathological aberration from the *"primitive"* and *"normal"* human kind. **[2]**

Even while the concept of biological degeneration as a whole was not new, Morel was the first to distill it into a coherent theory, setting the stage for arguments for the remainder of the 19th century. Nordau (1898, p. 17) in his work offers Morel's list of anatomical degenerative abnormalities. In order to show an inherited pattern that started with an ill group of people and ended in lunacy and insanity, Morel separates four degenerative generations. The first generation was the one that was exposed to urban toxins and addictive substances. The illness was passed down through an infected *"seed"* to the second generation, which is affected by epilepsy, neurosis, and hysteria. As a result, the third generation seems to be the one that is on the verge of insanity, while the fourth generation appears destined for full infertility and is mired in confusion and absurdity (Hurley 2008, p. 193).

The author of the *Traité des dégénérescences* expressed concern about the significant increase in the number of mentally ill people, which he attributed to the emergence of new clinical cases. Degeneration has emphasized the mechanism of heredity, as well as the biological factors that "*stigmatize*" future generations. Degeneration predicted a return to insanity, chaos, and human extinction. Prostitution, crime, antisocial behavior, and alcoholism were the root causes of all fin-de-siècle pathologies such as epilepsy, hysteria, atony, and deformity. The writers of the fin-de-siècle, as well as their own works, were the "*lightning rod*" of the degenerate theory. Concepts and fundamental principles, derived from the field of philosophy and theology, were the main discourses for Morel. At the same time, distortion and psychiatric disorders were exploited in such a way as to incorporate the ethics of the Victorian era (Liègeois 1991, p. 421).

In this context, Nordau in his *Degeneration* developed a sort of criticism of the contemporary society that seems to have been influenced by degenerate concepts and ideals. Modern artists are responsible or share most of the responsibility, as their artistic work is imbued with degenerative symptoms. Degeneration takes a threatening form for western civilization. The German physician, social critic, and writer employs medical terminology to describe a society that places a high value on illness and observes the "*modeling of an inevitable equation*" in which two different and unequal things, in this case, literature and illness, are equated (Arampatzidou 2013, p. 21).

3. The short-story "Mavra" by Nikolaos Episkopopoulos

3.1. An overview of the story

Literature has a significant role in the cultural history of several clinical disciplines. There is a lot of interest in epilepsy, and accounts of seizures are quite detailed. According to Wolf (2008, p. 3), writers' knowledge of epilepsy varies because it could be based on (a) the author's personal experience; (b) the author's observation of other people's seizures; (c) knowledge gleaned from interviews with epileptic people or doctors' opinions; and (d) knowledge derived more generally from information contained in dictionaries, articles in magazines, newspapers, and/or medical manuals. The researcher observes some significant features, particularly when concentrating on the latter two groups. More specifically, focusing on the last two categories, the researcher detects some important features. Regarding the simple observation of seizures in other people, the constituent component is the "*clinical objectivity*," as a result of the description of the seizure by the observer's reactions. Then, as a result of the third category's "*quite accurate*" descriptions, a "*scientific background*" is developed. Lastly, with regard to the fourth point, there are instances where literary authors misread information from trustworthy scientific sources.

In particular, the short story "Mavra" by the Greek author Nikolaos Episkopopoulos (first published in the newspaper *Asty* on December 19, 1893), included in the subsequent aggregate collection *Τρελλά Διηγήματα* (Eng. > *Insane Short Stories*), contains the identification of this neurological condition in the current Greek literary milieu. **[3]** The unnamed character's inner thoughts are allowed to grow in an aestheticistic setting by the author. The story goes as follows: The narrator has a profound hatred for his sister, Mavra. His dislike is made worse by their resemblance as siblings. The sudden passing of his epileptic sister and the announcement of her death by the housemaid rejoices and, at the same time, disturbs the main character. Following the changes in the hero's mental and psychological make-up, the reader ultimately catches a glimpse of the lethal look, which should be enough to render the narrator "*fratricidal*." The narrator, overcome with guilt following his sister's unexpected death, has an epileptic seizure instantly. His experiences with visual and tactile illusions and hallucinations before, but especially after the loss of his sister, as well as the perception of auras engulfing his body, are formative for the story and aid in the textual development of epilepsy.

3.2. Mapping the brain and the body

Being a well-known source of material for Episkopopoulos, the social stigmas of the degenerative theories encourage the identification of specific fixed motifs—fall, danger, and intelligence—that make up the characters' epileptic identities. However, epilepsy, as it appears in the text, does not strive to identify advances in medicine or provide an extensive clinical analysis. The history of medicine, or alternatively the material from real life, functions in an auxiliary manner as it seeks to pinpoint the recurring themes and patterns, examine how they interact, and enliven cultural narratives, while also bringing together and enhancing general and specific knowledge about epilepsy. The idea of an

epileptic "*identity*" takes on a social function and offers an alternate perspective on oneself and others. After all, the truth about any individual "*can only be determined chronologically, socially, and culturally*" (Potamianos 2012, p. 29). The success of the story, of course, depends on Episkopopoulos' ability to invite, challenge, and charm the readers, rather than offering only "*criteria for the truth*" (Potamianos 2012, p. 29). As a result, the literary – as well as aesthetic – texture of speech absorbs life's representation (Mavrelos 2011a, p. 20).

At the start of the story, the protagonist's nervous system was throbbing as a result of the annoying lighted candles in his office, which created an eerie and mysterious atmosphere akin to E. A. Poe's universe. While *"[his] head hurts [...] and [his] nerves [were] extremely irritated / η κεφαλή [του] επόνει […] και τα νεύρα [του] ήσαν εκτάκτως ερεθισμένα*" (Episkopopoulos 2002, p. 319), the narrator experiences nervous agitation. Experiencing such turbulence is ideal for testing new senses. His nervous system responds to external stimuli, his senses are awakened, and the brain creates a new and artificial reality. When he saw his sister, Mavra, his senses were heightened. Thus, a new image and a new experience are produced, by separating the object-stimulus from the material interactions that surround and compose it, in this case, a sense of danger and threat (Malabou 2008). In summary, Mavra is an object that is deliberately removed from its surroundings, so that it can be meaningfully associated with new information using the narrator's mental processes. The conducted nerve contractions result in the disturbance and work in a hyper-rousing manner. Mavra, eventually, takes on a demonic visage, as the narrator begins to focus on other aspects of her personality. The narrator's eyes, but also his brain, were working together to simulate a single, cohesive field of vision.

The image of his sister is what caused the collapse of his nervous system. The idea of a picture, or more specifically a mental image, is illustrative of the difficulties associated with the psychological process known as "*cognition*." According to cognitive theory, the absolute responsibility for all that occurs in the cognitive system of the individual, is recognized in ideas, rather than in actual external stimuli. The way internal mental constructs incorporate the outside environment has a significant impact on how people behave. Because of this, the creation of the repulsive image of his sister was enough to cause the creation of a brand-new, agonizingly frantic mental universe that served as the foundation for his cognitive map. The narrator, with his verbal silence – which is only suspended at the cerebral level – structures the image of his sister, which seems to be inadvertently filtered through the social codes of the time on the subject of epileptic disorder. With his verbal silence, which is only maintained at the cerebral level, the narrator shapes the reader's perception of his sister, which appears to have been unintentionally shaped by the social mores of the period about the epileptic disorder.

Within the short story, epilepsy is identified with female hysteria. The concept of hysteria, which is inserted as an aggressive definition to characterize Mavra's epilepsy, refers to the perception of the time about the coupling of hysterical and epileptic seizures. **[4] [5]** This is due to the fact that epilepsy and hysteria were both medical conditions that caused convulsions and loss of consciousness. In particular, in 1870, in the context of the

differential diagnosis of hysteria and epilepsy by Charcot, the concept of "*post-epilepsy*" was formed, while the stages of hysterical seizures were precisely defined. Hysteria, also known as the illness of the "*peripheral uterus*" (ancient Greek > υστέρα), has gynaecological, demonological, neurological, and psychological interpretations (Micale 1989). Of course, this reference can be seen as a set of symptoms, which are decisive for the description of his sister's aggressiveness during an epileptic seizure (Karvellas 2002). More generally, there is an impressive symbolic transmission of 19th century ideas about "*hysteria*" and "*feminity*," primarily through references to passions, fragile bodies, and sexual impulses. Pathological femininity appears to be contagious (Bergo 2007, p. 52).

Mavra's erratic and epileptic behavior puts the narrator in grave danger. The masterfully shaped danger pattern demonstrates that the gaze is sufficient to convey feelings of insecurity, uncertainty, and general fear.

> "*Το πρόσωπον της Μαύρας με τους γαλανούς οφθαλμούς μοί επροξένει επήρειάν τινα μαγνητιστικήν, και την παρετήρουν υποφέρων, την παρετήρουν ενώ την εμίσουν, και δεν εδυνάμην να στρέψω τους οφθαλμούς, και δεν εδυνάμην να προφέρω λέξιν, αλλ' ήκουον, ήκουον προσεκτικώς όταν εκείνη ωμίλει.*" (Episkopopoulos 2002, p. 320)
>
> [Trans.: Mavra's face with the blue eyes attracts me, and I watch her in pain even though I detest her, and I couldn't turn away my gaze, and I couldn't say anything, but I listened carefully when she spoke].

Considering the aforementioned section, it turns out that the danger emitted by the gaze is a prominent pattern. There was a belief in the 19th century that even looking at a human carrier of an illness could have similar effects on both one's behavior and body. **[6]** The narrator's imitation of and/or his infection by Mavra's "*sick*" behavior is regarded as unavoidable. People with epilepsy were thought to be capable of causing the observer to have a similar traumatic experience. The recording and citation of a symptom, which erases the profile of "*epileptic character*" and "*epileptic physical condition,"* reinforced this view of "*imitation*" in the 19th century (Friedlander 2001, p. 248; Vaja 2015, p. 33). Aggression, nervousness, and sexual urges are common symptoms of epilepsy. The link between epilepsy and aggressive behavior was first discovered in 1875, thanks to the research of neurologist John Hughlings Jackson (1835-1911) (Saleh & Reuber 2019, p. 15). The English neurologist identified the manifestation of violent behavior in an epileptic patient in his article "On temporary mental disorders after epileptic paroxysm" (1885) (Treiman 1986). Based on the foregoing, the subject, who appears to be confused and exhibiting abnormal behavior, is directed to any nearby object or person with the intent of injuring them.

Of course, the phenomenon of imitating other people's behaviors is interpreted differently in the context of modern neuroscience. The theory of the existence of "*mirror neurons*," which is related to prediction, but also understanding of the behavior of the other, is responsible for inducing similar behavior through the activation of mental processes (Acharya & Shukla 2012). Their discovery in the primary motor cortex

represents a scientific and neurological revolution because it aims to play a "*causal role in generating the observed behavior*" (Ferrari & Rizzolatti 2014, p. 2). It is important to emphasize that the "*understanding*" of others' behavior via the mirror mechanism demonstrates that the motor system is also involved in the *"comprehension"* of others' actions.

Extending the theory of "*mirror neurons,*" it could be said that Mavra functions as a mirror, activating the narrator's brain functions to construct the literary or fictional reality through psychological identification. The mirror reflects real-life material, i.e., the experience of people with epilepsy. Mavra and the narrator ultimately reflect the illness-centric society of the 19th century. The mirror's operation results in reflections of the epileptic body in the readers' real space and time, where the images are initially inverted. The brain is the organ responsible for steering them in the right direction. The perception of Mavra as a reflection of the narrator, as well as the belief that both protagonists "*mirror*" their period, reveals a reflective society (Armstrong 2008, p. 96).

The only way out of the emotional insanity the narrator gets, whenever he sees or thinks of his sister, is to commit her "*mental murder*" (motif of intelligence). His mind wanders in perilous directions as it oscillates between cognitive performance and malfunction. The cognitive patterns that develop in this setting confirm the facts or information that the narrator gathers from his early experiences and the outside world. Through the coupling or assimilation of both internal and external stimuli, the unnamed narrator shapes his conduct (Papakostas 1996, p. 14). This psychosomatic unification produces the mental construction (form or cognition) of the demonic form of Mavra, which controls or, more accurately, acts as a catalyst for the narrator's following actions and attitudes. Its current understanding and/or actions are guided by this mental construction, which has grown to alarming proportions. The self, which extends to the axis of space and time, is positioned at the centre of the cognitive shape (a mental image of its sister). The "*self*" is associated with the narrator's body and its bodily functions (neurological, cognitive, and biological), and it is influenced by emotions and interpersonal situations. Time is concerned with the significance of past experiences (Mavra's hysterical and epileptic seizures) in defining the present experience (nerve escalation, delusional thoughts, demonic image of Mavra), with the latter erasing future experiences (Mavra's death and the narrator's epileptic seizure). The existence of future time is established through the construction of mental images as carriers of information and knowledge from the past and present (Papakostas 1996, p. 17).

The knock on the door interrupts the nightmarish but liberating atmosphere that has formed in his mind (the murder of his sister). His housemaid informs him of the untimely death of Mavra. The next step is for him to go to his dead sister's room and confirm her death. Fear has taken over the narrator's mind and body.

> *"Εδίστασα επί μίαν στιγμήν και ήρχισα έπειτα τρέχων, τρέχων προς το δωμάτιον της Μαύρας. Εκάθησα πολλήν ώραν προ της θύρας φοβούμενος και τρέμων, έπειτα ώθησα την θύραν αποφασιστικώς, κλείων τους οφθαλμούς, και εισήλθον."* (Episkopopoulos 2002, p. 322)

> [Trans.: I hesitated for a moment and then started running; I ran towards Mavra's room. I sat for a long time in front of the door in fear and trembling, and then I pushed the door decisively, closing my eyes, and I entered the room].

The narrative is then built on a variety of neuro-cognitive processes. The narrative's context includes the processing and sense/impression of space; the development of an egocentric reference system—about the narrator's position in space; motor skills; the mobilization of both simple and complex somesthetic signals—sight, hearing, touch, smell (olfactory and visual hallucinations)—feelings of awe and panic. This directorial perspective, thus, lays the groundwork for this entire cognitive structure in order to shape the linguistic structure. The aesthetic/declining vocabulary used to describe the funerary atmosphere incorporates pleasure, pain, and death. His dead sister's body is on the bed, covered in luxurious linen sheets. Her face had turned pale (pallor mortis), while her blond hair "*was falling and swarming around her* / *καταρρέοντες επλημμύρουν τα πέριξ*." The narrator approaches Mavra, while noticing that her eyes are open. After her death, her eyes remained open, indicating that the morbidity of the gaze and its supernatural power remained. After all, the gaze is a critical pattern that attests to the modernity of writing in the context of the 19th century's "*scientific explanations of esotericism*" (Vasileiadi 2018, pp. 58-59).

The use of medical terminology indicates the narrator's attempt to examine the dead body and conduct a necropsy. Keeping open eyes is associated with the time-honored belief that open eyes are a sign of sin and demonic behavior on Earth. The narrator closes Mavra's eyes to hide her hideous expression. At this point, the experience of epileptic auras begins. Mavra's death leaves epilepsy as a legacy. His auras, which signal the onset of epileptic seizures, may have reflected his surprise during the ecstatic feelings (Rossettia & Bogousslavsky, 2005). He suffers an epileptic seizure at the end of the story, after having been an observer of his sister's seizures his entire life. At this point, the narrator wonders whether he shares his sister's "*sick*" nature. Currently, epilepsy appears to be inherited and caused by neurochemical and genetic disorders associated with brain damage.

Heredity is the primary component that influences human features in the context of the development of social Darwinist ideology, beginning with Spencer's basic doctrine of "*survival of the fittest*." **[7]** In the 19th century, it was recognized that heredity is a biological concept. Francis Galton's theories in *Hereditary Genius* (1869), exemplifying an extreme evolutionism, sought to demonstrate that human mental and physical capacity, as well as morality, is a hereditary matter. Spencer and Galton both based their social ethics on biological evolution. The fear of social, racial, and cultural decay was based on inverse theories of evolution in light of Galton's eugenics. In an effort to include the scientific statements of the period into his short story, Episkopopoulos addresses the question of the illness' hereditary nature.

The terms "*genetic*" and "*gene*" had not yet been defined when Darwin's *On the Origin of Species* (1859) was published; only a year later, in 1860, did Gregor Mendel develop his genetic principles—the Mendelian laws discovered by scientists in the 1900s

and incorporated into the *"synthetic theory"* of evolution in the 1930s. However, the widespread belief that epilepsy is a hereditary condition, is noted by Shorvon (2011, p. 5), who observes the development of four ideas, regarding epilepsy genetics. The first idea concerns Edward Henry Sieveking's identification of predisposing and exciting causes. The British physician used the analogy of gunpowder and a match, in order to describe the inherited nature of the seizure: the genetic predisposition to flammability (the predisposing cause) affected the likelihood that a flame (the exciting cause) would ignite and cause an explosion. The "*epileptic diathesis*" was the term for the hereditary tendency, which was thought to be a major contributing factor in predisposing individuals. The second concept is based on Jackson's assertion that epilepsy is essentially an "*idiopathic*" disorder, the etiology of which is still unknown. The third concept is Gowers' theory about people being predisposed to a variety of neurological disorders. The associated hereditary predisposition was dubbed the neurological trait, which encompassed a variety of conditions such as insanity, psychiatric disorders, mental retardation, and personality or behavioral degeneration. The final concept was the concept of degeneration, which was based on Lombroso's theory that epilepsy was an atavistic trait and a fundamental component of the criminal type.

The impact of social influences on epilepsy genetics is significant in shaping beliefs about the disorder. Concerns about degeneration in the late 19th century were reflected in degenerative theories of epilepsy etiology, as well as criminality theories (Shorvon, 2011, p. 6 & 7). Episkopopoulos incorporates the period's scientific and social debate on the concept of etiology as a mechanism of epileptogenesis, by making a simple reference to the disorder's heredity. Since the genetic basis of epilepsy appears to be hereditary, the narrator is confronted with warning signs that a seizure is on the way. The "*aura*" is the first sign of an epileptic seizure for the narrator, as it is for many people with epilepsy. The aura is a forewarning of impending crisis. **[8]** Fear, panic, shivering, discomfort, and pyrexia (fever) are the warning symptoms, followed by auditory, visual, and tactile hallucinations and delusions.

Mavra is brought back from the dead due to the narrator's intricate visual hallucinations, which take on a complicated personality. While magnified from a distance (macropsy), the objects in space flicker due to the visual delusions: "*without oil, the light became more intense red and flashed quickly / Ο λαμπτήρ στερούμενος ελαίου, εμηκύνετο εις φωταύγειαν ερυθροτέραν, και ανέδιδεν αναλαμπάς αστραπιαίας*." Acoustic hallucinations, threatening sounds: "*I thought I heard a sigh and the sound of bed sheets being pulled, as well as the sensation of bare feet on the floor and a human breath / ενόμιζα ότι ήκουα θόρυβον ως στεναγμού, και θρουν σινδονών αποσυρωμένων, και ψαύσιν ποδός γυμνού επί του πατώματος, και πνοήν ανθρώπινην" and "[…] I heard a distinct sound and a long exhalation / […] είχον ακούση ήχον ευκρινή και εκπνοήν παρατεταμένη*" (Episkopopoulos 2002, p. 324). The danger approaches and returns, as Mavra approaches the narrator, who, despite being motionless on the couch, manages to get up and try to escape. His legs tremble more as he meets her "*fiery*" gaze, while the light from the lamp creates sparkles and red glows. The epileptic aura is also stated explicitly by the narrator. The warning signs at this point are "*delicate anion tremors / λεπτών ανιόντων φρικίων*" in

its limbs. Episkopopoulos appears to view epilepsy as a paroxysm – "*tremor*" **[9]** – with minimal negative electrical charge (anions), which is responsible for the production of bioelectric current in his nerve cells.

At the end of the story, the pattern of the fall marks the transition from the first stage of the epileptic seizure (pre-ictal phase) to the second stage (ictal phase), with the narrator uttering an inarticulate cry – "*the cry of [his] cursed passion* / *την κραυγή του κατηραμένου [τ]ου πάθους*" (Episkopopoulos 2002, p. 325). The subject falls to the ground after suddenly losing muscle tone throughout his body. Despite the fact that people cannot understand the meaning of epileptic seizures because they are not reflected in the "*biological body*," the narrator emphasizes the sense of experiencing them. This action demonstrates how deeply Episkopopoulos examines the illness experience, which is made "*visible*" to the readers through the text. The protagonist's narrative is essential because it enables readers to see inside disease and morbid consciousness, to comprehend pathology and other components that have a profound impact on the human condition. At the conclusion of the story, Mavra attempts to "*spit*" and "*choke*" her brother while posing as a ghost.

> "*Και έπειτα ανέβλυσεν αιματηρός αφρός εις τα κίτρινα χείλη της, αφρός θερμός, όστις με ερράντισεν εκτιναχθείς, και σπασμός συνεκλόνισε το σώμα της, ενώ αι χείρες της συνεστέλλοντο πάντοτε και οι σιδηροί της δάκτυλοι μού συνέτριβον τας χείρας...*" (Episkopopoulos 2002, p. 325)
> [Trans.: Then bloody foam gushed out on her yellow lips, hot foam that violently shocked me while it ejected, and convulsions shook her body, while her hands always contracted and her iron fingers shattered my hands].

Epilepsy represents and implies a neurological *continuum* that connects physical, mental, and cognitive life. Through language, literary narrative attempts to convey and explain epileptic neurosis, leading to the socio-cultural structure of the epileptic self. Language is a dynamic tool that highlights the epileptic body's rhetoric, which is ultimately reduced to a socio-cultural symbol. The use and reception of epilepsy reveal a reflection of each era's values and culture. Simultaneously, theories about medical disorders have led to a better understanding of how these ideas, known as illnesses, are socially constructed. Of course, Episkopopoulos was uninterested in the medical aspects of epilepsy. His main goal was to investigate the illness using neurological recordings.

The movement of aestheticism is neuralgic in these fermentations. Neurological disorders can be understood as forms of uniqueness because they appear to have a decisive effect on the core of the individual's existence through a series of experiences that change their thinking and perception of themselves and the rest of the world (Malla, Joober, & Garcia 2015, p. 148). Epilepsy enters the individual character's mind as a unique and distinct form of self. Similarly, each neurological disorder refers to the individual's unique internal "*materiality*"—in his nerve cells, brain, and organs. Pain and mental suffering are all forms of communication that are also part of the resulting neurological language. The neurological language of an individual's illness experiences, in the context

of literary aestheticism, reveals a distinct individual condition. The sound of speech, of course, is performed silently, which means that it is heard only by each subject—another factor emphasizing the brain adventure's individuality and uniqueness.

4. Conclusion

The study of literary works by Nikolaos Episkopopoulos highlights the importance of dealing with interdisciplinary topics, with literature and cognitive neuroscience serving as connecting poles. Cognitive neuroscience implements/tools are used to discover and explain the protagonists' complex and multidimensional brain adventures. The use of cognitive literary history as a methodological tool creates a huge gap in our understanding of the "*complex*" structure and function of the human brain and body.

Based on the research findings, it is concluded that:

(a) Because of its interest in neurological/scientific discourse, the 19th century was and continues to be an appropriate ground for analysis and study. The discoveries of the time about the macroscopic and microscopic texture of the brain echo in literary texts, in the sense that some writers are aware of them and incorporate scientific material into their works. It is critical that the scientific climate be erased through the texts offered by the Aesthetic Movement. The dedication of Aestheticism to the construction of cerebral spaces—to which the subject and readers have unique access—and the experience of the resulting cerebral adventure places the movement ahead of other movements in terms of coexistence with respective scientific developments. The neurological discourse that articulates and pervades Nikolaos Episkopopoulos' aesthetic texts in Greece cultivates a fertile environment in which the modern scholar can work.

The current short story by the Greek author, in particular, is a good example of scientific developments in the field of neurology, which means that literary pleasure is closely tied to how real simulations of epileptic people project the readers into these textual worlds. Episkopopoulos creates spectacular "*physical representations*" by taking part in them while using his understanding of the medical reality of his day. Of course, the social stigma associated with epilepsy is addressed in an effort to concurrently eradicate it.

In this context, the "*haunting*" of the fear of degenerate stigmatized human bodies, promoted pathological medicine and biology, and reevaluated Darwin's theories of human evolution. The degeneration movement shaped public opinion on the causes and diagnoses of neurological disorders, while transferring the "*stigma*" of the illness to the fin-de-siècle literary group, by supporting the decomposition of the highest levels of the nervous system, which may be hereditary as an element, i.e., of an atavistic return to the illness.

(b) Episkopopoulos stands with the "*sick*" of the society, as he examines the cerebral and psychological representations of neurological conditions like epilepsy, utilizing the body and brain discourses that were then developing and turning them into narrative. The victims of social stigma are given independent voices in his short story. The author

proposes his own neurological language in an effort to portray the "*nervous*" body, to recreate a coherent sense of reality, and to cite public and private versions of the self. This proves that the individual experience of illness is equally as significant a "*culture*" from which people are defined and move.

In the short story "Mavra," the protagonist, who has epilepsy, strikes a balance between the prevailing stereotypes of his time and the personal and unique experience of illness – his own individual truth. Recent advances in neuroscience are incorporated into the text by the author. Thus, he discusses the development of symptomatology, aggressiveness of the patient, epileptic seizures, and the hereditary component of the condition. In order to challenge preconceived notions, the story portrays the scientific climate of the 19th century through distinct motifs—of fall, danger, and intelligence. This is also accomplished by creating a reality that is fueled by social misconceptions, regarding epilepsy.

Episkopopoulos conveys the flipped perception of reality by asking the narrator to describe in great detail the mental processes that emerge from the painful viewing of the stimuli (Mavra). The perception that society has of epilepsy is shaped and reflected by delusional thinking, the propensity for criminality, and mortality. It is clear and obvious that an artificial world reflecting the environment of the medical 19th century would eventually arise. After all, the neurological illness is a societal invention based on historical regulatory standards.

Of course, the author, while proposing the disorder's artificial dimension, also emphasizes the neurological disorder's decisive effect on human existence. Experiences and conditions created by epilepsy alter the subject's thinking, perception, and consciousness about himself and the world. Expressions of intense emotions that result in either ecstasy or collapse can thus be understood as forms of uniqueness. Epilepsy is promoted within the individual character of the subject through the use of a neurological language, contributing to the perception of the neurological disorder as a special and yet unique form of the self.

(c) The body is structured in the current narrative as the mapping of the hero's brain processes takes place. The body's interactions with neurocognitive processes extend beyond the boundaries imposed by dualism, which divides the individual's inner and outer worlds. Internal thoughts are implicitly externalized and external stimuli are internalized in the common effort to discover the human identity of sick subjects. The literature of Aestheticism depicts a "*face*" whose speech gives a narrative, which then develops into a *"speaker function,"* in the sense that literary heroes narrate their identity at a specific time (Now) and place (Here), assuming the special role of the sufferer (I). The epileptic person's body is a representation that serves as an "*indicator*" of the means of production and reception of representations, rather than simply being a "*representative object*" of the neurological condition.

(d) Interdisciplinary approaches provide new perspectives, enriching our understanding of the past. It is possible to conduct research in texts other than those from the 19th century

and/or works associated with the Aesthetic Movement. Literature, as a product of human activity, is a fertile field that can be *"cultivated"* in a variety of ways. Reading and interpreting literary texts through the lens of cognitive literary historicism does not imply simple interpretations or "*thunderous*" descriptions. What emerges is that reality is multifaceted and complex in an ever-changing world. This is due to the fact that each person has a unique set of experiences to add to the construction of reality, making each event and person unique as well. In this context, the experience of the mental disorder, its intensity, and forms are determined by the neuro-cognitive factor, which promotes a complex and unique perceptual experience that filters not only each person's personal truth, but also the social perceptions of each era. As a result, the era of cognitive literary studies gives academics the opportunity to create/produce works that offer new interpretations of literary texts and methodological tools while illuminating the historical and cultural formations of each period.

Conflict of Interest Statement
The author declares no conflicts of interest.

About the Author
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Notes:

[1] "*Η εκφύλισις διαγιγνώσκεται επιστημονικώς εκ πολλών φυσικών ή πνευματικών σημείων, στιγμάτων, όπως λένε, τα οποία μαρτυρούν ασφαλώς την ύπαρξιν της τοιαύτης παθολογικής καταστάσεως. Ο Νορδάου, όστις βεβαίως δεν ηδύνατο να κάμη παρατηρήσεις σωματικάς, περιορίζεται μόνον επί των πνευματικών στιγμάτων των συγγραφέων […] τείνει ν' αποδείξη, ότι τα στίγματα ταύτα ακριβώς, τα απαντώντα εις τους μεγαλοφυείς, δύναται κανείς να παρατηρήση και εις τους ενήθεις και τους βλάκας, τους κλεισμένους εις τα φρενοκομεία. Βλάκες δε και ενήθεις, κατά τη σημερινήν δοξασίαν της επιστήμης, δεν είνε άλλο παρά εκφυλισμένοι*" (Episkopopoulos 1893, p. 1).
[Trans.: Degeneration is scientifically diagnosed by many physical or spiritual signs, or stigmas, as they call them, which certainly testify to the existence of such a pathological condition. Nordau, who of course could not make any physical observations, confines himself only to the spiritual stigmas of the writers […], tends to demonstrate that these stigmas, which correspond to the

geniuses, can be observed in both the virtuous and the idiotic, those who are locked up in asylums. According to current scientific belief, stupid and morons are nothing more than degenerates].

[2] The original text reads as follows: "*Le définition que nous avons donnée du mot dégénérescence (déviation maladive du type primitive ou normal de l'humanité) suffirait, elle seule déjà, pour faire siasir la différence entre notre manière de voir et celle des naturalists qui emploient indifféremment, et sans y attacher le même sens que nous, les termes de dégénération, êtres dégénérés, abâtardissement de l'espèce; mais comme l'emploi de ces termes appliqués a d'autres catégories que celles qui nous occupant, pourrait jeter de la confusion dans les idées, il importe que nous établissions la différence d'une manière inattaquable. Un autre sentiment encore nous domine*" (Morel 1857, p. 15).

[3] In Greek, the name *"Mavra"* translates to *"Blackie."* The name, which also serves as the title, forewarns the reader of the short story's dark atmosphere.

[4] Nordau associates hysteria with neurasthenia. In particular, he states: "*But the physician, especially if he has devoted himself to the special study of nervous and mental maladies, recognises at a glance, in the fin-de-siècle disposition, in the tendencies of contemporary art and poetry, in the life and conduct of the men who write mystic, symbolic and 'decadent' works, and the attitude taken by their admirers in the tastes and æsthetic instincts of fashionable society, the confluence of two well-defined conditions of disease, with which he is quite familiar, viz. degeneration (degeneracy) and hysteria, of which the minor stages are designated as neurasthenia. These two conditions of the organism differ from each other, yet have many features in common, and frequently occur together*"(Nordau 1898, p. 15).

[5] Charcot, the father of Neurology, believed that he had discovered a new disorder called "*hystero-epilepsy*," in which female patients "*had convulsions, contortions, fainting and impairment of consciousness*" (Waraich & Shah 2018).

[6] The British physician Edward Henry Sieveking (1816–1904), in his book *On Epilepsy and Epileptiform Seizures: Their Causes, Pathology, and Treatment* (1858), believed that if one observed an epileptic seizure, the same could happen to him (Schmidt & Shorvon, 2016, pp. 22–23). At the same time, Vaja states that since the 18th century, the intense danger of seeing epileptic seizures has been in the forefront (Vaja 2008, p. 32).

[7] In an article titled "Herbert Spencer," which was published in the newspaper *Neon Asty* in December 1903, Episkopopoulos acknowledged "*the perfect and irreproachable support of the scientific method / την τέλειαν και άμεμπτον τήρησιν της επιστημονικής μεθόδου*" in the development of Spencer's social theories (Mavrelos 2011b, pp. 152-156).

[8] Galen introduced the term *"aura"* into the medical vocabulary in the 2nd century AD. The ILAE Commission on Classification and Terminology defined *"aura"* in 1981 as the

point of epileptic seizure that occurs before the individual loses consciousness and whose memory is then preserved. Later, the *"aura"* was described as a *"mental experience,"* emphasizing the subjectivity of its experience in an attempt to enrich and redefine the term. In light of this, the ILAE Commission on Classification and Terminology changed the above definition to "*subjective ictal phenomenon*" (Alvarez-Silva et al. 2006, pp. 529-530).

[9] The word *"tremor"* (Greek > φρίκια) can be found in Scarlatos Vyzantios' (1798-1878) *Dictionary* in both singular and plural forms. Regarding the plural form, it is defined as a "*shiver of paroxysm, cold sensations, and confusion*" (Greek > ρίγος παροξυσμού, κρυάδες και σύγρυα) (Vyzantios 1839, p. 1391).

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