

Signification and its Biology: A Biosemiotic Reading of Edward Thomas's *The Other*

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ABSTRACT: This paper aims to analyze Edward Thomas's *The Other* from a biosemiotics, and more specifically an ecosemiotic lens, studying how the narrator negotiates his position in and with his semiosphere, or umwelt. The narrator is in pursuit of a persona, with whom his relationship is almost that of a predator and its prey. The biology behind the infatuation that the narrator has with "the other", is also studied, elaborating upon the stimulation of obsession by genes and its control by the relevant areas of the brain, and how he comes to be dependent upon this pursuit of "the other" for his existence.

Keywords: Edward Thomas, *The Other*, Biosemiotics, Ecosemiotics, Semiosphere, Umwelt, Biology

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Thomas's *The Other* sketches a picture of the narrator interacting with his environment in different ways, while in pursuit of a persona he refers to as 'the other'. Rich with detailed descriptions of the surrounding environment and the narrator's perception of it, the poem provides a rich ground for a biosemiotic analysis.

This paper analyses the act of interpretation and the phenomena the act itself is dependent upon. In this context, the study focuses on how 'the other' is perceived by and interacted with, by the narrator himself and those around him. It also studies this perception and interaction in relation to how it affects the narrator's relationship and negotiations with his semiosphere at different points in the poem.

Being the most intelligent of animals, human beings' umwelt is perhaps the most expansive. Their interactions with the umwelt are not relevant solely to their immediate survival but go beyond that. The narrator's interactions with his umwelt tend to shape his pursuit, and his internal moods and external reactions shift depending upon this physical location. These shifts and the reason behind them have been analyzed but studying the semiotic and biological drivers, more specifically the neurological and endosemiotic determinants behind them.

Finally, the role that the environment plays in the act of signification, and the ways in which it regulates and control it have been analyzed. In this regard, the paper looks at how the narrator's perception functions through synesthesia and a heightening of sensation.

Ecocriticism is an ever-expanding branch of critical theory and one that is of growing importance now more than ever before. As an increasing number of theorists work on it, experts from different fields are making contributions, causing sub-branches to be progressively hybrid in nature. Of these emerging branches, one is Biosemiotics.

Biosemiotics, as the name implies, is an interdisciplinary sub-theory of Ecocriticism, which takes its primary premises from Semiotics and Biology, more specifically, from the theories of Charles S. Peirce and biologist Jakob von Uexküll. From Peirce, it borrows the concept of nature of the linguistic sign, and from Uexküll, that of the Umwelt, both of which shall be elaborated upon here.

Peirce's semiotic theory is essentially different from the more commonly known theory of the linguistic sign put forward by Ferdinand de Saussure. For Peirce, a sign is triadic: it consists of a sign-vehicle, an object, and an interpretant. The sign-vehicle is somewhat equivalent to Saussure's concept of the signifier, and the object to Saussure's signified. The interpretant, however, is distinctive to Peirce. The Stanford Encyclopaedia of Philosophy defines it as "the translation or development of the original sign. The idea is that the interpretant provides a translation of the sign, allowing us a more complex understanding of the sign's object" (Atkin). An act of signification, according to him, consists of a sign-vehicle, an object and an interpretant. The dynamics of the three are such that the object determines the sign by placing constraints that any sign must meet if it is to signify the object. Consequently, the sign signifies its object only in virtue of some of its features. Additionally, the sign determines an interpretant by focusing our understanding of certain features of the signifying relation between sign and object. This enables us to understand the object of the sign more fully (Atkin).

Another important component of Peirce's semiotic theory is 'Infinite Semiosis'. He claims that the very occurrence of cognition happens on the basis of signs. In simpler words, thoughts too, exist in signs. This means that signs exist in a somewhat chain-like structure since every sign proceeds a sign and is preceded by another, resulting in an infinite semiosis. This is because, in the necessity of a sign to have an interpretant in order to exist, the interpretant itself functions as yet another sign. However, in later developments of the theory, Atkin claims that Peirce somewhat renounced the idea.

Peirce's semiotic theory was propounded as an explanation of the nature of the linguistic sign. Thomas Albert Sebeok's further developments, in merging Peirce's theory with that of Jakob von Uexküll's concept of the *umwelt*, expanded it to cover all "living signifying systems in biosemiotics", according to Søren Brier, in his research article "The Paradigm of Peircean Biosemiotics" (2008). Sebeok, inputting biosemiotics in an evolutionary perspective, claimed that "symbiosis and semiosis are the same" (Brier).

Uexküll first proposed the concept of *umwelt* when he studied "the problem of how living beings subjectively perceive their environment and how this perception determines their behaviour", according to

Demir, in his article "The Project of Biosemiotics: An Attempt to Situate Culture within Nature". Deely elaborates this further, in his journal article "Umwelt" (2001), saying that...an Umwelt is not merely the aspect of the environment accessed in sensation. What an Umwelt is, amounts to a species-specific objective world, with elements of the physical environment made part of a larger, 'meaningful' whole or 'life-world' wherein the individual members of a given species live and move and have their being as members of that species rather than some other. (127)

It is this biological aspect of cognition through which Sebeok re-interpreted Peirce's semiotic theory, and in doing so, introduced the discipline of biosemiotics. Uexküll negated the idea of one world but rather believed that each organism has its own and that all these worlds are "perfused with signs" (qtd. in Rigby 25). Hence all life is driven by semiosis. "Art, Nature and the Poesy of Plants in the *Goethezeit*: A Biosemiotic Perspective" (2015) gives a clearer picture of the extent to which semiosis governs life: "from the level of the individual cell, which is obliged to interpret the genome that it contains in order to help build a body within a particular biophysical environment, to that of the literary critic who, perchance, interprets a poem to help build understanding within a particular sociocultural environment" (Rigby 25). Hence the umwelt relates not only to human but also non-human communication. Here it branches out to zoosemiotics, a sub-theory that deals with the interpretation of "corporeal sensations into meaningful perceptions" (Rigby 26). Similarly, other branches that emerged were phytosemiotics, endosemiotics, physiosemiotics etc., all studies in non-human communication.

Biosemiotics gradually moved away from pure natural sciences, to form interdisciplinary connections with other areas of study. One such development is that of ecosemiotics, the focus of which is human interaction "with and about, nature, as mediated through the sign systems of human culture" (Rigby 26), landing it in the ecocritical paradigm. Timo Maran and Kalevi Kull, in their article "Ecosemiotics: Main Principles and Current Developments" (2014), provide eight comprehensive principles of ecosemiotics, to formulate a basic theoretical framework.

The first few concern the structure and regulation of community or the semiosphere through the linguistic sign and the process of signification, regarding which they state that:

1. The structure of ecological communities is based on semiotic bonds (Maran & Kull 43).
2. Changing signs can change the existing order of things. Living organisms change their environment on the basis of their own images of the environment (Maran & Kull 44).
3. Semiosis regulates ecosystems. Meaning-making both stabilizes and destabilizes them (Maran & Kull 44).
4. The environment as a spatial-temporal manifestation of an ecosystem function as an interface for semiotic and communicative relations (Maran & Kull 46).

Other principles focus more on the ecological and environmental aspects of criticism, concerned about environmental problems and the interdependence of literature and the physical environment we inhabit:

1. Human symbolic semiosis (with its capacity of de-contextualization) and environmental degradation are deeply related (Maran & Kull 45).
2. The concept of culture is incomplete without an ecological dimension. A theory of culture is incomplete without the ecosemiotic aspect (Maran & Kull 46).
3. The narrative description is inadequate for the description of ecological semiosis (Maran & Kull 45).

Finally, one of the principles directly addresses the place of human culture in the ecosystem:

1. Energetically and biogeochemically, human culture is part of ecosystem. Semiotically, culture is both a part and a meta-level of the semiotic ecological network (Maran & Kull 46).

Although categorized as a war poet, Edward Thomas's writing is markedly different from that of other war poets like Auden, Eliot and Sassoon for instance, with whom comparison constitutes a major part of the research done on Thomas. In *Cambridge History of English Poetry* (2010), Rawlinson states that "What Owen, Rosenberg, Sassoon and Thomas have most in common is being 'chained to a historical event, and an abnormal one at that' (824). Perhaps primarily what the difference in writing style emerges from, is the fact that essentially, he was not a poet, but rather a critic and a writer of prose. While the war did play a role in inclining him towards writing poetry, it did not make him a poet. In the chapter titled "Owen, Rosenberg, Sassoon and Edward Thomas" (2010), Rawlinson says that, "He wrote in 'poetic form' only after the outbreak of war and his death makes him 'a lost voice'. But his is not a battlefield verse, and most of it was written before Thomas embarked for France, where he served in a Royal Artillery battery, so cannot superficially be connected with the rhetoric or the imagery of 'trench' poets" (824).

Black does not deny Thomas's status as a war-poet but rather discusses how his poetry defers from that of his contemporaries. In "'Literally, for this': Edward Thomas's Ecocentric War Poetry" (2017), she states that he "rarely makes explicit references to the conflict or his experiences of fighting in France. In contrast to the images of trench warfare and the human cost of war that would become emblematic of World War I poetry, the enduring focus of Edward Thomas's work is the environmental impact of war on the British countryside and the ways in which it disrupts rural society" (1).

Another aspect of the ecocritical study that has been conducted on Thomas's poetry is that of the relationship and dynamics of modernist poetry and the natural world. In her Ph.D. dissertation titled *'The Earth-Haunted Mind': The Search for Reconnection with Nature, Place and the Environment in the Poetry of Edward Thomas, T. S. Eliot, Edith Sitwell and Charlotte Mew* (2013), Elizabeth Harris brings to notice that "Thomas's poetry represents a modern way of writing about nature which responds critically to modernity and engages with the psychological complexity of ideas of 'home' and nation at a time when the vulnerability of both was magnified by war".

In ingraining environmental tropes in his poetry, Thomas's works mark their spot in ecocentric or nature writing. In doing so, he once again maneuvers innovatively around the Wordsworthian tradition of

Romanticism to which nature writing would automatically be associated. Black states that "(the) examination of the far-reaching environmental consequences of war challenges conventional associations of both nature poetry and war poetry and forges new connections between the two that, in contrast to the type of war poetry Thomas criticized, endure beyond their specific circumstances" (2).

Due to its proximity to nature, it has been of interest to ecocritics of late. Laurence Coupe, in the article "Edward Thomas and Green Studies" (2015) provides a comprehensive view of the ecocritical analyses conducted on his poetry. Coupe crowns Thomas as "something of a prophet of green studies" (Green Studies). Reviewing Edna Longley's work, he quotes her saying that "few poets can match Thomas's historical imagination. In fact, his post-Darwinian approach to 'the mystery of the past' is ultimately 'eco-historical'... Of all the ways in which Thomas's poetry anticipates ideas that help us to read it, his ecological vision may be the most inclusive. Taken together, his poetry and prose pioneer 'ecocriticism'" (qtd. in Green Studies).

Roger Ebbatson's, in *An Imaginary England* (2005), discusses another aspect of Thomas's handling of the environment and human-nature interaction, claiming, in Coupe's words, that he "defamiliarizes cultural stereotypes of rural nostalgia, suggesting a much more unsettled land" (Green Studies). To quote Ebbatson himself, "the nomadic wanderers who haunt Thomas's texts, as figures for the poet, represent an otherness antithetical to settlement and modernity through their investment in libertarian displacement and cultural authenticity" (171).

Another prominent critic to have taken interest in an ecocritical view of Thomas's poetry is Jonathan Bate. In his work *Romantic Ecology* (1991), he identifies a "Romantic environmental tradition" (Bates), which he traces from Wordsworth to Thomas. By way of a rejoinder to Raymond Williams, Bate defends the pastoral as a potentially radical force, given that it rests on a positive view of the countryside and involves a critique of the given urban hierarchy. In Wordsworth's hands, muses Bate, it involves the advocacy of rural community and democracy as well as sympathy with the surrounding world of nature. He claims that for Thomas, as for Wordsworth, pastoral was not a myth but a psychological necessity, an underpinning of the self, a way of connecting the self to the environment... In literature as in life, connection with the external world is dependent on what [John] Clare called 'The Eternity of Nature',

dependent on the survival of the daisy and the return of the swallow.
(Bate 10)

Coupe (Green Studies) points out that a significant parallel that Bate finds between the works of Wordsworth and Thomas, is that between Thomas's 'Household Poems' and Wordsworth's 'Poems on the Naming of Places'. "It is the sense of locality and the need to name, know and revere particular places that unite Wordsworth and Thomas most particularly", says Bate (Romantic Ecology).

Although Thomas's environment-centered poetry has been critically analyzed from an ecological perspective, ecocriticism as a paradigm through which it has been explored is still very recent. Almost all research done in the field, with the exception of a few articles, has been conducted only in the previous decade. One area of study that is still unexplored is that of biosemiotics. This paper aims to analyze Edward Thomas's *The Other* from the view of a sub-branch of biosemiotics called ecosemiotics.

In pursuit of 'the other', Thomas's narrator seeks traces and clues, almost as a predator after prey, constantly looking for him, forgetting at one point if there ever was another purpose to his existence. He believes that once he achieves his goal of finding this persona, he would finally be at ease, only to realize that the trail will never end, and when 'the other' ceases to exist, he will too.

Thomas's poetry never pins down meaning, but rather leaves it open to the interpretation of the reader, giving them ample space to dissect, explore and relate. It is for this lack of space for interpretation that he criticizes Hardy, calling him "tyrannous", for lacking "richness and diversity of interpretation" (Thomas 2). He iterates this in his book *Walter Pater; A Critical Study* (1913), saying that "no man can decree the value of one word unless it is his own invention" (Thomas 215). His views on the invitation to interpretation that a text ought to give are reflected in Charles Peirce's notion of the nature of the sign, regarding which he says that "a sign is only a sign in actual by virtue of it's receiving an interpretation" (qtd. in Wheeler 141). Texts - a poem in this case- are collections of signs, functioning together, dependent on meaning upon the interpretation they receive from the reader.

Michael Wood, in his article "Marvellous Money" (2008) holds that signs "hover on the edge of explanation, they promise to interpret a whole world for us; but tactfully never quite do this, thereby avoiding ... determinism" (Wood). The larger picture of this is better understood when Peirce's idea that "the universe is perfused with signs" (Wheeler 140) is kept in mind.

This is reflected in the main idea of the poem itself. The narrator is in search of a persona that he is told resembles him to the extent that people mistake him for 'the other'. Despite the uncanny resemblance he is supposed to have with him, when the narrator finally finds the persona, the persona gets offended at being sought after:

Loudly he asked for me, began To speak as if it had been
a sin
Of how I thought and dreamed and ran After him thus,
day after day:
He lived as one under a ban (Thomas 94-98)

The interpretation of this phenomenon in the semiosphere of people has hence been different for those whom he has been interrogating for the whereabouts of 'the other', from that of what he had expected to come across. Although the narrator expresses in multiple places in the poem that "What to do, / When caught, I planned not" (17-18), he has interpreted the 'the other', who acts as the object or the signified here, as a warmer, more welcoming entity, "more like [him] in general" (50), as is evident in his expression of disappointment, as he says "For this: what had I got to say? / I said nothing, I slipped away." (99-100). It is perhaps because there is no single determining meaning that the narrator will, to the end of both their days, continue the pursuit. Had there been a possibility of the process of signification ending in a set meaning, the pursuit could have had a resolution.

Jakob von Uexküll's theory of the Umwelt points out that "organisms and environments co-evolve in signs and interpretations: in this way, the semiosphere is both made and real" (Wheeler 145). Thomas's made-up and real are so well-integrated, that for the narrator, they are the same. However, this does not mean that what the poet has to say does not exist outside an ever-changing subjectivity of his readership. According to Maran, in his article "Biosemiotic Criticism: Modelling the Environment in Literature" (2014), zoosemiotic does, after all, depend upon the

capacity abilities of the sensory organs and nervous system, and follows the patterns of the human Umwelt to relate perceptions to actions. Furthermore, the environment itself has the "ability to direct and motivate sign processes, [and] it must be taken into consideration that the environment is filled with the semiotic activity of many species, their footprints, sounds, smells, color signals and meaningful actions" (Maran 5). Hence, the experience of the poem is authentic and grounded in some phenomena.

The search for 'the other' is not unique to *The Other*, but rather is a recurrent thematical concern, both in Thomas's prose and his poetry. This theme, according to Middleton, in "Poetry and the Languages of Nature" (2016), expresses "a fascination with the hidden processes and forms that transcend our everyday awareness of the world" (4). Before he started writing poetry, it was evident in his prose as well, as David Wright traces a foreshadowing of this pursuit of 'the other' in *The Other*, in *The South Country* and in *In Pursuit of Spring*, both works of prose by Edward Thomas.

As the poem opens, the narrator is exiting the forest, instantly reminiscing the sensory stimuli that the semiosphere had been providing him. He was "glad", for he had gotten "To feel the light, and hear the hum / Of bees, and smell the drying grass / And the sweet mint" (Thomas 2-4). The process of signification is different from that of an ordinary man. He "feel(s) the light" (2), like a plant, and "smell(s) the drying grass" (3) and "sweet mint" (4) like an animal that navigates with the aid of olfactory signs. Human beings, having the most extensive umwelt of all living beings, have the ability to feel the light and smell the grass too. However, it comes as secondary and not primary to their immediate conscious perception of surroundings. Hence this heightened sense of touch and smell are more animal than human, revealing the narrator to be more integrated with nature or the wild, than with the city or civilization. Thomas adds to this effect by using extended alliteration in saying that the narrator could "hear the hum" (2), and as a result, accentuating its onomatopoeic nature. Furthermore, in connecting the phyto and the faunal to the human, he highlights the inherited memory and shared evolutionary history of all living beings.

As he exits the forest, coming to "an end of the forest, and because / Here was both road and inn, the sum / Of what's not forest" (5-7), there is a shift in the atmosphere, both of that surrounding the narrator and that of

the poem itself. According to one of the key principles of ecosemiotics put forth by Maran and Kull, in "Ecosemiotics: Main Principles and Current Developments", "the structure of ecological communities is based on semiotic bonds" (43). As the narrator moves from one ecological community to the other, the signification process too undergoes change. From his previous feeling of gladness, the predominant state transitions to that of "fear" (10). As the hum of the bees and the scents of dying grass and mint disappear, a feeling of unease sets in due to their absence, signifying a loss in the perception of signs that otherwise were glaringly present in the semiosphere.

He does not leave the forest with the purpose of finding this 'other', but rather finds out about him after he does so, which again shows that when surrounded by nature, there was equilibrium within, which has now been disturbed. The previously reminisced forest now has darker associations. It is now a "dark wood" (12). This disorienting discovery has transformed it into a traumascap for him. I reinterpret, for this research, the term as a landscape that has been tainted, either physically or in the subjectivity of a being, due to trauma that a person or people collectively have undergone there. The inn, on the other hand, is "in the sun" (14), and in a "happy mood" (14). Although the binary of the natural and synthetic world has been inverted, he still relies on natural associations to express pleasure. The inn now makes him happy because he has "tasted sunlight there" (15). In "The Poetry of Hardy and Edward Thomas" (1975), Jonathan Dollimore states that Thomas uses "the tangible landscape to express feeling and response . . . together with a sensitive, searching awareness of the intangible, elusive elements of experience" (203).

This searching awareness in *The Other* stems from the mystery now unveiled to the narrator. It carries curiosity, but not one constructive in nature. He states his only purpose: "I pursued / To prove the likeness, and if true, / To watch until myself I knew." (18-20) Although he is "eager" (24), it is "but in a weary way" (24).

A point to note is that he does not perceive the search as merely an escapade, but rather develops an unhealthy infatuation with the subject. He has no tangible reason for tracking down 'the other' but does so as one driven by obsession. He says that "What to do / When caught, I planned not." (17-18). He claims to have "traveled fast, in hopes I should / Outrun

the other" (16-17). However, his adrenal glands are clearly inactive, for it is, for him, a "weary" (24) act.

Their relationship is almost like that of predator and prey. For instance, he "aimed at the unseen moving goal" (32), depending upon sensory input other than sight. In this predation, he reverts to the state he was in when he had not yet exited the forest, i.e. with heightened sensations. Although such an act of predation comes with energy produced due to adrenaline, for him it produces fatigue. His obsession with 'the other' has him so consumed, that he "quite forgot I could forget" (40).

When Seabok states that the universe is perfused with signs, he does not refer solely to the external world. Endosemiotics makes up an important part of Biosemiotics. Signification processes occur not only in the external semiosphere, but also within the body, starting from the genetic and cellular levels, and slowly building outwards to the organism, and then the cultural level.

The fixation with 'the other' can be explained through neurology. The Ventral Tegmental Area of the brain is a structure responsible for sending "dopaminergic neural; projections to both limbic and cortical areas (i.e. the mesolimbic and mesocortical circuits, respectively)", according to "International Review of Neurobiology" (2016). Hanlon and Jones state that "During a mental fatigue task, nonusing controls show enhanced activity in midbrain dopaminergic structures, including the VTA" (Imaging). In layman terms, the Ventral Tegmental Area gets stimulated by reward and positive reinforcement, which the narrator receives in small doses as he gets told by different people in different places that his look-alike has been sighted, stayed the night, been interacted with, as "A customer, then the landlady / stared at me. With a kind of smile" (41-42). Those who do not provide him with this reinforcement, are described as "never-foamless shores / Make better friends than those dull boors." (28-30). Once again, the behaviour reflects that of an addicted brain. The narrator says that

He was not there. Nothing
Told me that ever till that day
Had one like me entered those doors,
Save once. That time I dared "You may
Recall" (25-29)

And yet when those inquired cannot recall, they are not forgiven for not being able to do so, but rather are compared with "never-foamless shore", declared as worse friends than them. Even as the poem comes to an end, the narrator is almost dependent upon this 'other' for his existence, as he says "I wait his flight. / He goes: I follow: no release / Until he ceases. Then I shall also cease." (108-110). Furthermore, he describes his pursuit in a similar manner, saying that "I thought and dreamed and ran / After him thus, day after day" (96-97). It is the VTA that controls the activation and relapse of drug-seeking behaviours. After he finally finds the whereabouts of 'the other', the light/dark binary too gets inverted. The woods now provide only darkness, and the "steel(s) out of the wood to light" (104) to "keep in sight" (102), this light now being provided by the synthetic human world.

The comparison of "dull boors" (30) to "never-foamless shores" once again brings to notice the superior position of association of the narrator with nature than that with the synthetic world and its inhabitants. Of all things he could compare them to, in order to show them to be inferior in friendship, he chooses a natural phenomenon. An ocean's foam is generated due to organic matter in the water. McVean writes in a McGill University article that it is "a collection of organic material, like algae, fish scales or bits of coral, that when agitated by the ocean's waves and currents act as foaming agents and surfactants" (Sea Foam) These surfactants, according to him, play a big role in keeping us alive, as it helps in stabilizing the alveoli in our lungs, which help us defuse oxygen in and remove harmful gasses from our lungs. Hence, in drawing an analogy between the two, he calls the people at the inn as useless as an ocean not generating this foam.

In addition to the VTA, the DRD4 or the Dopamine Receptor gene, which is responsible for the control of neural signals that modulate behaviour (Ptáček et al.), also plays a role. Ptáček et al. state that "DRD4 variants can affect individual responses to stress or trauma" (DRD4). In fact, it is closely related to many psychiatric disorders, one of which is schizophrenia. Although keeping Thomas's philosophy in mind critics reject the notion of the narrator being schizophrenic, the poet himself, as mentioned earlier, contended that poetry is to be left open to the interpretation of the reader. Keeping in view that the narrator does in fact encounter 'the other', and interacts with it, he could be a patient of schizophrenia. The brief interaction has an emotional effect on him, leaving a traumatic impact on the narrator:

Till once amid a tap-room's din
Loudly he asked for me, began
To speak, as if it had been a sin,
Of how I thought and dreamed and ran
After him thus, day after day:
He lived as one under a ban
For this: what had I got to say?
I said nothing, I slipped away. (Thomas 93-100)

In the introduction to his *Selected Poems of Edward Thomas*, R. S. Thomas writes, "somewhere beyond the borders of Thomas' mind, there was a world he could never quite come at" (qtd. in Middletown 4). This constant search is a result of the poet's introspective nature. He is very perceptive of his surroundings. In a letter to Robert Frost, he describes his surroundings saying, "It is near the end of a 3 week's frost. The country is covered with snow which silences everything but the guns" (Thomas 365). Like his narrator, Thomas was sensitive to the different sensory signs around him.

In *Studies and Further Studies in a Dying Culture* (1971), Christopher Caudwell discusses the biology of perception, saying that the "body and environment are in constant determining relations. Perception is not the decoding of tappings on the skin. It is a determining relation between neural and environmental electrons. Every part of the body not only affects the other parts but is also in determining relations with the rest of reality. It is determined by it and determines it..." (208). The environment itself plays an active role in the interpretation of the signs present in it. Maran elaborates upon this saying that, "in addition to the environment's ability to direct and motivate sign processes, it must be taken into consideration that the environment is filled with the semiotic activity of many species, their footprints, sounds, smells, colour signals and meaningful actions" (2), hence the interpretant, as Peirce postulated, acts as a sign itself. Maran and Kull too word this in their sixth principle of ecosemiotics, which states that "The environment as a spatial-temporal manifestation of an ecosystem functions as an interface for semiotic and communicative relations" (Principles 46).

The narrator's relationship with the *umwelt* is dependent upon not only his visual, auditory, olfactory and tactile senses, but rather exhibits *synaesthesia*. Ternaux explores the concept in his article titled "Synaesthesia: A Multimodal Combination of Senses" (2003) and says

that In its pathological context, synaesthesia is described as a confusion of the senses where the excitation of one sense triggers stimulation in a completely different sensory modality. In contrast to this pathological form, synaesthesia can also be considered as a physiological behaviour that involves a multimodal combination of all senses. Such an expression of sensory perception can also be considered as a natural process that contributes to the adaptation of the living organism to its environment. (Ternaux)

Thomas's narrator can "feel the light" (Thomas 2) and "taste sunlight" (15). Even apart from the synaesthesia, his senses tend to be more heightened, signifying a person who has spent more time in the wild than in civilization. He can tell that "The wind had fallen with the night;" (62). His mood shifts when surrounded by the wilderness, and he becomes very attuned to his surrounding semiosphere:

And all was earth's, or all was sky's;
No difference endured between
The two, A dog barked on a high rise;
A marshbird whistled high unseen;
The latest waking blackbird cries
Perished upon the silence keen.
The last light filled a narrow firth
Among the clouds. I stood serene,
And with a solemn quiet mirth,
An old inhabitant of earth. (71-80)

So heightened are his senses, that he can tell from the sound of the dog's bark that it is standing on a hidden rise and from the time of the blackbird's cry that it is the last one to wake up. He is "serene" (78) and "with a solemn quiet mirth" (79). In fact, the division time being a social construct ceases to exist in his actual *umwelt*, and he has "name(s) I gave to hours" (81). In fact, "far off from men" (86), he has "Moments of everlastingness." (87).

Thomas's narrator appears to be extraordinary when his existence in relation to his *umwelt* is analyzed. However, this serves as a reminder that not only humans but all other living creatures in this sign-perfused universe are just as phenomenal. The universe itself, with its ability to dominate and manipulate interpretation by influencing the process of signification, is enthralling. The narrator's pursuit of 'the other', is, in

fact, something that we can all resonate with at some level. In this context, the poem not only reflects the poet's philosophy but also serves as a mirror for each reader, no matter how different he is from the rest. Thomas's narrator's heightened sensations are more animalistic than human, and his navigation in his forest semiosphere reveals a man more at home with nature than the synthetic human world. Although his umwelt expands over both, his inclination towards the former is directly in proportion to his pursuit. When the poem opens and the 'other' has not yet been introduced to him, the forest environment, richly perfused with sensory stimuli, makes him "glad". As soon as he is told that another exists, who is "like (him) in general" (50), his feelings transition to fear, his peace is permanently shattered.

Owing to the nature of the process of signification, the pursuit of 'the other' makes the relationship of the narrator and the persona resembles that of predator and prey. The interpretation itself is a very subjective act. Since the sign is tripartite, the interpretant makes way for multiple interpretations of the same sign. 'The other', is hence interpreted as just another, almost non-existent being by the inhabitants of the city, and yet for the narrator, he becomes equivalent to his existence.

The biology of perception reveals yet another aspect of the quest to find this other. The narrator is so infatuated by the idea of finding him, that the behaviour he exhibits is that of an addict. The Ventral Tegmental Area, which is one of the dopaminergic structures in the midbrain, gets stimulated by reward and positive reinforcement, which the narrator receives in small doses every time he gets a lead on the subject of his desire. It is also closely related to the activation and relapse of addiction-related behaviours. Another neurological factor involved is the Dopamine Receptor D4 gene, which is responsible for the modulation of behaviour. Closely related to stress, trauma and psychological disorders like Schizophrenia, the activation of this gene or its variants could be one possible reflection of the endosmotic processes of the narrator.

Finally, the environment's role in the regulation of interpretation through signification is exhibited through the responses of his body to the plethora of stimuli present in his surroundings. Not only are his senses accentuated through hypesthesia, but the phenomenon of synaesthesia is also present.

Works Cited

- Atkin, Albert. "Peirce's Theory of Signs." *Stanford Encyclopedia of Philosophy*, Stanford University, 15 Nov. 2010, <https://plato.stanford.edu/entries/peirce-semiotics/>.
- Bate, Jonathan. *Romantic Ecology: Wordsworth and the Environmental Tradition*. Routledge, 2014.
- Black, Elizabeth. "'Literally, for This': Edward Thomas's Ecocentric War Poetry." *Green Letters*, vol. 21, no. 1, 24 Oct. 2017, pp. 1–13., doi:10.1080/14688417.2016.1246974.
- Brier, Søren. "The Paradigm of Peircean Biosemiotics." *International Journal of Semiotics*, vol. 2, 2008, pp. 20–81.
- Caudwell, Christopher. *Studies and Further Studies in a Dying Culture*. Monthly Review Press, 1971, pp. 208.
- Coupe, Laurence. "Introduction." *The Green Studies Reader: From Romanticism to Ecocriticism*, Routledge, London, 2000, pp 5.
- Deely, John. "Umwelt." *Semiotica*, vol. 2001, no. 134, 2001, doi:10.1515/semi.2001.019.
- Demir, Metin. "The Project of Biosemiotics: An Attempt to Situate Culture within Nature." *Academia.edu*, <https://www.academia.edu/1593162/biosemiotics>.
- Dollimore, Jonathan. "The Poetry of Hardy and Edward Thomas." *Critical Quarterly*, vol. 17, no. 3, 1975, pp. 203–215., doi:10.1111/j.1467-8705.1975.tb01561.x.
- Ebbatson, Roger, and Ann Donahue. *An Imaginary England: Nation, Landscape and Literature, 1840-1920*. Ashgate, 2005.
- Hanlon, C. A., and J. L. Jones. "Ventral Tegmental Area." *Ventral Tegmental Area - an Overview | ScienceDirect Topics*, International Review of Neurobiology, 2016, www.sciencedirect.com/topics/neuroscience/ventral-tegmental-area.
- Harris, Elizabeth. "The Earth-Haunted Mind: The Search for Reconnection with Nature, Place and the Environment in the Poetry of Edward Thomas, T.S. Eliot, Edith Sitwell and Charlotte Mew."
- Longley, Edna. "Introduction." *A Language not to be Betrayed: Selected Prose of Edward Thomas*, Carcanet, Manchester, 1981, pp xix.
- Maran, Timo, and Kalevi Kull. "Ecosemiotics: Main Principles and Current Developments." *Geografiska Annaler: Series B, Human*

- Geography*, vol. 96, no. 1, 2014, pp. 41–50., doi:10.1111/geob.12035.
- Maran, Timo. “Biosemiotic Criticism: Modelling the Environment in Literature.” *Green Letters*, 28 May. 2014, pp. 297–311., doi: 10.1080/14688417.2014.901898.
- Middleton, Rowan.
“Edward Thomas, Poetry and the Languages of Nature.” *English: Journal of the English Association*, vol. 65, no. 251, 2016, pp. 310–329., <https://doi.org/10.1093/english/efw044>.
- Morales, Marisela, and Elyssa B. Margolis. “Ventral Tegmental Area: Cellular Heterogeneity, Connectivity and Behaviour.” *Nature News*, Nature Publishing Group, 5 Jan. 2017, www.nature.com/articles/nrn.2016.165.
- Ptáček, Radek et al. “Dopamine D4 receptor gene DRD4 and its association with psychiatric disorders.” *Medical science monitor: international medical journal of experimental and clinical research* vol. 17,9 (2011): RA215-20. doi:10.12659/msm.881925
- Rawlinson, Mark. “Owen, Rosenberg, Sassoon and Edward Thomas.” *The Cambridge History of English Poetry*, edited by Michael O'Neill, Cambridge University Press, Cambridge, 2010, pp. 824–843.
- Rigby, Kate. “Art, Nature, and the Poesy of Plants in the Goethezeit: A Biosemiotic Perspective.” *Goethe Yearbook*, vol. 22, no. 1, 2015, pp. 23–44., doi:10.1353/gyr.2015.0000.
- Ternaux, Jean-Pierre. “Synesthesia: A Multimodal Combination of Senses.” *Leonardo*, vol. 36, no. 4, 2003, pp. 321–322., doi:10.1162/002409403322258790.
- Thomas, Edward. “The Other by Edward Thomas.” *Poetry Foundation*, Poetry Foundation, www.poetryfoundation.org/poems/53750/the-other-56d2335583806.
- Thomas, Edward. “Edward Thomas.” *Edward Thomas*, Delphi Classics, 2013, pp. 365.
- Thomas, Edward. “Time’s Laughingstocks.” *Morning Post*, 9 Dec. 1909.
- Thomas, Edward. *Walter Pater; a Critical Study*. London M. Secker, 1913, pp. 215., <https://archive.org/details/walterpatercriti00thomuoft/page/n8>.
- Wheeler, Wendy. “Postscript on Biosemiotics: Reading Beyond Words – and Ecocriticism.” *New Formations*, 1 Jan. 2008. *Research Gate*.
- Young, Jason A. “Reframing Our Relationship with Nature: An Ecosemiotic Literature Review.” *Royal Roads University*.