



Vol. 24 No. 2, October 2024, pp. 328 – 343 **DOI:** 10.24071/joll.v24i2.8783 Available at https://e-journal.usd.ac.id/index.php/JOLL/index



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# Greening Semiotizations: The Ecocritical-Biosemiotic Literacies of Selected Ecopoems from Sustaining the Archipelago: Philippine Ecopoetry Anthology

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## Abstract

### This paper is an attempt to flesh out the biosemiotic and ecological literacies of selected ecopoems from the collection Sustaining the Archipelago: An Anthology of Philippine Ecopoetry (2017). I recognize the biosemiotic fact that every living organism of nature possesses the ability to inventively pursue their environments made possible through an active engagement of signs in the environment. Grounded on the ecocritical theories of Hubert Zapf, David Orr and Jacob von Uexkull and the descriptive-analytical research design, I analyze Philippine ecopoetry and how it can substantially bring readers within the environment itself and experience its attendant forces shaping it on both micro and macro heights. Ecopoetry allows us to better comprehend the particularities and complexities of the environment and the workings of our biologies. It positions its readers within the intricate spheres of the environment. Echoing the concept of ecological literacy, the reader becomes more knowledgeable and intimate with the environmental space recreated through the words of the poet. In the analysis, I recognize the ecoliterate affinities of the poets and their works highlighting ecocritical discourses on biophilia, topophilia, topophobia, anthropocentric activities, holism and systems thinking. These affinities are further dissected with the aid of biosemiotics. Biosemiotics looks into the complexities of the environment emphasizing various significant organisms and occurrences that shape environmental connections and disconnections. In the ecopoems, there are signs and occurrences that can be specifically interpreted shaping environmental connections. These are essential in understanding the processes that make nature and culture experience connections and disconnnections.

Keywords: biosemiotics; ecocriticism; ecological literacy; Philippine ecopoetry

# Article information

6 June 2024 Revised: 3 August 2024

Received:

Accepted: 4 August 2024

# Introduction

In understanding the connections that can be created between ecological literacy and biosemiotics, it is essential to begin with how the terms ecopoetry, ecological literacy and biosemiotics are operationally defined in their own respective ambits. Beginning with ecopoetry, I recognize what Greg Garrard and Susanna Lindstrom said in an essay titled "Images Adequate to Our Predicament: Ecology, Environment and Ecopoetics." In this essay, they said that ecopoetry is the artform that espouses the view that every human action must be guided by the pursuit of the common good. This applies to all species living in the biosphere (Garrard and Lindstrom, 2014). The notion of the common good is the main highlight in Garrard's definition. It is from here where we can also recognize the fact that this common good is also part of our Constitution specifically seen in the section on the Right to the Environment (Philippine Constitution, Article II, Section 16). We can extract from this section that we have a right to experience a healthful environment and ecology. We are free beings freely moving with the rhythm and harmony of nature. Part of this right is also the task of protecting and preserving the environment. In relation to these assertions, ecopoetry offers ways for us to experience the environment. It specifically exhibits the environment through poetry (Chua, 2017).

In its more specific sense, it can show through its images how poems can acquire various ecological moods and show how the environment can actually be presented on pages. In relation to this, ecopoetry has provided the groundwork for engaging known unknown issues related to and the environment. It is there to substantially bring us into the environment itself and experience its attendant elements shaping the environment on both micro and macro heights. Ecopoetry allows us to better comprehend environmental and biological complexities and particularities. The focus given on this particularity offers a fertile springboard for expanding the Philippine experience of biosemiosis captured in poetry.

Another important term to consider is the term "ecological literacy." The term conveys a writer's awareness of his environment. This awareness is essential for him to be able to create a work about the environment, its intricate biologies and present conditions. Echoing what David Orr also said regarding ecological literacy, it is also a way of espousing holism and systems thinking-a way of thinking about the world with special emphasis given on natural and cultural forces. It also underscores the repercussions of human actions (the Anthropocene) as humans mingle with various environmental forces and contexts (Boehnhert, 2015). It is also called "literacy" because readers of a work that is ecologically literate can essentially acquire the knowledge and even the competencies to understand and also address environmental issues and problems.

Mindful of these environmental complexities, I also recognize the definition of biosemiotics provided by Greg Garrard. According to Garrard, by capitalizing on ecocritical methods and procedures, biosemiotics looks into the complexities of the environment, particularly the micro and macro key players that shape environmental connections and disconnections (Garrard, 2012). There are signs and occurrences that can be specifically interpreted shaping nature and culture connections. This definition also supports what Hoffmeyer said regarding such connections. Signs in the environment can be interpreted to understand the processes that make nature and culture experience unification, continuity and evolution.

In the analysis of selected ecopoems, I recognize the ecoliterate affinities of the poets and their selected works highlighting ecocritical discourses on biophilia, topophilia, topophobia, anthropogenic activities, holism and systems thinking. These affinities are further dissected with the aid of the biosemiotic vista.

In order to do this, it is important that the poets are ecologically literate as reflected in the work. This is the reason why I am also invoking the concept of ecological literacy laid down by David Orr in his work titled "Ecological Literacy" from "The Earthscan

Reader in Sustainable Agriculture." Orr associates ecological literacy with the goal of viewing nature armed with a certain level of insight grounded on various perspectives include numbers, sciences, which can language, values and worldviews (Orr 22). In the case of ecopoetry, it is not enough that we see the ecopoets talking about nature and fighting for its protection. Ecopoetry, with the aid of the biosemiotic vista, can also partake in the discourse on sustainability with the attempt to offer solutions to certain environmental problems in a manner that it also emulates nature's strategies, ways, and time-proven designs and patterns (Benyus, 1997).

Previous literatures focusing on ecocriticism. ecological literacy, and can augment biosemiotics further the peculiarity of the analysis being advanced in this paper. In fleshing out biosemiotic methods in reading Philippine ecopoetry, I recognize what the environmental humanist Dana Phillips said in his article titled "Ecocriticism, Literary Theory, and the Truth of Ecology." He articulated the fact that ecocritics must not be satisfied with merely looking at the representations of nature. One must also engage the scientific authorities of literary ecology-the so called "truths of ecology" (Phillips, 1999). Philips recognizes the various views that scholars have to consider in greening the literary endeavor. These ecocritical trajectories distinctly expand the fact of how ecocriticism concurs with other branches. In the essay, Philips is to be commended for presenting a comprehensive landscape of scholars who have contributed to the intricate field of ecocriticism. He begins his exposition on this matter with the contributions of the environmental historian Donald Worster and ecology scholar John Elder. In "Nature and the Disorder of History", the former regards the concept of nature as a special landscape—a landscape of all patches, sizes, textures and colors (Worster, 1994). Ecocriticism responds to an unceasing barrage of perturbations (Worster, 1994).

This is the perspective that supports the ecocritical endeavor of examining nature and all its complex non-human elements. The focus on disasters, eco-injustices, environmental holism, anthropocentric and ecocentric beliefs greatly bolsters the dynamic nature of ecocriticism. This is the reason why Joel B. Hagen, an expert in the field of systematics and evolutionary biology, affirms that studying ecology significantly emphasizes indeterminism, variability, unpredictability and constant change (Worster, 1994). In the greening of literature, these statements from Philips supported by the reconnaissance of Worster and Hagen, imply that ecocriticism can also convey the tenors of poststructuralism. However, it is important to note that ecocriticism does not decenter the human subject in the same manner that we see from the postmodernist trend (Bellarsi, 2009). An important aspect of greening the literary discourse puts premium on the exploration and criticism anthropocentrism and its attendant ideologies. Biosemiotics recognizes the impacts of anthropocentrism but does not limit its investigations to it alone. There is a strong focus on the investigation and assessment of the autonomous existence and rights of the biotic and abiotic elements from the nonhuman domain, and how they can be safeguarded, prolonged and sustained through critical endeavors (Reed, 2002). This is a thought from Reed that the paper wants to further expound in the analysis of ecopoems.

These concentrations on the biotic and abiotic elements such as plants, animals, disaster, landscapes, and bodies of water in literary ecology become a resounding means of projecting the inextricable wholeness of the world (Elder, 1985). To further expound on this, John Elder, in "Imagining the Earth: Poetry and the Vision of Nature", affirms that environmental encounters and occurrences can acquire a significant poetic import and power (Elder, 1985). In greening the literary endeavour particularly through the method of biosemiotics, the specificity being affirmed by Elder becomes an important hallmark. This is observed in the case of poetry conceived and analyzed in the light of ecocriticism. According to Elder, poetry becomes the manifestations of landscape and climate just as the ecosystem's flora and fauna are (Elder, 1985). Philips questions this concern remarkably the scientific substantiations that Elder gives to his assertions. It can be seen that this is a mere simplification of the interrelation between literature and environment. This is where the discourse on biosemiosis can be generated. Elder underscores the conflation of the organismal perception of the ecological community with that of the ecosystem itself— a clear invoking of ecological literacy as well.

Grounded on prominent ecocritical purviews. Keith Moser's "Rethinking the Essence of Human and Other-Than-Human Communication in the Anthropocene Epoch: A Biosemiotic Interpretation of Edgar Morin's 'Complex Thought'" provides а clear exploration of the more specific issues and premises that one has to consider in applying biosemiotics to literature. To further exemplify this, the essay attempted to investigate the philosophical and linguistic implications of the concept of "complex thought" by the French philosopher Edgar Morin. Moser's discourse further affirms the fact that Homo sapiens are not just living beings who engage the intricacies of semiosis. In expanding the horizons of biosemiotics, Moser departs from this standard communicative prototype when speaking of human or anthropocentric semiosis. With this departure underscored, one can clearly understand how Morin unequivocally demonstrates that the nonhuman realm and the communication transpiring within this domain is also teeming discursive formations. purposes. and significance. Embedded in this illustration is the notion that we are residing in a jeopardized planet markedly delineated by the impacts of anthropocentrism, ecological disasters that can decidedly spiral out of control with the passing of time.

Keith Moser's discourse on the concept of the "complex thought" of Edgar Morin provides a strong reconnaissance when it comes to the nature of communication that is formed in the biosemiotics perspective. According to Moser, Morin posits that the entire universe is teeming with purposeful and meaningful semiosis occurring at all the biological levels of organization (Moser, 2018). Evidently, this is a clear biosemiotic assertion of how the environment can be modelled with reference to the levels of organization present in the biosphere. The departure from anthropocentrism being espoused by Moser is the key to further understand the complexity of the "umwelten" in biosemiotic thought. This concept of the umwelt is explained clearly by Kadri Tuur in the work titled "Semiotics of Nature Representations: On the Example of Nature Writing." The analysis of this paper is also a response to how the concept of the "umwelten" can be used in modelling the environment from various vistas possible.

Kadri Tuur in her study "Semiotics of Nature Representations: On the Example of Nature Writing." A central focus of the study of Tuur is her expansion of the discourses on the axiological interrelations of the human and non-human domains. She merges ecocriticism with semiotic methods in analyzing nature writing in order to explore new vistas and possibilities that nature writing can offer specifically as to how ecocritical studies view nature writing.

This paper also recognizes the theoretical affirmations of Tuur in her study particularly on the "umwelten" in biosemiotics. It acknowledges the fact that nature writing can unveil the "umwelten" of humans and it can intersect and have noteworthy similarities with the "umwelten" of other species that also promulgate life in the greater biosphere (Tuur, 2017). The various perceptions on the environment can be a resilient and pliant springboard to model the environment. Hence, the pronouncement that nature-text and nature-writing like ecopoetry can best be used as well to model the environment. This is the reason why a semiotic mediation is made possible with the presence of the various "umweltens" or "umwelt" for short in the foreground of nature writing. In the analysis of this paper. I am also particularly interested in the expanding the definition of the "umwelt" in the light of biosemiotics. In my analysis, I further expand the literatures on the "umwelt" affirming that it can also refer to active environments, multifaceted biological worlds, ecological relations, affective and disruptive connections, phenomenal worlds, and can also refer to the perceptive and communicative capacities of beings and entities peculiarly emplaced in the environment.

In this paper, the analysis of ecologically literate poems in the light of biosemiotics recognizes the different means in which we

can see nature and the environment being loquacious in various ways possible. Going beyond the strictures of anthropocentrism, the biosemiotic vista can offer different ecocritical strategies in understanding the dynamics occurring between nature and culture. We can also see augmented the peculiarities of how these binary forces work in their own unique ways in ecocritical discourse. The biosemiotic analysis of nature and the environment is also a means to know how we can make sense of ruptures and connections taking place in the environment, how certain anthropogenic significantly activities can impact the environment, how nature and its attendant elements disclose their own ecocentric tendencies with respect to its own emplacement in the biosphere-resulting to the possible ways in which see, comprehend, distinguish, and model the environment from both cultural and natural dispositions.

# Methodology

This paper provides an analysis of seven taken from the ecopoems anthology "Sustaining the Archipelago: An Anthology of Philippine Ecopoetry." These poems are "Ugat", "The Water I Love is a Stranger", "Treading on Weather", "Trekking on Mt. Iraya", "Manubal", "Itay Kayong" and "Nature." These seven ecopoems were coded in the light of ecocriticism. Capitalizing on the qualitative research design with close reading as the specific method deployed, the ecocritical codes that were highlighted centered on the notion of place, emplacement, place-mutualism (with place being the homeland occupied by the ecological self) (Chua, 2021), species, flora, and environmental justice. Aside from the contents of these selected ecopoems, it is also essential to underscore that the writers of the ecopoems are ecologically literate.

Part of the data included in the analysis of the ecopoems is the inclusion of the biography of the writers to further prove that they are ecologically literate in disposition. These data were taken from their published bionotes as individuals who are working in the Philippines as environmental activists, teachers, and environmental policy-makers. This is the method that can be drawn from the definition of ecological literacy discussed in this paper. In the literatures discussed, ecological literacy is a way of thinking and making sense of the world with special focus on its human and natural systems (Manitoba Government, 2011). These are the ecopoets included in this paper: J.G. Dimaranan, Genevieve L. Asenjo, Simeon Dumdum, Jr., Pat Labitoria, Edgar B. Maranan and Recah Trinidad.

With the notion of ecological literacy as foundation, the biosemiotic reading of the poems will attempt to link the ecological knowledge of the writer with the subject of literariness enabling the writer to create a body of work centering on the environment and its attendant concerns.

In this paper, the biosemiotic approach is cultural-natural utilized to examine phenomena capturing how human and nonhuman elements and key players shape their surrounding environment. This is the biosemiotic method that I was able to extract from the foregoing literatures presented. In the analysis, readers will also encounter certain biosemiotic modes that will be instrumental in examining the intricacies of the environment taking the cue from Timothy Morton's notion of ambient poetics (Morton, 2007). Expanding the purview of biosemiotics. these modes include the anthropocentric (centering on man), dendographic (trees and plants), hydrographic (bodies of water), and biophiliac (nature's force and beauty). It is from these modes where the specificity of the ecocritical discourse can transpire.

In order to be able to read the ecopoems and their attendant ecological literacies, one has to recognize the fact that literature can serve as a sensorium and sounding board for environmental philosophizing and revolution. As people identifying with the peculiarities of our islands and environment, ecopoems are regarded as a means for us to make sense of our interconnections specifically pertaining to interconnectedness with various our organisms, be it human or non-human, resulting to in the formation of an integrated natural climax community.

Hubert Zapf asserts the fact that literature can function as a powerful and imaginative sounding board for making sense of the problems affecting the larger culture (Zapf, 2016). As a special kind of sensorium, Zapf asserts that the textualities that we encounter in literature can creatively and critically concretize and articulate the ostracized, excluded, repressed, neglected by the powerful historical forces, institutions, structures, forms of life, and systems of discourse and knowledges.

Part of the critical method of this paper is to also examine how the concept of the "Umwelt" was presented in selected ecopoems from "Sustaining the Archipelago." From the discourses of Uexkull (1909) and Sebeok (1991), the German word "Umwelt" means surroundings or environment. From the biosemiotic vista, umwelt is the concept that affirms the epicentral ground of all biological foundations affecting the communication between the human and non- human domains. It is because of this subjective animating force that the umwelt can be regarded for making possible the existence of a self- centered world in biosemiotics.

In this case, the discourse on the umwelt in biosemiotics encompasses the various patterns, perceptions, and actions in the semiosphere. The umwelt can make us recognize the presence and the impact of the many environmental players the promulgate meaning in life and in the environment. The human and non-human domains have their own signifying systems. The umwelt shows how human beings subjectively perceive and make sense of their environment. From the perspective of the umwelt, these organisms, whether big or small, are considered as part and parcel of the larger and expressive lifeworld. It is possible to underscore the umwelt in ecopoetry because ecopoetry deals with the intricacies of our biology in a holistic manner (Chua, 2017).

In the analysis, ecopoetry can also be regarded as a sensorium and sounding board to use the terms of Hubert Zapf. As a sensorium and armed with its ecoliterate affinities, ecopoetry can chronicle the important issues, subjects and themes affecting the local environment.

## **Results and Discussion**

The poem "Ugat" (meaning the "root" of a plant in English) by J.G. Dimaranan clearly supports these tenets of ecological literacy complemented by the dendographic mode of representation in biosemiotics. This ecoliterate disposition of Dimaranan stems from the fact that she lives at the foot of Mt. Banahaw, an active complex volcano in Calabarzon Region of the Philippines, with her partner and three children (Anmly, 2022). The poem boldly speaks of the issues of land snatching and human rights violation.

As seen in the poem's objective situation. the poem discloses a significant biological procedure. specifically that of the photosynthetic process. Ugat, meaning the root of the plant, is vital in the photosynthetic process. Being an ecologically literate poem, the poem discloses this specific image unveiling the truth of systems thinking. The reference to photosynthesis is important as it is responsible for the oxygen that humanity takes in. The poem is ecocritical because it emphasizes the importance of converting solar energy into chemical energy which is the very process that is responsible for the creation of oxygen in the entire biosphere. The poem the evidently highlights process of photosynthesis happening in the "ugat" of the plant which is also the process that balances the levels oxygen and carbon dioxide in the whole ecosystem. The image of the root and photosynthetic process clearly accentuates the poem's strong ecological affinity. The provided descriptions bv the speaker regarding photosynthesis affirms the plant's biosemiosis—how the plant has a particular role to play in the vast ecological domain of life (Scitable, 2014). The representation of the plant is clearly presented on cogent biosemiotic grounds. The umwelt of the plant is pronounced as it plays a role in the conversion of energy into energy-containing macromolecules (Scitable, 2014). The first part of Dimaranan's poem clearly highlights the strong biosemiotic nature of its conveyed ecoliterate affinity:

#### I.

Sa isang halaman, mahalaga ang ugat para sa fotosintesis. Ito ang taga-supply ng tubig na gagamitin upang ang hangin ay maging pagkain sa enerhiya ng araw.

Itong pagtatrabaho at paggana ng mga elemento, mga parte upang lumusog ang kalakhan at kabuuan, ay ang payak na Sistema ng hambog na halaman. Kung gayon, nakaugat sa lupa, ang mga bagay na may saysay sa paglaki, pagyabong at pagtaas ng antas ng buhay (p. 93).

#### Ι.

In a plant, a root is important for photosynthesis. It is the water-supplier that will be used for the wind to become food for the sun's energy.

The laboring and functioning of the elements, the parts for thriving, the greatness and totality, is the simple system of the arrogant plant. If that is so, rooted in soil, are the things that make sense for growth, flourishing and upgrowth in the standards of living (my trans.).

The poem clearly echoes the cries of the Hacienda Luisita Peasant Supporters Networks in the Philippines. In relation to the importance of the plant's rootedness during the process of photosynthesis as seen in the poem's objective situation, the poem's speaker remarkably declares that sustenance, survival, and continuity are also grounded deeply in the ground. This is with reference to the many farmers and aboriginal inhabitants of the land who became victims of the government's imperialist strategies to use the natural resources of the land for their own capitalistic agenda resulting for the displacement of the natives residing in these places. The poem evidently shows its concern for the people centering on the consequences of APEC leading to people's poverty and political suppression (Antonio, 2016). It also conveys its attempt to partake in the discourse on sustainability through the act of protecting communities against western imperialist incursions. The strong dendographic umwelt of the plant clearly means grounding and anchorage. This grounding serves as the battle cry for the farmers and indigenous inhabitants of the land to echo their goal of fighting for legitimate agrarian reforms.

The entrance of the imperialist directives of the Asia-Pacific Economic Corporation (APEC) resulted in the brutal demise of some farmer at the Hacienda Luisita in the city of Tarlac in the Philippines. Bernadette Ellorin, the chairman of Bayan USA, is one of those individuals in the country who recognized how the APEC is clearly a means to exploit the resources of the country because of its imperialist agenda (Antonio, 2016). These farmers still fought for the rights to own the land even after the Supreme Court had awarded a big percentage of the land originally owned by the Cojuangcos (one of the powerful families in the Philippines who has control of several houses and banks in the country). The poem situates in the background the legacy of human rights violation against peasants and farmers because of the violent history of stealing lands from its original inhabitants. As an ecologically literate poem, we can see the attempt of the poem to make the readers cognizant of this brutal event that had happened in the local lands owned by peasants and farmers.

The strong dendographic bent of the poem affirms the transparent didactic intention of the poem. We can also see that the poem's didacticism also lies in how it shows the collision of anthropocentric principles. In its metaphorical sense, the dendographic capacities of the plant's root becomes the subject's umwelt of farmers and natives fighting for their rights giving their best to defend it from the incursions of foreign imperialist entities. As an ecopoem, the poem also shows its attempt to partake in the goal of sustaining communities. These lines from the poem show this bent of the poem:

#### II.

Huwag sana nating kalimutan: titindi pa ang krisis sa Lipunan at mahihinog ang kalagayan. Walang pag-aatubiling mag-aaklas ang taumbayan, lahat ng napagsasamantalahan! Gaya ng bulok na prutas, na siyang magiging patabang kakainin ng bagong halaman (p. 93).

#### II.

I hope that we do not forget: Crises in society will intensify and the circumstances will grow ripe. No hesitations the nation will go on strike, all those exploited! Just like a decaying fruit, that will become the fertilizer will be consumed by the new plant (my trans.)

As an ecopoem, it is evident that Dimaranan ends the poem with the goal of raising awareness concerning the evils of deterritorialization and even reterritorialization that can disrupt people's lives and environments. This is the poem's biomimicry—its attempt to offer a modest solution to such anthropocentric occurrences. As ecopoetically chronicled in the poem's agenda, we can see that the people will constantly fight for and against these many issues plaguing the environment and their own environments in particular.

Genevieve L. Asenjo's "The Water I Love is a Stranger" is a poem that shows how the hydrographic mode in biosemiosis can certainly shape the way we connect with nature. The poem is from Asenjo's poetry collection titled "Sa Gihapon, Palangga, Ang Uran" (Always, Beloved, the Rain, 2014). In this collection, Asenjo focused on genuine and imagined homecomings. The ecoliterate tendencies of her work were also shown in the themes that she had chronicled in her collection. These ecoliterate themes and subjects include the movement from rural to urban, the forest that provided people with natural resources becoming private property, Boracay being sliced up by local and foreign restaurants, hotels and resorts (Asenjo, 2014).

"The Water I Love is a Stranger" is one of the poems from her anthology that ponders on the absurdity of clean water's inaccessibility as well as the tragedies experienced by Manila where water is involved. The poem is translated from Kinaray-a to English by Ma. Milagros Geremia-Lachica. The reflections of the speaker chronicle her experience with nature's hydrographic powers. The poem focuses on the speaker's experience of water in her own barrio as well as in the city. Water from the earthen-jar in her barrio is described as spring-cool. The water that she encountered in Manila is viewed from the ecocritical tragic perspective for the reason that water floods Manila and water level is low in La Mesa Dam.

As an example of ecopoetry and as seen in the first line of the poem, the prominent hydrographic subject is seen to be the very element that links and sustains all beings in the ecosystem and in the biosphere at large. The umwelt of water is implicitly pronounced by the speaker in the first lines of the poem: "The water I love is a stranger. I have no thirst or hiccups. In the barrio, water from the earthen jar is spring-cool (p. 6)." In relation to this water umwelt, Asenio declares that it is basically one of the most essential nutrients sustaining life. It is the element responsible for the propelling of the growth of plants. It is also home to water-birthed organisms. It is also the element contains the nutrients needed to sustain physical life itself. These ecopoetic tenors are clear hallmarks that show that an ecopoem attempts to understand the local environment (Orr, 2005). As an ecologically literate work, the poem also raises concern on the issue of water interruption experienced in the metro.

The clear hydrographic mode of Asenjo's ecopoem is enough for it to show how water maintains life in the environment. The poem also implicitly provided an explanation show the absence of water markedly interrupts life in the biosphere. These lines from the poem of Asenjo aver ecological literacy with focus on the experience of water interruption:

I made you read the memo: water will be cut off from eight o'clock in the morning until five o'clock. You said we should finish this bottle of wine so we can fill it up with water. We were lying on a mountain of laundry on the sofa.

I left the pail in the barrio. Laundry is 30/kilo down the corner. I got up and filled up the bowl and brushed my teeth. You kissed me, and I tasted of distilled water.

Light showers flood Manila, and my eyes scoop it. Water level is low, says the radio, the newspaper, the TV, the Internet, and the text message: La Mesa Dam is dying (p. 6).

The interruption experienced by the speaker is affirmative of the powerful umwelt of water in the ecosystem. The emphasis given to the hydrographic element in Asenjo's ecopoem is seen as an attempt to read the attendant elements of nature as discursive and loquacious signs affecting the people and the environment (Phillips, 1999). Specifically Examining the umwelt of the water, the reference to the death of the La Mesa Dam, an earth dam or reservoir in Quezon City (a city in the National Capital Region of the Philippines) that can hold up to 50.5 million cubic meters, is the declaration that water interruptions can harmfully and unpleasantly affect community health in general most especially if access to water is remarkably reduced on domestic grounds (Scispace, 2024). The strong hydrographic biosemiotic bent of the poem is also one that raises the discourse on water pollution, shortage and ultimately absence.

The poem "Treading on Weather" by Simeon Dumdum, Jr. and "Trekking on Mt. Iraya" by Edgar B. Maranan are ecopoems that specifically affirm the truths of the biophiliac mode of representing nature in biosemiotics. According to Alfred A. Yuson, Simeon Dumdum, Jr. is the kind of poet who loves to observe places. Yuson also said that he is a lover of mundane spectacles happening in nature. These include the flowers, the sea, the weather and the climate in general (Yuson, 2017). To quote Yuson again, the poem "Treading on Weather" significantly captures the gravitas of a particular place and its attendant element. This feat is reflective of the notion of place-based referentiality in ecocriticism.

Edgar B. Maranan was a fictionist, poet, essayist, translator, writer of children's stories and an activist who supported environmental causes in the local scene. Maranan is also prominent for his journalistic feature-writing and reportage on environmental issues (Chua, 2017). The two works are ecopoems that can best engage the hallmark of biophilia in biosemiotic thought. In these two poems, we can notice specific attentions given to the natural elements that shape the biophilia being experienced by the speakers in the two poems.

As someone greatly engaged in environmental issues, Dumdum's "Treading on Weather" perfectly captures the biophilic design with special emphasis on the natural subjects and elements that make the special connection between culture and nature possible. In the first lines of Dumdum's poem, the speaker declares the peculiar linkage formed between her wife and their gardenia. This is evident in the biography of Simeon Dumdum Jr. He is someone who loves to observe their garden with his wife (Yuson, 2017). As someone drawn to the beauty of nature, we can say that the result of this observant disposition is the formation of a biophiliac connection with nature:

Like guards hibiscuses have lined the fence Since, well, the children were still small. They go in various colors, three in all, And there's the flower the wife has the good sense

Of caring for, gardenia, which grows dense Not far from the forget-me-nots that crawl Towards the house and make as though to call

*On me to like the garden, and its scents* (p. 23).

The act of observing the beauty and unique attributes of these specific elements in Dumdum's garden clearly illustrates the truth of the biophiliac mode in biosemiotics. This is the ecological truth that Elder and Worcester also affirmed in their discourse on greening the environment (Elder, 1985 & Worcester, 1994). In light of the biosemiotic thought, we can see the plants executing their umwelt-the umwelt of enhancing the garden's very environment. Zeroing in on the plant, this can be an affirmation of the fact that these plants have their own algorithmic beauty inviting the speaker to ruminate on the garden's overall beauty. The plants become unique characters on their own animating spaces by virtue of its active peculiar umwelt (Tonnessen, 2009). The biophilia happens as seen in nature in the space of the poem. The direct nature of the space is also captured in the poem:

But I do, fact is, herbs of different kinds Run the place, basil, angel hair and mint. I put them there, also a bush called silver, They teem so much like weeds they blur the lines (p. 23).

In an ecoliterate poem such as "Treading on Weather", the nature of the space can also be pronounced in these lines with the plants affirming their own aesthetic umwelt. With the way the plants are presented and configured in the poem's objective situation, we can see how the poem also affirms the importance of the socalled spatial elements (McCain, 2020). On the part of Dumdum, the said garden can be regarded as a place of sensual and sensory refuge resulting in the creation of the biophilic disposition. The ecoliterate disposition of the poem and with the plants disclosing their umwelt validate the ecocritical fact that nature truly exerts a certain and peculiar attraction on human beings (Kaplan, 1995). With reference to Dumdum's disposition as well, the very garden itself becomes symbolic of security. This security can both be understood on physical and mental heights. The plants serve as the reminder that he has a special kind of shelter and connection with nature as well as access to economic resources (Gunderson, 2014).

The biosemiotic discourse on biophilia can further be expounded by Maranan's

"Trekking on Mt. Iraya." Maranan's experience of the titular mountain in Batanes can be used as springboard to engage how we can biosemiotically perceive the notion of life in an ecoliterate work further serving as a "sensorium" (Zapf, 2016). The profound immersion that Maranan had experienced in this mountain shows what life is (spelled out with l in the lower case). To cite these lines from the poem:

A fold in time, a V of sky and earth, plus sea, stun of pasture, rock, air quivering, waves sun- dappled, and tropic skydom of migrant birds.

This northernmost island floats on the planet's edge, about to fall off without a trace.

Here, where a stonehold stands, its serpent's tail defends against the lash, breaking up the spray of ancient surf, a turquoise glinning whoosh.

*This is where our pilgrim journey starts* (p. 128).

In the case of this poem, life is viewed as the elements that comprise nature's beauty. It is basically the external environment being presented by the speaker in this poem. These are the key elements that shape the space of nature. Biosemiotically, with the natural elements surrounding the mountain augmenting its glory, we can come to know that nature does not just mean mere intrinsic quality. Nature flourishes remarkably in the context of the poem. As seen in his ecoliterate disposition. Maranan is said to be naturefriendly when it comes to addressing issues related to the environment. He shows the glory of such a disposition in "Trekking Mt. Iraya." Maranan had conveyed the beauty and perfection of the biosphere in this particular region of the province of Batanes. He also specifically captured the biotic and abiotic elements animating the island (Reed, 2002). Nature indicates the biosphere in general and the abiotic matrices surrounding Mt. Irava.

As an ecopoem, the poem also can didactically illustrate what Life means from the perspective of cognitive biophilia. In this case, it is important to note that Life is spelled with a capital L (Barbiero and Berto, 2021). With Maranan declaring that "This is where our pilgrim journey starts, the meeting point of god's play marbles and green raiments of the brooding peak" (p. 28), we can see how he boldly declares the correlation between Nature and Life. As an environmentalist, Life is presented as a dynamic process and undertaking where the organic and inorganic concur perpetually enhancing the world's liveable settings and environments (Volk, 1998):

In trekking, the self is carried lightly with faith to whistle up the wind across the treeless space, with mirth to savor cool air upon quick sweat as we file, devotee-like (p. 128).

The specificity of Nature's representation in this poem is further captured with Maranan specifically declaring the umwelt of a bird that can be found only in Batanes and Babuyan Islands. This is another instance of how biosemiotics also places a premium on other mobile organisms shaping the environment. According to Maranan in the poem: "Moments ago, a black-chinned fruit dove flashed through a silver airstream, in and out of canopy, trilling for its mate, then lit upon a branch" (p. 128). This is the case of migration of the birds witnessed by the speaker trekking the mountain further adding to the experience of nature and life in this poem. We can also add to this specific representation that the speaker had evidently experienced biophilia as he declared the mountain's glory with an elevation of 3,310 ft making it the highest point in Batanes. The speaker did not just physically experience the place. It was also noteworthy that he had also felt the mythological aura of the mountain. The poem is ecopoetically and mythologically literate making it a perfect sensorium to engage the space, place, life and nature in Mt. Iraya—a mountain noted for its majestic apex where one can the infinite skies and blue sea of Batanes:

Exalted, we have left the earth behind us to seek the deities on Iraya's peak, bestirring. But the peak is never reached, as we stand in awe beneath gnarled limbs in ever deepening green, as we watch the clouds darken halfway to the top.

Heaven lours overhead, wind rises from the sea. In this grey light the world seems crispy bright (p. 129).

As an environmentalist, the ecocriticalmythological bent of Edgar B. Maranan is always pronounced in his work. His poem titled "Manubal" (referring to a place in Pangutaran, Sulu) lucidly affirms the truth of the most important mythology developed by humans (Junguera and Moreno, 2018). In the intersections of ecocriticism and mythology, we can find the concept of the creation and reclamation of Eden being advanced. In ecocritical discourse, this is not just a plain attempt to go back to the past. With ecocriticism at the backdrop of the discourse, we can see that the act of going back to nature can become a resilient movement leading to the rebalancing of nature's species. This can become the avenue as well to come up with a more sustainable relationship with nature. The trope of nature being sacred, divine and a source of inspiration and contention are truths espoused by Maranan in Manubal.

In relation to this, we can see how Maranan further makes nature stand as a character on its own boldly pronouncing its own umwelt as seen in his description of the "whistling in the mountains of Manubal comprehending the voices and the placental rhythms in the village" and "the flowing of the rivers of Manubal bearing old wonders" (pp. 130-131). In addition to this, we see how the flowing rivers and placental rhythms of the wind are at one with the goal of chanting the dreams and aspirations of the first "thimuay" (meaning datu or sultan) and even the souls of their departed ancestors. The poem of Maranan is a compelling piece to consider in the discourse on disrupting the Anthropocene as a capitalist, imperialist and exploitative undertaking. As someone who was vocal when it comes to issues and problems plaguing the environment, the mythic references and allusions of Edgar B. Maranan becomes an invitation to read the environment and see it as an entity endowed with its own agency, intricacy and identity. It is in this kind of intersection where ancient narratives and stories can be used as ecocritical tools that will serve as effective antidotes and solutions to anthropocentrism—the current geological epoch that sets the pace for the different ecological crises of the time (Callaghan, 2015).

The poem "Itay Kayong" by Recah Trinidad and "Nature" by Pat Labitoria are also noteworthy for their ecoliterate outlooks. It is through their poems where we can see nature from a biosemiotic topophiliac and topophobic perspectives respectively. Recah Trinidad is prominently known as a sports columnist of the Inquirer. In the year 2013, Trinidad released a book titled "Tales from My Lost River." Inquirer says that this book is a revelation of the intimate and unexplored side of Trinidad (Inquirer, 2013). The ecoliterate character of the work is seen in how Trinidad chronicled his fictional memory of the long stretch of the Pasig River specifically in Mandaluyong City located in the National Capital Region of the Philippines. The work also ruminates on the changing landscapes near the Pasig River as well as its impending demise of its once beautiful geography brought by the Anthropocene. The titular "Itay Kayong" is presented as the symbol of folk wisdom who knew how to understand the language of the river.

Pat Labitoria is an environmentalist-a graduate of Environmental Planning and Management major in Urban Planning. She is part of the Miriam Volunteer Mission after her college education and was assigned at Maryknoll Ecological Sanctuary in Baguio, Philippines. She is a prominent name in environmental education, bio-farming, and cosmology research. She is also known for living near the mountains which inspired her to further boost her career related to the environmental advancing Philippine ecological literacy. She is currently a member of the Biodiversity Management Bureau under the Department of Environment and Natural Resources (Chua, 2017).

In the poem "Itay Kayong", the titular Itay Kayong is the symbol of the simple folk who guards the river. We can see him as the clear romantic representation of someone who has a strong affinity with nature. As seen in these lines, this disposition of Itay Kayong is the one that can distinctly unveil the truth of topophilia also known as an affective bond that can be formed with one's experience of space and place

If today's sunset was salmon-hued Or bathed in a romantic pink, The next sunrise would be bright, sparkling. The old man had come near, The summer sun dimmed. Did the old man talk to the trees? How was he able to do that? Was he tipped off by devotional birds? He moved away, with his headgear on (p. 76).

This poem featuring Itay Kayong also asserts the human value of the space being presented in the poem. The poem makes its readers grasp the beauty and significance of the Pasig River as it utterly conveys its peculiar hydrodynamics in the background. It is in this regard where we can see the poem being animated by the hydrographic mode of representation in biosemiotic thought. The hydrographia of the Pasig River can be read as a means of unveiling its hydrodynamics illustrating how it can naturally flow and move to Manila Bay leaning downward to the sea (Sumagaysay, 2021). The poem perfectly captures the glory of this body of water as seen in how Trinidad poetically described its hydraulic resilience through the endless hymn that it has to share to the inhabitants:

The river itself was always there, It also hummed an endless hymn More of a mother's lullaby Straight from its bosom of virgin sand As it rolled from the mythical upper lake, Emptying into the sunset bend towards Manila Bay (p. 76).

The poem becomes ecoliterate in a manner that it presents Pasig River and its surroundings with a remarkable visual pleasure, the delight of sensual contact with nature and its concomitant elements, the fondness for place as it becomes the very provider of strength, vitality and health (Tuan,

1974). In the poem Nature, the poet Pat Labitoria, as a counter to the topophiliac discourse in biosemiotics. gives some ecopoetic reminders on ecocritical connections and disconnections. As an environmental educator, we can see how Labitoria's ruminations become reflective of the truths of perfect ecology in ecocritical thought. It is a reminiscing of the time that inhabitants can become "topophils" in their own unique ways. In the first lines of the poem, the importance of topophilia is markedly underscored. This is Labitoria's way of declaring that it is important to know how to attend to the world, be able to read its language through its varied peculiar biosemiosis. This is where the ecoliterate disposition is seen in Labitoria's poem. Labitoria says that we must be mindful of its language and how it must be read and deciphered:

We used to understand these things, the elders say the wails of the wind, the crackling laughter of fire, earth and sky, the poems of water—we used to know their language, taught to us by the stars (p. 30).

These signs that markedlv are communicate nature's power. The wails of the wind—the loud high-pitched cries of the wind, the coziness brought by the crackling fireplace, and the gush of the waters are remarkable features of the ecological literacy of the poem that make us cognizant of the organic forces that make life possible and sustainable in the biosphere. These signs are part and parcel of nature's biosemiosis. This is the biosemiosis that confirms the umwelt of these small occurrences in the environment. As an ecopoet, Labitoria gives the reminder that the Earth is a self-regulating system where the biota itself plays a significant role in shaping the umwelt of living and non-living organisms (Tuur, 2017). Another remarkable feature of this ecopoem of Labitoria is the fact that she recognizes the impacts of the Anthropocene resulting in the destruction of the romantic and biophilic threads that significantly connect human beings with nature. As an ecopoem, it also affirms the truth of the anthropocentric

mode of representing the actions that led to nature's destruction. This is a way of saying that human beings and "their violent hands" as mentioned in the poem are the leading biosemiotic key players that make possible the experience of "decay", "sadness", and "an unexplainable restlessness of the heart" in the biosphere. To quote these lines:

But these threads, these ties, connecting us to everything have been torn and forgotten, thrown away with the decaying remnants of years passed by our own violent hands (p. 31).

# Conclusion

The ecoliterate affinities seen in the seven analvzed secopoems, augmented bv biosemiotics, assert the uniqueness and individuality of every single organism, spaces and places, the umwelt (or sometimes called umwelten) of various key players, organisms and occurrences remarkably differ (Von Uexkull. 1909). The connection and disconnections are what make possible the discourses affecting the biosemiosphere. This is where I affirm what Greg Garrard said concerning biosemiotics. The emergence of biosemiotics is a feasible and potent tool that can be utilized in expanding the ambit of semiotic undertakings—one that can possibly embrace living organisms, physical and biological occurrences in the biosemiosphere (Garrard, 2012). Such are the complexities that can be articulated in ecoliterate works like ecopoetry in literary studies.

As seen in the analysis and the ecological literacies of the writers, this paper also affirms the biosemiotic truth that every living organisms such as plants, animals, humans and even microorganisms possess the ability to inventively engage their environments made possible through an active recognition and engagement of the signs in the environment. We can view both natural and cultural processes as special instances of a careful, comprehensive and extensive biosemiosis (Hoffmeyer, 2008).

With this biosemiosis, we have a more expanded avenue to examine how the environment can represent itself in various ways possible. This is a reinforcement of the fact that environments are distinctly semiotic in nature (Wheeler, 2008). As seen in the analysis of the poems, ecological disposition can be grounded on emplacement, placetopophiliac and mutualism. topophobic inclinations, situatedness, environmental referentialities and significations. These are factors that can augment the truth that literature can possess ecoliterate tendencies and function as a sensorium in making sense of various environmental concerns and contradictions (Zapf, 2016).

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